

# 2023 International Conference on Business, Economics, and Management for Sustainability



# Proceedings

Edited by  
ICBEM Committee

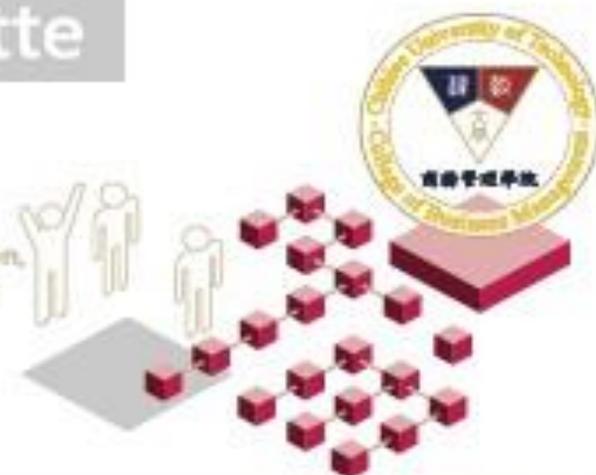
**Organizer** | College of Business Management  
Chihlee University of Technology

**Co-Organizers** | Technical and Vocational Education SIG,  
Research Discipline of Applied Science Education,  
Department of Humanities and Social Sciences,  
National Science and Technology Council

Department of Applied Economics  
Fo Guang University

Energies

Corporate Management Review



October 16-18, 2023, Taipei, Taiwan

## **Organizer**

College of Business Management, Chihlee University of Technology, Taiwan

## **Co-Organizer**

Technical and Vocational Education SIG, Research Discipline of Applied Science Education,

Department of Humanities and Social Sciences, National Science and Technology Council

Department of Applied Economics, Fo Guang University, Taiwan

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**2023 International Conference on Business, Economics,  
and Management for Sustainability  
DAILY AGENDA**

| Activities<br>Time           | 10/16        | 10/17  |   | 10/18  |
|------------------------------|--------------|--|---|--|
|                              | Monday       | Tuesday  |   | Wednesday  |
| 09:00~09:20<br>(20 minutes)  |              | Registration   |   | City Tour  |
| 09:20-09:30<br>(10 minutes)  |              | Opening Ceremony   |   |  |
| 09:30-10:30<br>(60 minutes)  |              | Keynote Speech<br>Ph.D. S.-Y. Simon Wang<br>(Utah State University, USA)<br>Topic: Deciphering Climate Extremes and Risks<br>Host<br>Nick Vasiljevic (Nationality: USA)<br>International Conference Hall<br>[Google Meet Link: <a href="https://meet.google.com/cuh-aadc-nak">https://meet.google.com/cuh-aadc-nak</a> ] |   |  |
| 10:30-10:50<br>(20 minutes)  |              | Break Time   |   |  |
| 10:50-12:10<br>(80 minutes)  |              | Session I  | Room I: Business Administration                     |  |
|                              |              |  | Room II: Tourism and Others                         |  |
|                              |              |  | Room III: Finance and FinTech                       |  |
|                              |              |  | Room IV: International Trade (NTU Workshop Session) |  |
|                              |              |  | Room V: IT and Fit Tech (NCYU Session) (E55)        |  |
| 12:10-13:20<br>(70 minutes)  |              | Lunch  |   |  |
| 13:20-13:50<br>(30 minutes)  |              | Poster Session   | Room I: Financial Markets and Regulation            |  |
|                              |              |  | Room II: Business and Risk Management               |  |
|                              |              |  | Room III: Business Administration                   |  |
|                              |              |  | Room IV: Tourism and Logistics Management           |  |
|                              |              |  | Room V: Others (E55)                                |  |
| 13:50-14:00<br>(10 minutes)  |              | Break Time   |   |  |
| 14:00-16:00<br>(120 minutes) | Registration | Session II   | Room I: Marketing and Consumer Behavior             | Yunus Social Business Forum<br>Speech 1<br>13:40 ~15:00<br>(In Chinese)<br>Speech 2<br>15:10 ~16:00<br>(In English)<br>International Conference Hall |
|                              |              |  | Room II: Economics                                  |  |
|                              |              |  | Room III: Sustainable Development                   |  |
|                              |              |  | Room IV: Efficiency Analysis (SCU Session)          |  |
|                              |              |  | Room V: Management and Others (E55)                 |  |
| 16:00-16:20<br>(20 minutes)  |              | Break Time   |   |  |
| 16:20-16:40<br>(20 minutes)  |              | Best Paper Award & Closing   |   |  |

# Venue



Chihlee University of Technology



No.313, Sec.1, Wenhua Rd., Banqiao Dist., New Taipei City 22050, Taiwan (R.O.C.)



## TRANSPORTATION



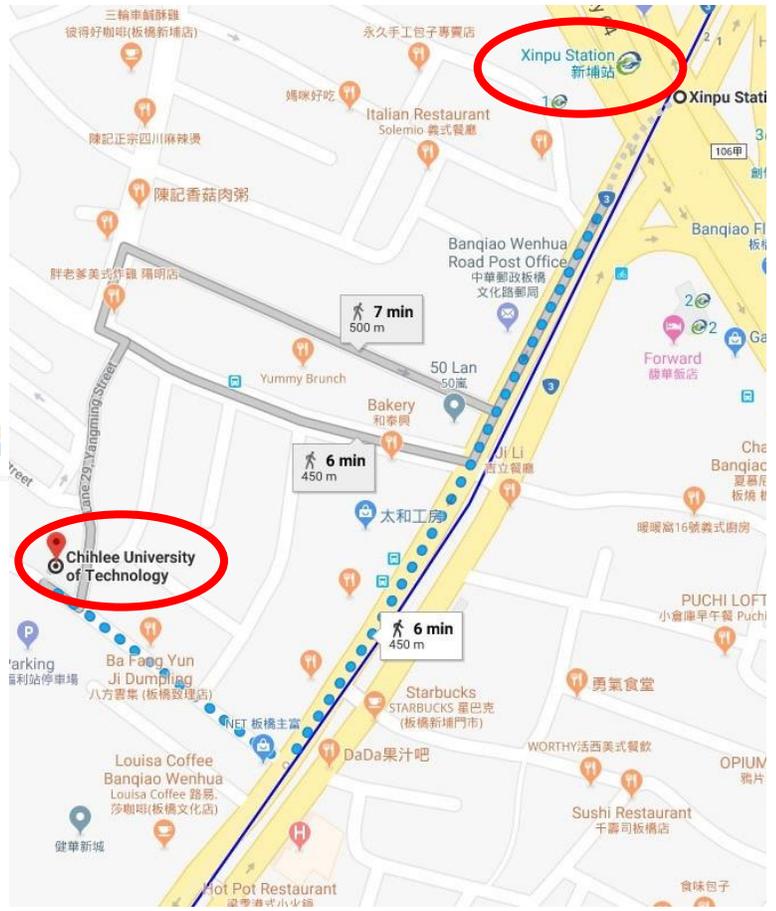
By high speed railway to Banqiao



By taxi



By MRT to station (BL08)





# 致理科技大學

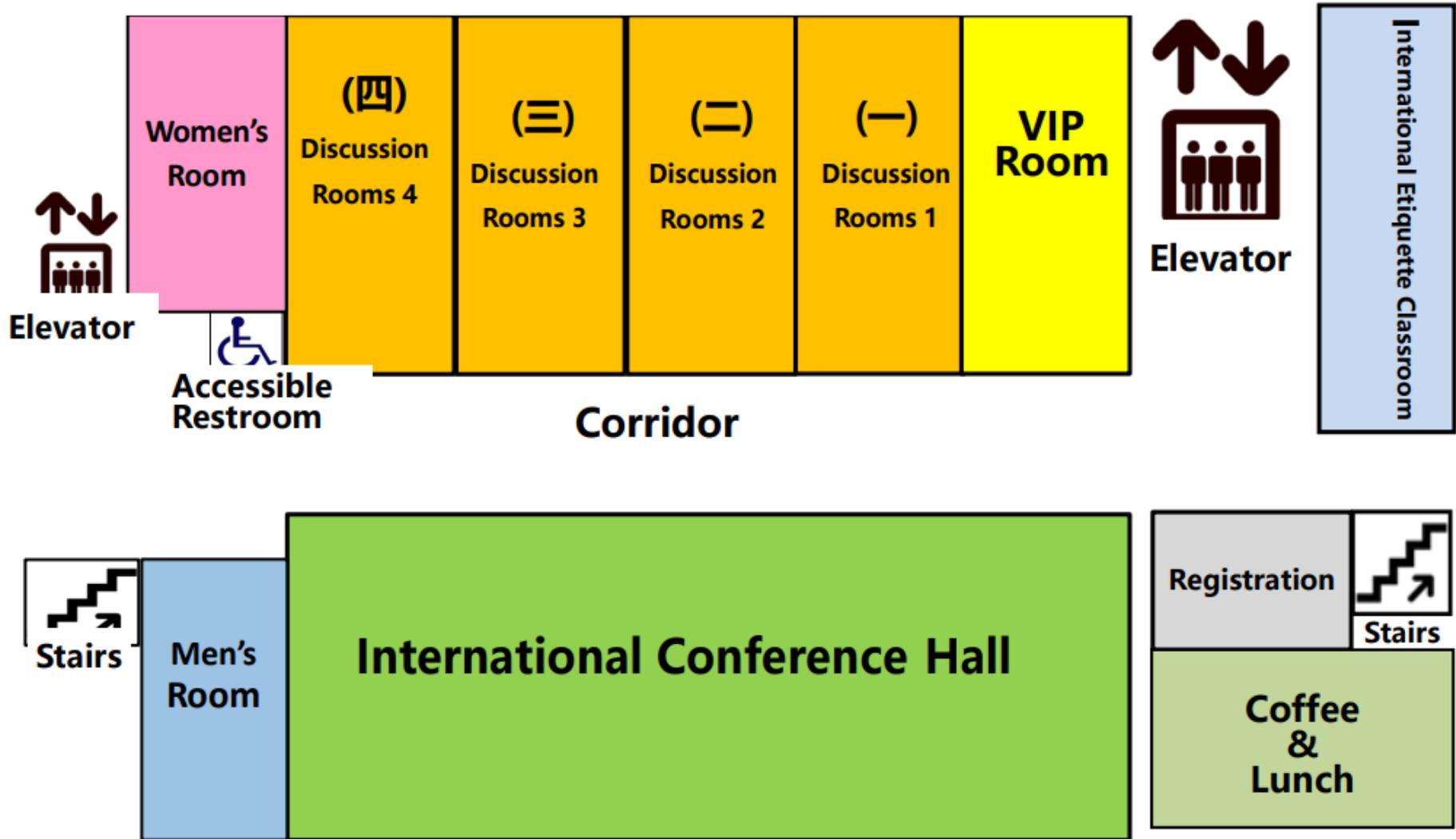
Chihlee University of Technology

# 校園平面圖

## Floor Plan



## Deployment layout



(Venue : 8<sup>th</sup> Floor of General Teaching Building)

## 2023 ICBEM Event Opening Remarks 1

By Bor-Yi Huang

Good morning and welcome President Philippa Tsai, Professor Simon Wang, Professor Nick Vasiljevic and all the participants today. On behalf of Chihlee University of Technology, I would like to thank all of you for joining our 2023 International Conference on Business, Economic and Management for Sustainability as well as the Chinese Conference 2023 商務管理實務研討會：永續發展 held by College of Business Management.

With an eye on creating a better and more sustainable future for us all, the United Nations General Assembly set up a collection of 17 interlinked global goals in 2015 known as Sustainable Development Goals (SDGs), their purpose is to act as a blueprint towards achieving a manageable future.

Hence, in 2017, the Ministry of Education has launched University Social Responsibility (USR) Program to embrace a new paradigm of engaging campuses and communities to contribute to sustainable development and proactive solutions to societal and environmental changes or research activities according to each university's strength and expertise.

Corresponding with the aims of the University in SDGs such as USR and sustainability, College of Business Management is organizing the 2023 International Conference on Business, Economics and Management for Sustainability.

Before we start, I'd like to thank our distinguished sponsor, the Ministry of Education, our co-organizers, Technical and Vocational Education SIG, Research Discipline of Applied Science Education, Department of Humanities and Social Sciences of the National Science and Technology Council, as well as the Department of Applied Economics, Fo Guang University, and the two journals, *Corporate Management Review* and *Energies* and of course our new partner *Foundation of Yunus Social Business Taiwan*. With their help, we have been able to accomplish this event.

This year, we have increasing numbers of scholars participating in this conference including scholars from the United States, Vietnam, Philippines, Indonesia, India, Oman, Egypt, and Taiwan; 50 oral papers and 11 posters will be presented today. With that, we are excited to learn about new tools, methods, and techniques concerning achieving Sustainability through business, economics, and management. We look forward to learning from each of you and producing new ideas for sustainability.

The last but not the least, while Chihlee University of Technology is to continue to develop into a high value-added, service-orientated technological and vocational institution, we also encourage research contributions, therefore, we will announce the Best Paper Award, the Best Student's Paper Award and Highly Commended Awards in the closing ceremony of this conference. Best papers have the potential of being published in *Corporate Management Review*, so there are many exciting possibilities at this year's event! We look forward to your participation in the closing ceremony.

**2023 International Conference on Business, Economics, and Management for Sustainability**

Once again, thank you for joining this year's ICBEM and Chinese Business conferences. Thank you.

## 2023 ICBEM Event Opening Remarks 2

By Jonathan Lin

Vice President of Chihlee University of Technology Professor Huang, Dean of Academic Affairs Professor Yang, Dean of College of Business Management Professor Liou, scholars from both domestic and abroad hello everyone.

I am Jonathan Lin, the director of Foundation for Yunus Social Business Taiwan. First and foremost, I am deeply honored to be here with all of you to participate in the 2023 International Conference on Business, Economics and Management on Sustainability.

I would like to share with everyone that in 2006, Nobel Peace Prize laureate Professor Muhammad Yunus founded the Grameen Bank and has been dedicated to promoting social businesses and creating a world of three zeros - zero poverty, zero unemployment, and zero net carbon emissions". This initiative has bloomed worldwide. The Foundation for Yunus Social Business Taiwan, inspired by Professor Yunus, is committed to achieving the three zeros goal in Taiwan by promoting our four aspirations in the local society.

Having said that, I am also very grateful to Chihlee University of Technology for becoming the 13th Yunus Social Business Center in Taiwan. It not only finds new and innovative means to expand the concept of social business among the students and researchers but also provides valuable educational resources and guidance to help young people stand out in this highly competitive world.

This July, the Foundation for Yunus Social Business Taiwan, along with the Dean of the School of Business Management Professor Liou together with two colleagues from the Yunus Business Center Chihlee University of Technology, represented Taiwan at the Social Business Day annual meeting held in Malaysia. Dean Liou even had the opportunity to share on stage in international Academia Dialogue, in addition, she shared the goals and directions of Chihlee University of Technology in promoting social business in Taiwan. Her brilliant presentation received very positive feedback from representatives of various countries.

Moreover, on October 20th, which is this Friday, the Foundation for Yunus Social Business Taiwan will hold an imperative sustainability forum. This forum will focus on key issues of sustainable development and invite experts and scholars from various fields to discuss strategies and innovative models for sustainable development.

Additionally, we are planning to organize the second Yunus Camping early next year. This will be a unique opportunity for students from colleges and universities across Taiwan to join together to discuss innovative social business concepts and practices. We hope that through this camping activity, we can plant a seed in the participants' minds to actively engage in social issues and seek solutions. We believe that one day this seed will take root and grow, leading to the establishment of more social businesses that will help society develop stably and sustainably.

**2023 International Conference on Business, Economics, and Management for Sustainability**

In recent years, Professor Yunus has been encouraging youth aged 12-35 to form groups of five people and establish the 3Zero Clubs to jointly discuss and starting taking action on social issues.

Lastly, I would like to thank Dean Liou for the kind invitation. This conference has provided us with a valuable opportunity to share experiences and learn from each other. We hope that through the exchanges and collaborations from this conference, we can jointly promote sustainable development in business and achieve a better tomorrow. Thank you, everyone!

### Session Schedule (I)

|   |  |                                    |
|---|--|------------------------------------|
| <b>Date: 10/17 Tuesday</b>                                  | <b>Time: 10:50 - 12:10</b>   | <b>Oral Presentation in Room I</b> |
| Session Topic: Business Administration                      |  |                                    |
| Session Chair: Nick Vasiljevic (Nationality: United States) |  |                                    |
| 1.  | Paper Title: Factors Influencing Health Insurance Purchase Intention of Indian Consumers: Extended TPB Approach<br>Author(s): Tejas Agarwal<br>Commentator: Anirudh Gupta                    | <b>Paper ID: 0342</b>              |
| 2.  | Paper Title: Factors Influencing Adoption of E-Health Apps by Indian Consumers: Applying the UTAUT Model<br>Author(s): Anirudh Gupta<br>Commentator: Chien-Ern Huang                         | <b>Paper ID: 0344</b>              |
| 3.  | Paper Title: Estimating Production Length and Linkage in Supply Chains: Evidence from Taiwan's High-Tech Products<br>Author(s): Kuo-Feng Wang, Chien-Ern Huang<br>Commentator: Tejas Agarwal | <b>Paper ID: 0410</b>              |

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2023 International Conference on Business, Economics, and Management for Sustainability  
**Session Schedule (II)**

|   |   |                            |                                     |
|---|---|----------------------------|-------------------------------------|
| <b>Date: 10/17</b>  | <b>Tuesday</b>  | <b>Time: 10:50 - 12:10</b> | <b>Oral Presentation in Room II</b> |
| Session Topic: Tourism and Others   |   |                            |                                     |
| Session Chair: Chia-Ning Chiu (Nationality: Taiwan); National ILan University |   |                            |                                     |
| 1.  | Paper Title: Frontline Employees' Turnover Intentions in Tourism and Hospitality Sectors:<br>A Systematic Literature Review and Research Agenda |                            | <b>Paper ID: 0328</b>               |
|   | Author(s): Tony Nguyen, Giang Hoang   |                            |                                     |
|   | Commentator: Chin-Yen Li  |                            |                                     |
| 2.  | Paper Title: Studying the Potential of Wellness Tourism Development in Vietnam towards<br>Sustainable Development                               |                            | <b>Paper ID: 0404</b>               |
|   | Author(s): Nguyen Thi Ngoc Anh, Nguyen Thi Nhat Mai   |                            |                                     |
|   | Commentator: Giang Hoang  |                            |                                     |
| 3.  | Paper Title: Identifying determinates of employee's digital competence in the accommodation<br>and catering industry by DEMATEL method          |                            | <b>Paper ID: 0418</b>               |
|   | Author(s): Chin-Yen Li, Chung-Chu Liu   |                            |                                     |
|   | Commentator: Nguyen Thi Ngoc Anh  |                            |                                     |

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2023 International Conference on Business, Economics, and Management for Sustainability  
Session Schedule (III)

|   |   |                                      |
|---|---|--------------------------------------|
| <b>Date: 10/17 Tuesday</b>                                  | <b>Time: 10:50 - 12:10</b>  | <b>Oral Presentation in Room III</b> |
| Session Topic: Finance and Fintech                          |   |                                      |
| Session Chair: Christos Michalopoulos (Nationality: Greece) |   |                                      |
| 1.  | Paper Title: Behavioral Intentions Towards the Use of Digital Wallets in Yunnan China<br>Author(s): Jonathan C Gano-an, Xueting Pan<br>Commentator: Dety Nurfadilah   | <b>Paper ID: 0338</b>                |
| 2.  | Paper Title: Adoption of E Banking Value Added Services by Retail Customers<br>Author(s): Akshra Negi<br>Commentator: Jonathan C Gano-an  | <b>Paper ID: 0365</b>                |
| 3.  | Paper Title: Risk Attitude and Investment Intention of P2P Lending: Exploring the Mediation of Overconfidence and Perceived Investment Value<br>Author(s): Ben-Roy Do, Kris Liao, Ikhtiara Isharina<br>Commentator: Akshra Negi | <b>Paper ID: 0384</b>                |
| 4.  | Paper Title: Driving Digital Transformation for Sustainable Islamic Rural Banks in Indonesia: Talent Mapping Approach<br>Author(s): Sudarmawan Samidi, Dety Nurfadilah, Wiwiek M Daryanto<br>Commentator: Ben-Roy Do            | <b>Paper ID: 0409</b>                |

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2023 International Conference on Business, Economics, and Management for Sustainability  
**Session Schedule (IV)**

|   |                            |                                     |
|---|----------------------------|-------------------------------------|
| <b>Date: 10/17 Tuesday</b>  | <b>Time: 10:50 - 12:10</b> | <b>Oral Presentation in Room IV</b> |
| Session Topic: International Trade (NTU Workshop Session)   |                            |                                     |
| Session Chair: Yan-Shu Lin (Nationality: Taiwan); National Dong Hwa University                                  |                            |                                     |
| 1. Paper Title: Bundling and Horizontally Differentiated Innovation   |                            | <b>Paper ID: 0327</b>               |
| Author(s): Hui-Ling Chung, Pei-Cyuan Shih   |                            |                                     |
| Commentator: Ayu Sasni Munte  |                            |                                     |
| 2. Paper Title: The Welfare Analysis of Anti-competitiveness in the Presence of Corporate Social Responsibility |                            | <b>Paper ID: 0329</b>               |
| Author(s): Ku-Chu Tsao, Chih-Wei Chang, Yan-Jhen Lin, Yan-Shu Lin   |                            |                                     |
| Commentator: Hui-Ling Chung   |                            |                                     |
| 3. Paper Title: Vertical Integration and Separation Under Unobservable Contracts                                |                            | <b>Paper ID: 0416</b>               |
| Author(s): Ayu Sasni Munte, Yan-Shu Lin   |                            |                                     |
| Commentator: Ku-Chu Tsao  |                            |                                     |

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2023 International Conference on Business, Economics, and Management for Sustainability  
**Session Schedule (V)**

|  |                            |                                    |
|--|----------------------------|------------------------------------|
| <b>Date: 10/17 Tuesday</b>   | <b>Time: 10:50 - 12:10</b> | <b>Oral Presentation in Room V</b> |
| Session Topic: IT and Fit Tech (NCYU Session)  |                            |                                    |
| Session Chair: Hong-Yi Chang (Nationality: Taiwan); National Chiayi University   |                            |                                    |
| 1. Paper Title: Exploring The Key Factors of Green Energy for Sustainable Development in Taiwan  |                            | <b>Paper ID: 0388</b>              |
| Author(s): Yong Jhen Sie, Bo Hsiao   |                            |                                    |
| Commentator: Tu-Liang Lin  |                            |                                    |
| 2. Paper Title: Financial Prediction Based on Converted 2D Images of Technical Indicators for Programmed Trading Using Convolutional Neural Networks |                            | <b>Paper ID: 0390</b>              |
| Author(s): Tzu-Shan Chang, Yu-Chieh Chang, Tu-Liang Lin  |                            |                                    |
| Commentator: Yong Jhen Sie   |                            |                                    |
| 3. Paper Title: Selection the Key Factors to Affect User's Preference of Video Conferencing Platform by Using DANP Approach                          |                            | <b>Paper ID: 0392</b>              |
| Author(s): Yi-Wei Lin, Bo, Hsiao   |                            |                                    |
| Commentator: Tu-Liang Lin  |                            |                                    |
| 4. Paper Title: Study of User Behavior and APPs Recommendation System  |                            | <b>Paper ID: 0395</b>              |
| Author(s): Hong-Yi Chang, Tu-Liang Lin, Hung-Yin Liu, Yu-Ming Hsu, Wei-Xuan Hu, Pei-Ning Wang, Yun-Chiao Chen, Yi-Ying Lin                           |                            |                                    |
| Commentator: Yi-Wei Lin  |                            |                                    |

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2023 International Conference on Business, Economics, and Management for Sustainability  
**Session Schedule (VI)**

| <b>Date: 10/17 Tuesday</b>                                  | <b>Time: 14:00 - 16:00</b>  | <b>Oral Presentation in Room I</b> |
|---|---|------------------------------------|
| Session Topic: Marketing and Consumer Behavior              |   |                                    |
| Session Chair: Nick Vasiljevic (Nationality: United States) |   |                                    |
| 1.  | Paper Title: Triggers of Brand Evangelism and Knowledge Contribution in Online Communities<br>Author(s): Tzy-Wen Tang, Pei-Jing Yu, Pei-Tzu Lee<br>Commentator: Hassani Hussein Juma  | <b>Paper ID: 0347</b>              |
| 2.  | Paper Title: Online Purchase Intentions for Fashion Products: What Influences the Consumers?<br>Author(s): Saksham Chaudhary<br>Commentator: Chih Ming Tsai   | <b>Paper ID: 0359</b>              |
| 3.  | Paper Title: Factors Affecting Young People’s Avoidance of Advertisements on Social Media Platforms: A Case Study in the Mekong Delta of Vietnam<br>Author(s): Luong Ngoc Tran, Thu Huong Tran<br>Commentator: Chih Ming Tsai                           | <b>Paper ID: 0367</b>              |
| 4.  | Paper Title: Understanding the Consumer’s Motivations to Purchase Second-Hand Products in Taiwan<br>Author(s): Hassani Hussein Juma, Athumani Leonard Yuba, Bor-Ming Hsieh<br>Commentator: Tzy-Wen Tang   | <b>Paper ID: 0400</b>              |
| 5.  | Paper Title: The Effect of Content, Electronic Word-of-Mouth, Perceived Usefulness, and Brand Trust on the Online Purchase Intention for Buying Online Health Supplements<br>Author(s): Chih Ming Tsai, Yi-Hsuan Chen<br>Commentator: Saksham Chaudhary | <b>Paper ID: 0413</b>              |
| 6.  | Paper Title: The Effect of Influencer Attributes, Brand Fit, Brand Awareness, and Parasocial Relationship on Purchase Intention: From Influencer Marketing in Social Media Perspectives   | <b>Paper ID: 0414</b>              |

Author(s): Chih Ming Tsai, Ting Yi Wu  
Commentator: Hassani Hussein Juma

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2023 International Conference on Business, Economics, and Management for Sustainability  
Session Schedule (VII)

| Date: 10/17 Tuesday   | Time: 14:00 - 16:00  | Oral Presentation in Room II |
|---|--|------------------------------|
| Session Topic: Economics                                    |  |                              |
| Session Chair: Christos Michalopoulos (Nationality: Greece) |  |                              |
| 1.  | Paper Title: CO2 Emissions and Economic Growth Per Capita: Evidence from India<br>Author(s): Meehika Mohan<br>Commentator: Christos Michalopoulos  | <b>Paper ID: 0337</b>        |
| 2.  | Paper Title: Effect of Exports and FDI Inflows on Economic Growth in India<br>Author(s): Vedant Agrawal<br>Commentator: Meehika Mohan  | <b>Paper ID: 0339</b>        |
| 3.  | Paper Title: Ending Child Labour: Does Conditional Cash Transfer Matter? Evidence from Indonesia<br>Author(s): Resty Tamara Utami, Romi Bhakti Hartarto, Wahyu Tri Wibowo, Muhammad Luqman Iskandar<br>Commentator: Vedant Agrawal | <b>Paper ID: 0373</b>        |
| 4.  | Paper Title: Trade Policy, COVID-19 Pandemic and Firm Values<br>Author(s): Chih-Wei Yang, Yi-Chein Chiang<br>Commentator: Wahyu Tri Wibowo   | <b>Paper ID: 0381</b>        |
| 5.  | Paper Title: Analyzing the Link Between Patent Innovation and Market Valuation in High-Tech Sectors: An Applied Econometric Study<br>Author(s): Tsung-Han Ke, Hung-Chun Huang, Hsin-Yu Shih<br>Commentator: Chih-Wei Yang          | <b>Paper ID: 0391</b>        |
| 6.  | Paper Title: Evaluation of the Economic Impact of COVID-19 Pandemic and the Effect of Government Relief Policies: A Case Study of Taiwan<br>Author(s): Shu-Yuan Lu   | <b>Paper ID: 0397</b>        |

Commentator: Tsung-Han Ke

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2023 International Conference on Business, Economics, and Management for Sustainability  
Session Schedule (VIII)

| Date: 10/17 Tuesday  | Time: 14:00 - 16:00  | Oral Presentation in Room III |
|--|--|-------------------------------|
| Session Topic: Sustainable Development   |  |                               |
| Session Chair: Chin-Yi Fang (Nationality: Taiwan); National Taiwan Normal University |  |                               |
| 1.   | Paper Title: Public Toilets Sustainability Through Art and Culture<br>Author(s): Amir Nabih, Howaida Eid<br>Commentator: BUI Thi Thanh Huong   | <b>Paper ID: 0324</b>         |
| 2.   | Paper Title: Corporate Social Responsibility and Firm Performance in Listed US Technology Companies: The Additive Efficiency Decomposition in Two-stage DEA and Network-based Ranking Approach<br>Author(s): Hsiu-Fei Wang, Kuo-Cheng Kuo, Thi Hoang Yen Nguyen<br>Commentator: Amir Nabih | <b>Paper ID: 0378</b>         |
| 3.   | Paper Title: The Board Size Effect on CSR and Firm Level Performance – Cross COVID-19<br>Author(s): Oyunerdene Dashnyam, Wen-Min Lu, Kuo-Cheng Kuo<br>Commentator: Thi Hoang Yen Nguyen  | <b>Paper ID: 0380</b>         |
| 4.   | Paper Title: Influences on the Intention of Residents to Install Rooftop Solar Panels: A Study in Greater Taipei<br>Author(s): Hsien-Long Huang, Ivashova Natalia, Yun-Chen Yu<br>Commentator: Oyunerdene Dashnyam   | <b>Paper ID: 0385</b>         |
| 5.   | Paper Title: The Role of Economics in Education for Sustainable Development<br>Author(s): Tsung-Chi Chen<br>Commentator: Hsien-Long Huang  | <b>Paper ID: 0406</b>         |
| 6.   | Paper Title: Policies for green innovation in agriculture<br>Case study in Quenfarm in Thanh Hoa province in Vietnam<br>Author(s): BUI Thi Thanh Huong, Koji TSUJI, Tue An LE, RSS Nehru, VU Tuan Anh, TRAN Van Tan<br>Commentator: Tsung-Chi Chen   | <b>Paper ID: 0417</b>         |

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2023 International Conference on Business, Economics, and Management for Sustainability  
**Session Schedule (IX)**

| <b>Date: 10/17 Tuesday</b>  | <b>Time: 14:00 - 16:00</b>  | <b>Oral Presentation in Room IV</b> |
|---|---|-------------------------------------|
| Session Topic: Efficiency Analysis (SCU Session)                        |   |                                     |
| Session Chair: Shih-Yung Chiu (Nationality: Taiwan); Soochow University |   |                                     |
| 1.  | Paper Title: Exploring the Moderating Effect of National Governance Quality on Eco-Efficiency and Business Efficiency Before and During Covid-19 Pandemic: A Case of Multinational Pharmaceutical Enterprises<br><br>Author(s): Thu-Thao Le, Wen-Min Lu, Kuo-Cheng Kuo<br>Commentator: Shih-Yung Chiu | <b>Paper ID: 0377</b>               |
| 2.  | Paper Title: Can Intellectual Capital Influence on R&D Efficiency and Marketability Efficiency of Global Innovators<br><br>Author(s): Ci Yue Kweh, Wen-Min Lu, Qian Long Kweh<br>Commentator: Thu-Thao Le   | <b>Paper ID: 0379</b>               |
| 3.  | Paper Title: Efficiency evaluation of Luxury Brands' ESG Sustainability and Adaptation During the COVID-19 Pandemic<br><br>Author(s): Hsiu-Fang Chien, Liang-Chun Lu, Shih-Yung Chiu, Yung-Ho Chiu<br>Commentator: Ci Yue Kweh  | <b>Paper ID: 0382</b>               |
| 4.  | Paper Title: Efficiency and Ranking Analysis of Global Brand Enterprises: Navigating Sustainability and Resilience in the Face of U.S.-China Trade Conflict and Pandemic<br><br>Author(s): Liang-Chun Lu, Shih-Yung Chiu, Hsiu-Fang Chien, Yung-Ho Chiu<br>Commentator: Tai-Yu Lin                    | <b>Paper ID: 0383</b>               |
| 5.  | Paper Title: Efficiency Analysis of Urban Sustainable Development and Happiness from the Perspective of Education<br><br>Author(s): Yu-Chuan Chen, Shih-Yung Chiu, Liang Chun Lu, Yung-Ho Chiu<br>Commentator: Tai-Yu Lin   | <b>Paper ID: 0399</b>               |
| 6.  | Paper Title: IC Industry Operation and ESG Performance—Taking Semiconductor Industry of Taiwan as an Example  | <b>Paper ID: 0371</b>               |

Author(s): Tai-Yu Lin, Pi-Yu Hung, Yung-ho Chiu, Tzu-Han Chang, Chung-Tzer Liu  
Commentator: Shih-Yung Chiu

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2023 International Conference on Business, Economics, and Management for Sustainability  
**Session Schedule (X)**

| <b>Date: 10/17 Tuesday</b>   | <b>Time: 14:00 - 16:00</b>  | <b>Oral Presentation in Room V</b> |
|--|---|------------------------------------|
| <b>Session Topic: Management and Others</b>  |   |                                    |
| <b>Session Chair: Chia-Ning Chiu (Nationality: Taiwan); National ILan University</b> |   |                                    |
| 1.   | <b>Paper Title:</b> Quality of Life and Start-up Alternatives for Small-Scale Banana Chippers in Maragusan, Davao de Oro<br><b>Author(s):</b> Jonathan C Gano-an<br><b>Commentator:</b> Liang Chun Lu   | <b>Paper ID: 0325</b>              |
| 2.   | <b>Paper Title:</b> The Relationship between Competition Engagement and Competition Achievement: A theoretical perspective of Thriving<br><b>Author(s):</b> Yi-Tze Chen, Bo-Yu (Peter) Pan, Chia-Yu Chang<br><b>Commentator:</b> Jonathan C Gano-an   | <b>Paper ID: 0334</b>              |
| 3.   | <b>Paper Title:</b> Behavioural Intentions of Indian Users for Crypto Currency Adoption: Extended TPB Model<br><b>Author(s):</b> Arsh Khan<br><b>Commentator:</b> Bo-Yu (Peter) Pan   | <b>Paper ID: 0364</b>              |
| 4.   | <b>Paper Title:</b> A Hybrid Method of Demand Forecasting for Improving Delivery Delay —A Case Study on A Fitness Equipment Company<br><b>Author(s):</b> Hsin-Yao Hsu, Po-Heng Tsou<br><b>Commentator:</b> Arsh Khan  | <b>Paper ID: 0369</b>              |
| 5.   | <b>Paper Title:</b> Exploring Vocational Education and Training in European Countries - A Case Study of the Three-Stage Circular of Higher Education, Enterprises, and Government<br><b>Author(s):</b> Yun-Jing Chen, Liang Chun Lu, Shih-Yung Chiu, Yung-Ho Chiu<br><b>Commentator:</b> Po-Heng Tsou | <b>Paper ID: 0419</b>              |

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2023 International Conference on Business, Economics, and Management for Sustainability  
**Poster Session (I)**

|   |  |                                      |
|---|--|--------------------------------------|
| <b>Date: 10/17 Tuesday</b>                      | <b>Time: 13:20 - 13:50</b>   | <b>Poster Presentation in Room I</b> |
| Session Topic: Financial Markets and Regulation |  |                                      |
| 1.  | Paper Title: Financing Obstacle, Gender and Country Culture: Cross-country Evidence<br>Author(s): Hsiu-Hsia Chou | <b>Paper ID: 0386</b>                |
| 2.  | Paper Title: Taxation on Crypto Assets in Taiwan<br>Author(s): Chien, Yin Ying, Huang Shih Chou                  | <b>Paper ID: 0412</b>                |

**Poster Session (II)**

|                                |  |                                       |
|--------------------------------|--|---------------------------------------|
| <b>Date: 10/17 Tuesday</b>     | <b>Time: 13:20 - 13:50</b>   | <b>Poster Presentation in Room II</b> |
| Session Topic: Risk Management |  |                                       |
| 1.                             | Paper Title: KY Company's Governance Risk Early Warning Strategy -Taking Konyou KY<br>Hollowing Case as an Example<br>Author(s): Te-Wei Chiang, J-P Lin                          | <b>Paper ID: 0321</b>                 |
| 2.                             | Paper Title: The Role and Relationship of Information Technology Capability, Supply Chain<br>Resilience and Operation Performance in Post-Pandemic Era<br>Author(s): Wen Lu Wang | <b>Paper ID: 0341</b>                 |



2023 International Conference on Business, Economics, and Management for Sustainability  
**Poster Session (III)**

|  |  |  |
|--|--|--|
| <b>Date: 10/17 Tuesday</b>             | <b>Time: 13:20 - 13:50</b>   | <b>Poster Presentation in Room III</b> |
| Session Topic: Business Administration |  |  |
| 1.                                     | Paper Title: Factor Affecting the Decision in Using the Way of Buy Now, Pay Later (BNPL) to Purchase Products through Online Applications in Thailand<br>Author(s): Apitchaya Jarupriwan   | <b>Paper ID: 0398</b>                  |
| 2.                                     | Paper Title: A Study on the Improvement of the Service Quality of Security Personnel from the Perspective of Job Demand-Resources Model<br>Author(s): Ya-Ti Hsu, Wei-Tao Tai, Hsin-Hui Lin | <b>Paper ID: 0408</b>                  |

**Poster Session (IV)**

|   |   |                                       |
|---|---|---------------------------------------|
| <b>Date: 10/17 Tuesday</b>                      | <b>Time: 13:20 - 13:50</b>  | <b>Poster Presentation in Room IV</b> |
| Session Topic: Tourism and Logistics Management |   |                                       |
| 1.  | Paper Title: An EOQ Models for Non-instantaneous Deteriorating Items with Expiration Dates under Linearly Time-dependent Holding Cost and Preservation Technology Investment<br>Author(s): Jui-Jung Liao, Sung-Lien Kang, Wen-Lin Kuo | <b>Paper ID: 0323</b>                 |
| 2.  | Paper Title: The Study among Memorable Tourism Experience, Place Attachment and Word-of-mouth Behavior<br>Author(s): Jiajen Ni, Tingru Yang, Tom M. Y. Lin  | <b>Paper ID: 0372</b>                 |

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2023 International Conference on Business, Economics, and Management for Sustainability  
**Poster Session (V)**

| <b>Date: 10/17 Tuesday</b>   | <b>Time: 13:20 - 13:50</b> | <b>Poster Presentation in Room V</b> |
|--|----------------------------|--------------------------------------|
| Session Topic: Others  |                            |                                      |
| 1. Paper Title: An Automatic Trading System based on Python and Qt   |                            | <b>Paper ID: 0366</b>                |
| Author(s): Te-Wei Chiang, J-P Lin  |                            |                                      |
| 2. Paper Title: Why are Taiwanese Learning Vietnamese?   |                            | <b>Paper ID: 0368</b>                |
| Author(s): Ngoc Phung Sai, Mei-Shiu Chiu   |                            |                                      |
| 3. Paper Title: Why Can Sustainable Leadership Promote the Willingness to Adopt an Environmental Strategy? |                            | <b>Paper ID: 0322</b>                |
| Author(s): Shih-Chin Lee, Stanley Y. B. Huang  |                            |                                      |

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# **Keynote Speech**

## **Deciphering Climate Extremes and Risks**

### **Speaker**

**Dr. Professor S.-Y. Simon Wang**  
**Ulta University, US**

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# Yunus Social Business Forum

Speech 1

## UUPON 點數平台介紹

**Speaker**

**David Huang,  
Chain Sea Information Group**

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# **Yunus Social Business Forum**

**Speech 2**

## **Social Business & Its Impact on Socio-Economic Development**

**Speaker**

**Dr. MFM Amir Khashru.**

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## PRESENTATION GUIDELINES

### For oral presentations

Every presentation room will be equipped with a screen (data) projector and a notebook computer with the Microsoft PowerPoint. Prepare your presentation file on an USB flash drive or other portable memory device. All speakers should upload your files into the computer and test the projector before the session begins. In each presentation room, one service staff will help you for your preparation.

The following guidelines will help you to ensure a successful presentation.

1. Be sure to come at least 20 minutes early to your session.
2. Prepare your slides as a PowerPoint file or a PDF and bring them with you to the session.
3. Bring your slides files on an USB flash drive or other portable memory device.
4. Upload your files to the computer and test the projector.
5. Introduce yourself to the session chair and co-chair.
6. Each presentation is limited in 15~20 minutes including 5 minutes Q&A.

### For session chair and speaker

The roles of session chair and co-chair are to ensure the smooth execution of the session. They should

1. Contact the speakers before the session and prevent any technical problem.
2. Keep presentations in the order shown in the program.
3. Introduce the speakers and the title of each presentation.
4. Ensure the presentations not overstep their time frame.
5. Ask for questions, manage discussion and thank the speakers.

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## For poster presentations

You may wish to consider a poster presentation as opposed to the traditional oral presentation because posters allow you more time to present to a much larger audience base.

The following guidelines will help you to ensure a successful presentation.

1. Authors are responsible for mounting their posters the morning of their presentation and removing them as soon as the session ends.
2. Posters should be A2 sized, and the format of poster, please see the template as follows.
3. Please email your poster to ICBEM (Mail: [ICBEM@mail.chihlee.edu.tw](mailto:ICBEM@mail.chihlee.edu.tw)) **BY OCTOBER 12<sup>th</sup>** while you finish your poster.

## POSTER TEMPLATE

|                                       |         |                       |  |
|---------------------------------------|---------|-----------------------|--|
| PAPER TITLE<br>AUTHORS                |         | SIZE :A1              |  |
| INTRODUCTION                          |         | GRAPHS<br>&<br>TABLES |  |
| FIGURES<br>&<br>EXPERIMENTAL<br>SETUP | CONTENT | CONCLUSION            |  |

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No.ICBEM-23-0324

## Public Toilets Sustainability Through Art and Culture

### Amir Nabih

Under Secretary of State for International Cultural Agreements and Programs  
Foreign Cultural Relations, Ministry of Culture of Egypt .  
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### Howaida Eid

General Director of Artistic Office for Music, Opera & Ballet, The National Cultural Center "Cairo Opera House.  
Email:howaidaeid@gmail.com

### Abstract

Our argument is “Why Culture and art are very important for World public policy implications towards the problem of public toilets? And what are the linkages between public toilets, art, culture, social innovation and economy?

The SDG 6 recognizes that countries’ social development and economic prosperity depend on the sustainable management of freshwater resources, sanitation and ecosystems; one of unspoken area in this challenge is Public Toilets.

According to the World Health Organization, 2.4 billion people globally do not have access to any type of improved sanitation facility. That is over 30% of the world total population, of these, 892 million still defecate in the open air, e.g. in street gutters, behind bushes or into open bodies of water. Women are particularly badly affected; 50% of school girls in Africa leave school when menstruation starts because of lack of school toilets. On the other hand First world problems have a different aspect; when you already have a substantial amount of what you need, yet you complain about the quality and the type you want. So it has recently been the object of theoretical questionings, empirical evaluations and debates anchored in the relevant judicial and legal frameworks, but generally speaking we can say that Everyone, not just the poor, is affected by Public toilet inequality.

In this study, we focused on acknowledging the pivotal role that art, Cultural beliefs and traditions play in shaping identity through designing public toilets, as well as acknowledging that such codes are not neutral functional objectives but rather reflect and reproduce deep-seated cultural beliefs that shape the design of the spaces of our daily lives and it can be also a big chance for social innovation and positive economy. In addition, such innovations can present opportunities to promote microentrepreneurship and enhance incomes.

**Keywords:** Public toilets, Sustainability, SDG 6, Cross Cultural Problems, discrimination, Urban planning

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No.ICBEM-23-0325

## Quality of Life and Start-up Alternatives for Small-Scale Banana Chippers in Maragusan, Davao de Oro

**Jonathan C Gano-an**

University of Southeastern Philippines

### Abstract

With the grip of chronic poverty in the countryside which was exacerbated by issues relating to climate change, food security and waste problems, understanding the quality of way of life of the vulnerable population has a focal role in developing sustainable efforts that would somehow improve their present condition. Hence, this research undertaking was conducted with the primary aim of describing the present economic condition, assesses the quality of life and identify challenges in the livelihood of small scale banana chippers in selected Barangays in the Municipality of Maragusan. This study was also dedicated to identify viable entrepreneurial opportunities that they can exploit. A total of 80 respondents participated in this study and findings showed that banana chippers considered themselves as *'poor'* and their assessment to their quality of life in terms of governmental service, support, and policy and living condition in the community, they are *mostly satisfied*; they are *pleased* as to the cooperation among producers; *mixed* feelings about the satisfaction for the job/business; and *mostly dissatisfied* in terms of satisfaction of income. With regards to the current issues and challenges they have encountered, most of them recounted that changing *weather conditions and lack of production facility and equipment* emerged.

**Keywords:** Quality of Life; Banana Chippers; Enterprise Development; Entrepreneurship

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## **Bundling and Horizontally Differentiated Innovation**

**Hui-Ling Chung**

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**Pei-Cyuan Shih**

Corresponding author. Department of International Business, Ming Chuan University  
pcshih@mail.mcu.edu.tw

### **Abstract**

This research builds a three-stage (bundling, horizontally differentiated innovations(HDIs), and outputs) game in which only one multi-product firm undertakes a bundling strategy in order to analyze the impacts of bundling on HDIs and competes with a single-product firm. It is found that no matter what the degree of initial product substitution is, bundling will definitely amplify the degree of horizontal product differentiation. When the initial degree of product substitution is large, the bundling strategy subdues the firm's HDI while increasing the competitor's HDI. However, when the initial degree of product substitution is small, the bundling increases both firms' HDIs, resulting in higher competitor's profit, consumer surplus, and social welfare. An important policy implication of our results is that antitrust regulation that allows bundling may contribute to the multi-product firm's HDI.

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# Frontline Employees' Turnover Intentions in Tourism and Hospitality Sectors: A Systematic Literature Review and Research Agenda

**Tony Nguyen, Giang Hoang**

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## Abstract

Frontline employees play crucial roles in tourism and hospitality organizations because they work directly with the customers and represent the organization. However, the turnover rate amongst tourism and hospitality frontline employees is found to be higher than other groups of employees in the same sector. Therefore, detecting the factors that affect turnover intention among frontline employees is necessary to develop effective human resource management strategies in the tourism and hospitality sectors. Our article reviews the empirical studies on frontline employees' turnover intention in tourism and hospitality and proposes a research agenda for future research. Through a systematic and rigorous selection process, we obtained a sample of 72 empirical studies. By analyzing and synthesizing the research results from these studies, we found that: (a) studies on frontline employees' turnover intention in tourism and hospitality are mainly anchored in conservation of resources theory, social exchange theory, and the job demands-resources model; (b) turnover intention of frontline employees has been investigated in different cultural contexts mostly using quantitative methods; (c) various scales were utilized to measure turnover intention; and (d) antecedents, mediators, and moderators of frontline employees' turnover intention in a variety of tourism and hospitality contexts have been identified. Based on the findings of our review, we developed an integrated framework for turnover intention in tourism and hospitality contexts and provided research implications for future studies.

**Keywords:** turnover intention; frontline employees; systematic literature review; tourism and hospitality management

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No.ICBEM-23-0329

## The Welfare Analysis of Anti-Competitiveness in The Presence of Corporate Social Responsibility

**Ku-Chu Tsao<sup>1</sup>, Chih-Wei Chang<sup>2</sup>, Yan-Jhen Lin<sup>3</sup>, Yan-Shu Lin<sup>4</sup>**

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3 Department of Industrial Economics, National Central University, Taoyuan, Taiwan.

Email:410542005@gms.ndhu.edu.tw

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### Abstract

This article establishes a duopoly vertical supply chain model, in which a monopoly manufacturer authorizes the products to two dealers, a CSR dealer, and a PMF dealer, in the form of the input price. We analyze the optimal degree of CSR and explore the impact on consumer surplus and social welfare. The results show that when a manufacturer sets a uniform price for two dealers, the manufacturer's profit, consumer surplus, and social welfare will be higher than in the case of discriminatory pricing. Regardless of whether the manufacturer uses uniform or discriminatory pricing authorization, the overall industrial profits, consumer surplus, and social welfare are higher when the CSR dealer belongs to the direct selling store rather than the franchise store. When a manufacturer adopts uniform pricing at the direct selling store, it is the highest channel coordination method for social welfare; but at the same time, CSR will become a tool to concentrate the market, drive PMF dealers out of the market so that manufacturers can extract all of the industry profit.

**Keywords:** corporate social responsibility, welfare, discriminatory pricing, uniform pricing

QR code for full paper review



No.ICBEM-23-0334

## The Relationship between Competition Engagement and Competition Achievement: A Theoretical Perspective of Thriving

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### Abstract

With entrepreneurship competitions increasingly becoming a major teaching method in higher vocational education, the condition of students' competition engagement and how it promotes competition achievement has become a topic worthy of researchers' exploration. Based on this, this study used the socially embedded theory to explore whether cognitive engagement, emotional engagement, and behavioral engagement could positively influence learning achievement through thriving. This study used a questionnaire survey method to distribute two stages of questionnaires to a private university of science and technology in northern Taiwan, and a total of 218 questionnaires were collected. The results showed that all three types of competition engagement can promote students' thriving and thus affect learning achievement. Based on the above, this study proposes theoretical and educational implications at the end of the article.

**Keywords:** Competition engagement, Thriving, Competition achievement

QR code for full paper review



No.ICBEM-23-0337

## **CO2 Emissions and Economic Growth Per Capita: Evidence from India**

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### **Abstract**

Sustainability goals have a significant place in the economic policies of the countries today. Therefore, along with economic growth, the impact which the growth in economic output can have on environment in terms of carbon emissions has to be considered. This paper attempts to analyse the cointegration and causality between economic growth and CO2 emissions at per capita level in India for the period 1990-2020. It is found that there is a two way causality where economic growth Granger-causes CO2 emissions and CO2 emissions also Granger-cause GDP per capita during the period of study. The results have implications for policy making regarding balance of growth and sustainability.

**Keywords:** CO2 emissions, Economic Growth, Granger Causality, Cointegration, India

QR code for full paper review



No.ICBEM-23-0338

## Behavioral Intentions Towards the Use of Digital Wallets in Yunnan China

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### Abstract

Amplified by the technological advancement, all electronic transactions around the world has consistently reshape the financial ecosystem and the use of e-wallets do not only redefine how we use cash but it has become a paramount to the lives of the growing population. The aim of this research was to analyze the behavioral intentions of the users of digital wallets. Through a survey research method, this research undertaking was conducted in the Yunnan Region in China where a total of 606 customers were surveyed using a structured questionnaire. Using the Partial-Least Square Structural Equation Modelling (PLS-SEM), this study tested 5 structural relationships. In the test of correlation conducted, the data suggests that there are positive relationships between the constructs, indicating that higher scores in one construct tend to be associated with higher scores in other constructs. This implies that perceived ease of use, usefulness, risk, awareness, intention to use, and behavioral intention are all interconnected in some way. Lastly, based on the hypothesis testing conducted, it appears that all the paths from the predictor variables (PEU, PU, PR, AW) to the outcome variable (IU) are statistically significant and supported. Additionally, the path from IU to BI is also statistically significant and accepted. Findings suggest that Fintech companies may invest to making sure that e-wallet is less risky. One good strategy is to invest in studying and developing a software that would complement the existing security features of the existing digital wallets. On the policy side, strict adherence to the existing data privacy laws must be ensured to protect the interest of the public. Fintech companies and affiliated financial institutions may also see the need to enhance and expand the usefulness of e-wallets and may add other services such as insurance, short term loans, and personal finance monitoring. This way, e-wallets do not only fulfill a single role, rather it promote financial inclusivity among the population of Yunnan.

**Keywords:** Financial Technology, Digital Wallets, Financial Inclusion, Behavioral Intentions

QR code for full paper review



No.ICBEM-23-0339

## Effect of Exports and FDI Inflows on Economic Growth in India

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### Abstract

Most economies of the world follow a liberal trade and investment policy with other countries in order to take advantage of the gains arising from export earnings and FDI inflows in terms of rise in economic growth. This paper is an attempt to analyse the effect of FDI inflow and exports on GDP in India. Using the multiple regression framework, the data from 1990-2020 has been analysed. The results exhibit a significant effect of exports as well as FDI inflows on GDP.

**Keywords:** Trade, Foreign Direct Investment, Economic Growth, India

QR code for full paper review



No.ICBEM-23-0342

## **Factors Influencing Health Insurance Purchase Intention of Indian Consumers: Extended TPB Approach**

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### **Abstract**

Health Insurance has become a necessity in today's world due to various reasons such as the emergence of new diseases, exponentially rising medical expenses, reduced immune system due to lifestyle changes, and pollution. The adoption of health insurance in India is still moderate. This study aimed at analysing the factors affecting the adoption of health insurance in India applying an extended Theory of Planned Behaviour (TPB) model in the adoption of health insurance in India. Based on the results of analysis it was concluded that perceived behavioural control and attitude towards insurance significantly affect consumers purchase intentions for health insurance followed by Price value of insurance premium and trust on insurance provider in predicting health insurance purchase intentions among Indians. Findings have important implications for policy makers and insurance companies.

**Keywords:** Health Insurance, Theory of Planned Behaviour, Trust, Price Value

QR code for full paper review



No.ICBEM-23-0344

## **Factors Influencing Adoption of E-Health Apps by Indian Consumers: Applying the UTAUT Model**

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### **Abstract**

The adoption of e-health apps in India is low despite the positive impact of mobile device services globally, and understanding adoption at the individual level is essential for success. This paper aims to test a conceptual framework based on UTAUT model to contribute to the understanding of the factors influencing e-health app adoption by consumers in India. The analysis results demonstrate that Facilitating Conditions, Effort Expectancy, Performance Expectancy, and Social Influence all play important roles in influencing the intention to adopt e-health apps. These findings highlight the significance of creating favorable conditions, enhancing the ease of use, promoting perceived usefulness, and leveraging social influence to encourage the adoption and usage of e-health apps among individuals.

QR code for full paper review



No.ICBEM-23-0347

## Triggers of Brand Evangelism and Knowledge Contribution in Online Communities

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### Abstract

This study aims to investigate the antecedents of two types of user citizenship behaviors in online communities: users' brand evangelism and knowledge contribution. The brand evangelism, such as referrals and oppositional referrals towards a rival brand, and knowledge contribution are important for enterprises to propagate their brand via social media. We examine the effects of users' knowledge on their brand evangelism and knowledge contribution, and the mediating role of trust and commitment toward the brand. This study targeted online smartphone community users who had been members of an official brand fan page. It was tested by applying partial least squares technique, and the data were collected from a survey of 208 members of online smartphone communities. Empirical results show that users' knowledge, trust, and commitment toward the brand have positive effects on brand evangelism and knowledge contribution. Moreover, the results also show that trust and commitment toward a brand had a mediating effect between user knowledge and two types of user citizenship behaviors. This study adopts the extension view point of organizational citizenship behaviors to the understanding of users' brand evangelism and knowledge contribution behaviors in enterprise's online community. This paper contributes to the brand evangelism and knowledge contribution literature in enterprise's online community and open innovation context.

**Keywords:** user knowledge, trust, commitment, brand evangelism, knowledge contribution

QR code for full paper review



No.ICBEM-23-0359

## **Online Purchase Intentions for Fashion Products: What Influences the Consumers?**

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### **Abstract**

The online market for fashion products has seen tremendous growth in recent years with the advent of e-commerce platforms and deepening internet penetration. This paper aims to analyse the factors influencing online purchase intentions of consumers in India for fashion products in order to suggest strategies to be followed by e-commerce platforms offering fashion products for being successful. The multiple regression analysis results demonstrate that convenience, pricing, information quality available on the e-commerce website and trust on the online vendor are significant factors influencing the purchase intentions. These findings have important implications for e-commerce platforms selling fashion products in terms of devising their strategies and designing their websites.

**Keywords:** e-commerce, online fashion, purchase intention, information quality

QR code for full paper review



No.ICBEM-23-0364

## **Behavioural Intentions of Indian Users for Crypto Currency Adoption: Extended TPB Model**

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### **Abstract**

Cryptocurrency is no strange term anymore across the globe. Its adoption is increasing at an ever-increasing pace. The scale of related infrastructure has also evolved to a great extent further enabling the adoption. This paper is an attempt at investigating cryptocurrency adoption intention among users in India based on the framework provided by Theory of Planned Behaviour extended by Trust. Results of multiple regression analysis show that Attitude, Subjective Norms, Perceived Behavioural Control, and Trust are significant predictors of Behavioural Intention to adopt cryptocurrencies among users in India.

**Keywords:** Crypto Currency, Theory of Planned Behaviour, Trust, Behavioural Intention

QR code for full paper review



No.ICBEM-23-0365

## Adoption of E Banking Value Added Services by Retail Customers

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### Abstract

With the advancement in technology and the development of digital banking products to cater demand of customer the pioneer banking process has been transformed completely. Today banking income is not static over interest but banks have generated many new avenues to generate income through commission and service charges provide to their customers. Hence this study attempts to analyse the factors affecting adoption of Value Added Services (VAS) provided over E Banking platform based on Theory of Planned Behaviour (TPB) framework considering variables of Attitude, Perceived behavior control, and social norms. Results indicate that all three core constructs of the TPB model are significant predictors of behavioural intention to adopt E-Banking based Value Added Services provided by Indian Banks to their customers

**Keywords:** E-Banking, Value Added Services, Theory of Planned Behaviour, Indian Banking

QR code for full paper review



No.ICBEM-23-0367

## **Factors Affecting Young People's Avoidance of Advertisements on Social Media Platforms: A Case Study in the Mekong Delta of Vietnam**

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### **Abstract**

The aim of this research is to investigate why young people in Can Tho City, which is located in the heart of the Mekong Delta region of Vietnam, avoid advertisements on social media platforms with application of the reactance theory. Descriptive statistics and a Chi-square test are employed to describe the status of advertising and also the avoidance of advertising on social networks. Furthermore, with 232 young respondents, we apply multiple linear regression to find out the effect of five constructs, namely goal impediment, ad clutter, negative experience, privacy concern and perceived personalization on ad avoidance. According to the results, the primary reason people avoid social media advertising is due to their negative experiences. Ad avoidance can also be influenced by goal impediment, ad clutter, and perceived personalization; however, among these three factors, only perceived personalization has a negative effect. Young people in Mekong Delta from Vietnam do not avoid advertisements due to privacy concerns, which is in contrast to the findings of many research conducted in developed countries. The management implications of this finding for lowering the amount of time spent avoiding advertisements on social networks are as follows.

**Keywords:** Social media advertising, Ads Avoidance, Reactance Theory, Personalization, Vietnam

QR code for full paper review



No.ICBEM-23-0369

## A Hybrid Method of Demand Forecasting for Improving Delivery Delay —A Case Study on A Fitness Equipment Company

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### Abstract

A case study on a fitness equipment company was initiated by Wan-ru Cai who is responsible for managing logistics distribution from Taiwan to Europe and America. The corporate headquarter is in New York, while their assembly base of fitness equipment in Taichung, Taiwan. The components of fitness equipment usually come from Shanghai, Hong Kong, or Shenzhen in China. In addition, the sales are mainly concentrated in Europe and the US areas. The objective of a case study was to improve the present delivery delay situation of physical distribution of treadmills and spinning bikes among 2 -3 months. In order to improve relative issues of operational activities, analysis of Fishbone Diagram has been used to identify the relative of cause-and-effect relationship, DEMATEL Technique is used to present the important and influential relationships, and the method of Time Series Forecasting is also used to create future operational activities of production and delivery.

The main contribution is a submission of a hybrid method of analysis of Fishbone Diagram and DEMATEL, and Time Series Forecasting to help decision-makers obtain accurate demand forecasts as well as allow decision-makers to be more aware of the properly developing operational activities of production for improving the delivery delay situation. Also, this hybrid method of feasibility and applicability of this study can be used in different product line or different industry.

**Keywords:** Fishbone Diagram; DEMATEL; Time Series Forecasting; Case Study.

QR code for full paper review



No.ICBEM-23-0371

## IC Industry Operational and ESG Performance—Taking Semiconductor Industry of Taiwan as an Example

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### Abstract

This study focused on analyzing the semiconductor industry in Taiwan by examining 73 listed companies. The industry was categorized into three groups: IC design, IC manufacturing, and IC packaging and testing. The researchers utilized the meta frontier's dynamic three-stage RDM DDF Model to assess the operation, sustainability, and market efficiency of the semiconductor industry during the period from 2017 to 2021. The results indicated that IC manufacturing exhibited the highest efficiency among the three groups, followed by IC design and then IC packaging and testing. Furthermore, the study explored the Technology Gap Ratio within the semiconductor industry groups, revealing that the IC design group had the smallest technology gap, followed by IC manufacturing, while IC packaging and testing faced the most significant technology gap. Additionally, when analyzing the efficiency value at different stages of the semiconductor industry, the second stage (sustainable stage) demonstrated the highest efficiency, indicating that the companies' sustainability practices were the most effective. The first stage (operation stage) followed, and the third stage (market stage) exhibited the lowest efficiency, suggesting room for improvement in market-related operations.

**Keywords:** semiconductor, Taiwan, IC manufacturing, IC design, IC packaging and testing, DDF Model, DEA.

QR code for full paper review



No.ICBEM-23-0373

## Ending Child Labour: Does Conditional Cash Transfer Matter? Evidence from Indonesia

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### Abstract

This study aims to investigate whether and to what extent the Indonesian Conditional Cash Transfer (CCT), known as the Family Hope Program (FHP), impacts the probability of children engaging in labour activities. We utilize data from the Indonesian Family Life Survey (IFLS) in 2014, focusing on periods following the implementation of the FHP. To estimate the impact of FHP on child labour in Indonesia, we employ a propensity score matching (PSM) strategy to balance the characteristics observed between the participant and non-participant groups. The estimates show that FHP does not have any statistical impact on child labour across all matching techniques. This implies that receiving the CCT does not always help poor households to decrease the probability of stopping their children from participating in labour activities. The findings of this study provide crucial information and insights into evaluating the performance of CCT programs in eradicating child labour. It is highly advised that government officials and policymakers prioritize their attention on the design, structure, and coverage of such programs.

**Keywords:** conditional cash transfer, child labour, education, Indonesia

QR code for full paper review



No.ICBEM-23-0377

## Exploring the Moderating Effect of National Governance Quality on Eco-Efficiency and Business Efficiency Before and During Covid-19 Pandemic: A Case of Multinational Pharmaceutical Enterprises

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### Abstract

This study employs a two-stage network data envelopment analysis to assess the impact of Worldwide Governance Indicators on the enterprise efficiency of multinational enterprises in the pharmaceutical sector during the pre-Covid 19 and post-Covid 19 periods. In the first stage, we adopt the additive efficiency decomposition to examine the efficiency of 34 enterprises from three regions, which are America, Asia, and Europe. Then, we apply the network-based ranking approach to segregate efficient enterprises based on their centrality scores. The empirical result shows that companies in three regions have higher overall eco-efficiency score than business efficiency, and America leads the other two regions with the highest efficiencies in two stages. In the second stage, the panel regression demonstrates that Worldwide Governance Indicators negatively impacts the relationship between eco-efficiency and business efficiency. Policymakers can reference the findings of this paper as a guide for what they should advance upon and as a resource for learning from experience.

**Keywords:** Covid-19 pandemic, pharmaceuticals enterprise, eco-efficiency, business efficiency, national governance quality.

QR code for full paper review



No.ICBEM-23-0378

## Corporate Social Responsibility and Firm Performance in Listed US Technology Companies: The Additive Efficiency Decomposition in Two-stage DEA and Network-based Ranking Approach.

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### Abstract

This study aims to examine the impact of corporate social responsibility (CSR) on the firm's performance and also analyze the efficiency of listed US technology companies. The research utilizes the additive efficiency decomposition in two-stage data envelopment analysis (DEA) network model to calculate the firm efficiency and a network-based method to rank the efficient units, also based on the results from the method to point out the strengths and weaknesses of each firm in the listed US technology companies. This study treats firm performance as multiple stages and divided into two sub-processes named innovation efficiency and operation efficiency. The results from network-based ranking highlight the sufficiency and deficiency of each firm and provide references among the listed US technology companies. Moreover, the research contributes a novel on the significant relationship between CSR and firm performance. Specifically, this study found out that there are negative effects of CSR indicators on innovation efficiency, meanwhile, there is an existence of a positive impact of CSR indicator on operation efficiency. These findings could highlight the benefit of an increase in CSR, which leads to a higher operation efficiency for investigated listed US technology companies. In contrast, CSR could minimize the innovation efficiency of the firm.

**Keywords:** corporate social responsibility, innovation efficiency, operation efficiency, data envelopment analysis (DEA), network-based ranking method.

QR code for full paper review



No.ICBEM-23-0380

## The Board Size Effect on CSR and Firm Level Performance – Cross COVID-19

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### Abstract

The study's primary objective is to investigate the influence of corporate social responsibility (CSR) on sustainability and marketability performance perspectives, analyzing the firm performance of manufacturing equipment enterprises moderates a potential effect of board size. The research scope incorporates 71 multinational enterprises with samples during the 2017–2021 period cross COVID-19. This study applied a dynamic network data envelopment analysis (DEA) models' characteristic of time efficiency, carryover activities, and network industry structure, decoding sustainability and marketability performance. The moderation effect employed by panel regression analysis. Our empirical result reveals that the social practices were affected negatively by sustainability performance, whereas the governance practices were affected positively by marketability performance. We also found that the board size was affected negatively by marketability performance. Moreover, the findings of this study suggest that European region and medical equipment sector enterprises led ESG disclosure and demonstrated superior performance compared with the other three industries. Then, the challenging COVID-19 pandemic had an impact on both performances. The outcome of this study highlights strategic CSR for sustainable development goals.

**Keywords:** Corporate social responsibility; Sustainability performance; Marketability performance; Dynamic network DEA; Board size; COVID-19 Pandemic

QR code for full paper review



No.ICBEM-23-0381

## Trade Policy, COVID-19 Pandemic and Firm Values

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### Abstract

This paper will study the trend of accounts receivables for Taiwan firms and examine if there is structure change of the accounts receivables during COVID-19 period. In order to optimize the firm value, it will also determine the optimal point for Taiwan firms' accounts receivables. COVID-19 has had a significant impact on global businesses, leading to a global decline in economic activity and catastrophe in many areas of life. This research will give empirical data on numerous elements of the accounts receivables and its effect on the value of the Taiwan enterprises by applying and examining subsamples from both before and after the COVID-19 outbreak. The results show that there is a declining trend of account receivables, especially during COVID-19 period. In addition, the optimal value of account receivables is also lower during COVID-19 period.

**Keywords:** Accounts receivables, firm value, optimal point, COVID-19

QR code for full paper review



No.ICBEM-23-0382

## Efficiency Evaluation of Luxury Brands' ESG Sustainability and Adaptation During the COVID-19 Pandemic

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### Abstract

This study presents an assessment of sustainability efficiency for 27 luxury brand companies spanning 2018 to 2021, taking into account the COVID-19 pandemic's impact. Employing the Modified Dynamic Three-Stage Network DEA with Directional Distance Function Model, this research investigates efficiency and ranking across ESG Governance, operation, and marketing stages. Outcomes reveal that luxury brand companies generally exhibited poor marketing stage efficiency, significantly influencing overall scores and rankings. Total-Factor Efficiency Analysis identified consistent inefficiency in the market value output indicator, a key factor affecting sustainability efficiency during COVID-19. Moreover, this research model assesses traditional luxury brand ranking methods based on market value and net sales or revenue, revealing effective correction of overestimation bias. Emphasizing the quantitative approach's grounding in real-world social conditions, this study analyzes luxury brand companies' adaptability to ESG sustainable capabilities and development amidst COVID-19 economic turmoil. Consequently, this model offers a more objective evaluation of luxury brand performance.

**Keywords:** Luxury Brands Efficiency evaluation, Three-Stage Network DEA, Directional Distance Function Model, , ESG sustainability, Market Value

QR code for full paper review



No.ICBEM-23-0383

## **Efficiency and Ranking Analysis of Global Brand Enterprises: Navigating Sustainability and Resilience in the Face of U.S.-China Trade Conflict and Pandemic.**

**Liang-Chun Lu<sup>1</sup>, Shih-Yung Chiu<sup>2</sup>, Hsiu-Fang Chien<sup>3</sup>, Yung-ho Chiu<sup>4</sup>**

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### **Abstract**

Between 2018 and 2021, global economics were affected by the U.S.-China trade conflict and the COVID-19 pandemic, causing disruptions in the global market and challenges for brand enterprises. This study used the Modified Dynamic Three-Stage Network DEA Model with Exogenous Directional Distance Function to analyze the sustainable efficiency of 49 global brand enterprises. It assessed governance, operations, and market value, considering revenue and environment in parallel operations with an ESG focus. Findings: 1. No brand achieved optimal sustainable efficiency overall. 2. Fluctuating annual scores led to notable brand ranking variations, emphasizing the yearly impact on efficiency. 3. Parallel operations mainly contributed to low efficiency; the weakest was revenue due to the U.S.-China conflict and pandemic. 4. Environmental efficiency suggests room for improvement. 5. Brands attained optimal efficiency in market value, highlighting effective optimization. 6. The research model rectifies biases in global brand rankings, accounting for real economic context. The study assesses brand enterprises' efficiency and rankings, offering insights to enhance sustainable overall efficiency through better corporate governance.

**Keywords:** ESG, Brand Ranking, Three-Stage Network DEA Model, Exogenous DDF.

QR code for full paper review



No.ICBEM-23-0384

## **Risk Attitude and Investment Intention of P2P Lending: Exploring the Mediation of Overconfidence and Perceived Investment Value**

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### **Abstract**

Technological improvements have led to many disruptive innovations in various industries, such as peer-to-peer (P2P) lending in the financial sector. However, prior research on P2P lending primarily emphasizes legal regulations and systematic mechanisms, rather than considering the potential investors' point of view about the phenomenon in FinTech. Although the P2P lending market in Taiwan is still in its infancy, recent fraudulent conduct by im.B. or China's 2018 crisis, where more than 4000 P2P lending platforms failed, may raise concerns about consumers' risk attitudes and their investment intentions to become P2P lenders.

Therefore, the purpose of this research is to empirically investigate the relationship between risk attitude and P2P lending investment intention. We also propose that Overconfidence and perceived investment value mediate this relationship. An online questionnaire was distributed to users of P2P lending platforms, online P2P lending investment discussion groups, and social media. A total of 533 valid responses were retained for further analysis using SPSS and AMOS, with structural equation modeling applied for path analysis and hypotheses testing. Results show that risk attitude is positively and significantly related to P2P lending investment intention, while perceived investment value is found to mediate the relationship. The mediation of overconfidence is only found among people without P2P lending experience. Managerial implications, research limitations, and future recommendations are provided.

**Keywords:** P2P lending, risk attitude, investment intention, Overconfidence, perceived investment value

QR code for full paper review



No.ICBEM-23-0385

## Influences on the Intention of Residents to Install Rooftop Solar Panels: A Study in Greater Taipei

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### Abstract

The rooftop photovoltaic system is an affordable and readily available energy source that effectively mitigates the risks associated with global warming. Its long-term viability is contingent upon implementing government incentives and developing marketing tactics to enhance customers' perception of its benefits. Solar photovoltaic systems have emerged as a pivotal green energy solution, particularly in Taiwan, benefiting from its abundant sunlight in the subtropical region. This study investigates the factors influencing residents' intention to install rooftop solar photovoltaic systems in Greater Taipei.

Empirical data were collected from an online survey, and 365 valid questionnaires were collected. The collected data were analyzed using SPSS software. The results show that perceived usefulness, perceived ease of use, environmental awareness, and government incentives significantly influence adoption attitudes. Adoption attitude significantly and positively affects adoption intention. This research provides valuable insights into promoting the adoption of solar photovoltaic systems in Greater Taipei, aligning with the global efforts to combat climate change and embrace sustainable energy sources. This paper also provides suggestions for government policymakers and offers a solid theoretical and practical framework for photovoltaic industry marketers.

**Keywords:** Theory of planned behavior; Technology acceptance model; Environmental awareness; Government incentive.

QR code for full paper review



No.ICBEM-23-0388

## Exploring The Key Factors of Green Energy for Sustainable Development in Taiwan

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### Abstract

Exploring the key factors for the sustainable development of green energy in Taiwan requires consideration of a series of economic, environmental, social, and technological aspects. Taiwan is increasingly emphasizing transitioning to green energy as a way to address environmental concerns, reduce dependence on fossil fuels, and ensure long-term sustainable development. This study mainly discusses the key factors that promote the sustainable development of green energy in Taiwan and adopts a multi-criteria analysis method to conduct an in-depth discussion. The questionnaire was analyzed according to three criteria and nine dimensions. Through these key elements, Taiwan can make significant progress toward a sustainable energy future, contributing to global efforts to combat climate change while minimizing environmental harm.

**Keywords:** Green energy, energy, multiple criteria decision analysis

investment value

QR code for full paper review



No.ICBEM-23-0390

# Financial Prediction Based on Converted 2D Images of Technical Indicators for Programmed Trading Using Convolutional Neural Networks

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## Abstract

This study explores the application of algorithmic trading in financial forecasting, with a particular focus on the potential benefits of convolutional neural deep learning in stock markets. Algorithmic trading has become an important trend in modern finance, combining advanced technology with the forecasting needs of the financial markets. As a powerful machine learning method, deep learning has the ability to learn features on its own, which makes it have a broad application potential in the predictive analysis of the financial markets. This study proposes an innovative programmatic trading model that utilizes appropriate data preprocessing and model training. It uses a 2D convolutional neural network (CNN) based on image processing characteristics. It successfully captures complex patterns and trends in the stock market by using 15 different technical indicators and converting each 15-day indicator instance into a 15x15 2D image. According to a holding period, whether the Stop Loss and Stop Profit conditions of the stock price are met, and mark each image as "Buy", "Sell" or "Hold". Experimental results show that compared with traditional technical analysis indicators, the model proposed in this study exhibits superior performance and accuracy in financial forecasting. Finally, as a reference for users to make financial transactions, the model's buy and sell signals are sent to Telegram to provide users with relevant information, such as real-time time, investment projects, and current recommended operations. The study sheds light on the potential benefits of deep learning methods in programmed trading and their application to financial forecasting. These research results will provide new directions and inspiration for related research, as well as help financial practitioners and academics gain a deeper understanding of how modern technology can be used to improve the forecasting ability of financial markets.

**Keywords:** Financial Prediction, Deep Learning, Algorithmic Trading, Technical Indicators, Technical Analysis

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No.ICBEM-23-0391

## **Analyzing the Link Between Patent Innovation and Market Valuation in High-Tech Sectors: An Applied Econometric Study**

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### **Abstract**

In the domain of technology management, the concept of technological progress has conventionally been conceptualized as a trajectory encompassing phases of technological incubation, industrial establishment, and evolutionary development. However, this trajectory has predominantly relied on conceptual observation rather than undergoing a thorough quantitative investigation. This study employs rigorous econometric analysis to provide a quantitative framework for understanding this trajectory, utilizing the concept of maximum Lyapunov exponents. Furthermore, it scrutinizes the lead-lag relationship between the technological trajectory and the Philadelphia Semiconductor Index, a prominent indicator within the stock market. The primary contribution of this study lies in its endeavor to empirically ascertain the correlation between patent development and the market valuation of high-tech industries.

**Keywords:** Lead and Lag Effect; Technological Trajectory; Patent

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No.ICBEM-23-0392

## Selection the Key Factors to Affect User's Preference of Video Conferencing Platform by Using DANP Approach

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### Abstract

In recent years, the impact of the widespread COVID-19 pandemic has led to many activities being forced to shift to remote modes, such as remote work and distance learning. As a result, this has gradually increased the importance of video conferencing platforms. Therefore, this study has chosen three commonly used video conferencing platforms for analysis. The study aims to identify the factors that influence user's choices when selecting video conferencing by using DANP (DEMATEL-based Analytic Network Process) from the multi-criteria decision-making (MCDM) and identify the optimal platform by using VIKOR (Vlsekriterijumska Optimizacija I Kompromisno Resenje). The research findings revealed that the key factors influencing user's preference are platform security, followed by stability and ease to use.

**Keywords:** video conferencing, MCDM, DANP, VIKOR

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No.ICBEM-23-0395

## Study of User Behavior and APPs Recommendation System

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### Abstract

This research introduces a novel approach to improve recommendation systems within the Industrial Technology Research Institute's Smart Machinery Cloud Marketplace. Using Box-Cox transformation, neural network recommendation, and time weighting techniques, the study aims to improve the precision of product recommendations. By applying these techniques to user interactions and purchase histories, the approach identifies products that align with users' historical preferences.

One focus is gauging user engagement through clicks and time spent on product pages. Leveraging the transformed metrics through Box-Cox and neural network recommendation models enables the identification of products that match users' past behaviors.

In another dimension, the study delves into users' purchase histories to predict evolving preferences. By integrating time weighting into the neural network recommendation model, the approach adapts to changing user interests, thus enhancing recommendation accuracy.

In addition, various modeling strategies are explored to ensure compatibility with the Smart Machinery Cloud's data architecture. This research not only advances recommendation systems but also provides insights tailored to the Smart Machinery Cloud Marketplace, enriching user experiences.

**Keywords:** Recommendation System, Hybrid Filtering, Neural Network Recommendation, Box-Cox Transformation, Time Weight

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No.ICBEM-23-0397

## **Evaluation of the Economic Impact of COVID-19 Pandemic and the Effect of Government Relief Policies: A Case Study of Taiwan**

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### **Abstract**

At the end of 2019, the novel coronavirus disease (COVID-19) emerged and subsequently caused a global outbreak, affecting human health, the environment, energy and the economy. While governments around the world limited physical economic activity to prevent the spread of the epidemic, they also implemented relevant policies to encourage consumption or provide relief to certain industries in order to avoid or alleviate economic recession. During the pandemic in Taiwan, the domestic people cooperated with the pandemic prevention and control measures to reduce going out, and the flow of consumption in physical stores declined. The commercial service industry, which is very related to people's livelihood consumption, was thus affected. This study uses the industry input-output tables compiled by the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan, and the government relief data of the commercial service industry in 2020 and 2021. The purpose is to estimate the effect of Taiwan's government relief policies during the COVID-19 pandemic and the net impact of the pandemic on Taiwan's economy. Through input-output modeling and simulation, we hope that the results of this study can serve as a reference for future government policy decision-making and evaluation.

**Keywords:** Input-Output Model, COVID-19, Relief Policy, Commercial Service Industry

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No.ICBEM-23-0399

## Efficiency Analysis of Urban Sustainable Development and Happiness from the Perspective of Education

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### Abstract

This study analyzes urban sustainable development and happiness from the education perspective, using the dynamic parallel four-stage SBM DEA and entropy methods to combine variables into indicators. The four stages include education, economics, parallel urban sustainability, and urban happiness. The research objects are counties and cities in Taiwan. The results show that the average sustainable well-being efficiency score of the 21 cities is 0.834, with the highest score being 0.926 and the lowest being 0.706. The study also identifies the factors that contribute to the sustainable well-being efficiency of the cities, including income inequality, air quality, and traffic congestion. The findings of this study provide insights for policymakers to enhance the sustainable well-being of Taiwanese cities.

**Keywords:** Education, Economic Development, Urban Sustainable Development, Happiness

QR code for full paper review



No.ICBEM-23-0400

## Understanding the Consumer's Motivations to Purchase Second-Hand Products in Taiwan

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### Abstract

Second-hand products business in Taiwan has been growing steadily in recent years. The market for second-hand products has become more established and is gaining popularity among consumers who are looking for affordable and sustainable alternatives to new products. There are several online platforms and brick-and-mortar stores that specialize in selling second-hand goods, including clothing, electronics, furniture, and more. According to a report by the Taiwan External Trade Development Council (TAITRA), the second-hand market in Taiwan was worth about NT\$100 billion (approximately US\$3.6 billion) in 2019. The aim of this study is to examine the consumers' intention to buy used products and to visit a second-hand shop using the extended Theory of Planned Behavior (TPB) in Taiwan. The application of the TPB to the analysis of second-hand purchasing behavior can provide significant insights into the elements that impact people's decisions to engage in such behavior.

Using an online survey, a total of 155 valid samples are collected from Taiwan and other countries. Our results shows that the attitude towards positive impact of second-hand buying on sustainable consumption, perceived behavioral control, personal norms, and intention to purchase second-hand products has a positive influence on the intention to buy second-hand products and the results are varied across gender, nationality, and education levels. Overall, the study provides important recommendations for decision-makers in marketing, public policy, and environmental preservation, as well as informative information about how customers behave when purchasing second-hand products. It can be used by stakeholders to develop strategies in promoting a culture of mindful and responsible consumption.

**Keywords:** Secondhand Product, Theory of Planned Behavior, Buying Intention, Consumption

QR code for full paper review



No.ICBEM-23-0404

## Studying the Potential of Wellness Tourism Development in Vietnam Towards Sustainable Development

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### Abstract

Recently, wellness tourism has been mentioned quite often and is becoming a trend chosen by many tourists. In particular, since the major upheavals of the Covid-19 pandemic, the demand for medical tourism has increased. With rich and diverse natural resources including many beaches, primeval forests, hot mineral spots, long stretches of hot mud, along with a huge number of temples, monasteries, and famous traditional medicine... Vietnam has a plethora of advantages to develop medical tourism. Developing healing tourism is the direction to help attract high-quality tourists, towards sustainable development, contributing to overcoming the seasonality of tourism. However, healing tourism in Vietnam is only in its early stages, so it is not really diverse and professional. In this study, the authors analyze the potential, current status and factors affecting the development of healing tourism in Vietnam, thereby proposing practical solutions to develop healing tourism in Vietnam towards sustainable development.

**Keywords:** Wellness tourism, Vietnam tourism resources, influencing factors, sustainable development

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No.ICBEM-23-0406

## The Role of Economics in Education for Sustainable Development

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### Abstract

This study compares the educational goals of the United Nations and Taiwan through text analysis, looking for similarities and differences and gaps, and finds that in the aspect of sustainable development education, the concept of supporting resources and teaching tools for qualified teachers. This study seeks references from past literature, trying to make some supplements to the concept of sustainable development. In order to build students' systematic cognitive ability, a "sustainable development system" model is gradually rolled out in accordance with each learning stage to explain the meaning of sustainable development, aiming hoping to pave the way for future scientists and entrepreneurs who are growing in the future stage a short learning path while being able to support the teaching momentum of qualified teachers.

**Keywords:** SDGs, Education for Sustainable Development, Sustainable development system, Economics Education.

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No.ICBEM-23-0409

## Driving Digital Transformation for Sustainable Islamic Rural Banks in Indonesia: Talent Mapping Approach

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### Abstract

Digital transformation has a significant impact on traditional banks, in particular Islamic rural banks. The objective of this research is to identify and map the digital talent skills and abilities that will be required for the sustainability of Islamic rural banks. The research employed a mixed-method design by distributing questionnaires to 277 respondents and in-depth interviews on separate occasions. The interviews involved academicians, practitioners, human resources and talent managers. The data was then analysed using a descriptive, AHP, and talent mapping process. The result shows that the gap between current and future competencies can be seen in Quadrant III and IV. Future competencies highlight that applying technology and expertise and analyzing under limited but growing, while social and emotional skills under importance and growth. This study bring contribution to the strategic talent management of Islamic rural banks by providing a quadrant analysis for twenty competencies.

**Keywords:** Digital talent, Islamic rural banks, talent mapping, talent management, talent competencies.

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No.ICBEM-23-0410

## Estimating Production Length and Linkage in Supply Chains: Evidence from Taiwan's High-Tech Products

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### Abstract

This paper develops an estimation model and the estimation indices of production length and linkage in supply chains to explore the production position and the linkage relationships of production activities in the supply chains. In this paper, the estimation of the production length is to estimate the degree of production activities of the supply-side in which the individual orders form the demand side will be produced within the scope of the supply-side's foreign production or within the scope of the supply-side's domestic production, while the estimation of the production linkage is to estimate the linkage relationships with the production activities of individual countries by the degree of production length. The estimation indices proposed in this paper observe the production activities of three major high-tech products between Taiwan and its three major trading countries, the United States, China, and Japan, from 2001 to 2022. The estimation results show that the degree of production length is relatively high in both foreign and domestic countries with the United States and China, the production position of both foreign and domestic production is evenly distributed, and the degree of production linkage relationships show that Taiwan has a higher degree of production linkage relationships with the United States and China, but the degree of domestic production linkage with Taiwan is relatively high. The analysis of the estimation model of production length and production linkage in supply chains proposed in this paper can be used as a forecast and observation indices and reference for firms, industries, countries and policy makers.

**Keywords:** production length, production linkage, supply chains, production position, linkage relationships.

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No.ICBEM-23-0413

# The Effect of Content, Electronic Word-of-Mouth, Perceived Usefulness, and Brand Trust on the Online Purchase Intention for Buying Online Health Supplements

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## Abstract

This study investigated the influence of content, electronic word-of-mouth (eWOM), perceived usefulness, and brand trust on Taiwanese consumers' online purchase intention towards health supplements. This study is conducted specifically in a Taiwanese context, with 323 responses obtained from Taiwanese middle-aged individuals ranging from 30 to 50 years old. The data obtained were analyzed through reliability and validity analysis, confirmatory factor analysis, and structural equation model. The results showed that content has a positive influence on eWOM, perceived usefulness, and online purchase intention; eWOM positively influences brand trust, perceived usefulness, and online purchase intention. Perceived usefulness also has a positive influence on online purchase intention. However, both the influence of content on brand trust and the influence of brand trust on online purchase intention are not significant. This study stressed the importance of content, eWOM, and perceived usefulness on consumers' online purchase intention when purchasing health supplements online.

**Keywords:** Content, Perceived Usefulness, Electronic Word-of-Mouth, Brand Trust, Online Purchase Intention

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No.ICBEM-23-0414

# The Effect of Influencer Attributes, Brand Fit, Brand Awareness, and Parasocial Relationship on Purchase Intention: From Influencer Marketing in Social Media Perspectives

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## Abstract

This study examined the relationships among influencer attributes, brand fit, brand awareness, parasocial relationship, and purchase intention. The 222 valid questionnaires were received from people of all ages who have experience of purchasing advertised goods and have experience of using social media. The data were analyzed through reliability and validity analysis, confirmatory factor analysis, and structural equation model. The results revealed the interrelationships between influencer attributes, brand fit, brand awareness, parasocial relationship, and purchase intention. Influencer attributes were found to directly impact brand fit, brand awareness, and parasocial relationship by shaping consumer perceptions and preferences, acting as a conduit connecting influencers with brand values, enhancing brand visibility, and fostering trust among followers. Additionally, brand awareness was observed to have a direct influence on brand fit, as consumers' familiarity with a brand aided in assessing its alignment with their values and needs, shaping their perception of brand fit within their personal identity and lifestyle. Furthermore, both parasocial relationship and brand fit were found to directly affect purchase intention, with strong parasocial connections fostering loyalty and a sense of closeness, while brand fit aligned the brand with consumers' identities and needs, making them more inclined to make a purchase. Influencer attributes and brand awareness indirectly influenced purchase intention by shaping consumers' attitudes and perceptions, contributing to overall consumer sentiment and trust, which subsequently influenced their likelihood to make a purchase. Lastly, influencer attributes were noted to indirectly affect brand fit by influencing consumer perceptions and associations, linking the influencer's characteristics with those of the brand and contributing to the perception of a strong brand fit. This study also highlights the strategic significance of influencer marketing for managers. It emphasizes the importance of aligning influencers with brand values and audience to enhance credibility and trust. Furthermore, building genuine parasocial relationship with influencers can foster consumer loyalty and tailor marketing strategies based on factors like brand fit and parasocial relationship, which is crucial for success in influencer marketing. Finally, we concluded how the influencer marketing impacts consumers' purchase intentions during the prevalent era of social media.

**Keywords:** Influencer Attributes, Brand Fit, Brand Awareness, Parasocial Relationship, Purchase Intention

QR code for full paper review



## Vertical Integration and Separation Under Unobservable Contracts

Ayu Sasni Munte, Yan-Shu Lin

### Abstract

An upstream firm that typically produces inputs has several options for maximizing profit. In this study, we analyze at how an upstream firm decides whether to maximize profits through vertical integration or vertical separation. We also analyze that downstream firms cannot observe input prices imposed by upstream firm. Hiding input price information indicates that an upstream firm is acting opportunistically. As a result, downstream firms that have no access to information about input prices will be less responsive. The following are the main findings of this paper. Under common supplier: First, under vertical integration, the transfer price is set to zero. However, wholesale price is higher under decentralization than centralization. The output of intrafirm (rival firm) is higher (lower) under decentralization than under centralization. VI firm, consumer surplus, and social welfare prefer centralization to decentralization. Second, comparing vertical integration and vertical separation, firm D, upstream firm, consumer surplus, and social welfare prefer vertical integration to vertical separation. In addition, under dedicated suppliers: upstream firm, consumer surplus, and social welfare prefer vertical integration to vertical separation. Furthermore, we also look at how VI firm can avoid charging discriminatory input prices on downstream firms. In the presence of arm's-length pricing restrictions, the preference of the VI firm is determined by the input price efficiency.

**Keywords:** Vertically integrated producer, common supplier, dedicated suppliers, vertical integration, vertical separation, centralization, decentralization, unobservable contracts, opportunistic behavior.

QR code for full paper review



## **Policies for Green Innovation in Agriculture Case Study in Quenfarm in Thanh Hoa Province in Vietnam**

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### **Abstract**

After more than 30 years of renovation, Vietnam's agriculture has made spectacular progress: From a hunger country after the war, Vietnam's agriculture has gradually become self-sufficient in food and progressed to becoming an agricultural exporter in the continent and in the world with a value of nearly 50 billion dollars. But agriculture are facing new challenges: To ensure food security for more than 100 million people with a population growth rate of more than one million people per year; with increasingly narrow land resources; and limited financial resources are increasingly depleted; environmental pollution, climate change, competition with other industry and service sectors. These challenges have the opportunity to develop sustainably or not in the questionaes. Vietnam is a country with a backward agriculture, with just over 10 million farming households and several hundred thousand small-scale farms, with fragmented land and limited financial capacity. Therefore, the investment and development process of high - tech agriculture will face many difficulties and complications, requiring many synchronous and drastic solutions to solve. Specifically: Firstly, perfecting policies and macro-management for agriculture; Second, study and learn from the experiences of high - tech agriculture of other countries; Third, apply the link model connecting 3 partners: Government – university and enterprise for promoting green innovation in agriculture. In this chapter will analyze the current situations, difficulties and challenges in the development of green innovation agriculture in Vietnam, thereby proposed to assess the reality situations, advantages achieved, difficulties and propose policy solutions for the development of green innovation on Agriculture in Vietnam in the new perspective.

**Keywords:** Green innovation, Agriculture, Policy, Thanh Hoa province, Vietnam.

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No.ICBEM-23-0418

## Identifying Determinates of Employee's Digital Competence in the Accommodation and Catering Industry by DEMATEL Method

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### Abstract

The rise of the digital economy and the emergence of the COVID-19 epidemic have changed the context of work and life, accelerated the use of technological tools, and the willingness of enterprises to invest in digital transformation. The purpose of this study is to find out how enterprises can stay ahead of their competitors in the digital era by identifying the digital competencies required by digital transformation enterprises. In order to know well the pattern of digital talents, we have identified the key influencing relationships among the sixteen factors, so as to select or cultivate talents to effectively participate in the digital economy activities.

From the Employee's Perspective, the DEMATEL method was used to find out the degree of interaction between various digital competencies in the accommodation and catering industry. A total of 20 current practitioners were collected to complete the DETAMEL expert Questionnaire. Based on the results, the key competencies that organizations need to digitally transform are eight key digital competencies, including "Data Interpretation", "Data Analysis", "Accurate Classification", "Process Concept" " Process Adaptation ", " Operational Ability", "Cross-Functions", and "Platform Development".

This study analyzes the relevance of digital competencies for enterprises to select, train, and employ talents with limited resources, and suggests that enterprises can strengthen and cultivate talents for digital transformation from these eight digital competencies to promote digital transformation and keep sustainable competitive.

**Keywords:** Digital Transformation, Digital Competences, Competences, DEMATEL

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## Exploring Vocational Education and Training in European Countries - A Case Study of the Three-Stage Circular of Higher Education, Enterprises, and Government

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### Abstract

This research focuses on 28 European countries during the study period from 2015 to 2019. It aligns with the educational objectives of SDG4, aiming to promote quality, equity, and lifelong learning. The study utilizes a three-stage approach, starting from higher education, passing through enterprise operations, and examining government economic performance. It also incorporates the circular of vocational education training and educational investment. Using the Modified Dynamic Circular Three-Stage Network DEA Model, the research analyzes the overall efficiency distribution of the impact of higher education on national economic efficiency during the study period. Additionally, it investigates the efficiency at each stage, stage links, and circular links during the research period. The finding of the study:

1. There are 12 EU countries that have efficiency scores lower than the overall efficiency in the higher education stage and enterprise stage. In the government stage, there are 14 EU countries that have a bigger room for improvement in GDP efficiency. 2. The graduates' salary is the most required improvement in most 13 EU countries. and there are 11 EU countries required to improve the number of companies and production value. 3. Compared with the number of graduates, 11 countries have more room for improvement in revenue efficiency, indicating that the enterprises should increase their revenue. 4. Considering the circular Links, 12 countries require to consider improving their higher education expenditure.

This study reveals that countries adhere to the concept of sustainable development of vocational education training and lifelong education, and effectively use education, enterprise, and government's three-stage circular of higher education resources. According to different national conditions, provide countries with policy improvement directions and optimize education allocation to improve countries' economic efficiency.

**Keywords:** Higher Education, Dynamic SBM DEA, Circular Three-Stage, Vocational Educational and Training (VET), Higher Education Expenditure

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No.ICBEM-23-0341-Poster

## **The Role and Relationship of Information Technology Capability, Supply Chain Resilience and Operation Performance in Post-Pandemic Era**

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### **Abstract**

The COVID-19 pandemic has created significant uncertainty in all areas of life, especially in supply chains disruption. Information Technology (IT), during the COVID-19 period, enabler and support the activities in business model creation and supply chain operation. According to the Dynamic Capability View, IT capability in organization and IT system implementation can help firms to create sustained competitive advantage and enhance operation performance. Supply chain resilience is another key ability to deal with external changes, withstand shocks and continuously adapt and accelerate recovery from supply chain disruptions and crises arise over time. IT support has been shown by different way to direct or indirectly benefit to supply chain performance. By using PLS SEM to research from Taiwan Manufacturing and logistics companies, it aims to verify the moderation role and mediation relationship of IT capability and supply chain resilience on how to influence on firm's performance in post-pandemic era. The result from this research is to identify IT and resilience are the important dynamic capabilities in supply chain management after COVID-19 impact under literature review and to verify the relationship of these capabilities influence on operation performance through quantitative research method of SEM. This study also provides a practical contribution on what the manufacturing companies' capability should be build-up and advise that IT strategy both in technology and organization shall be invested without doubt since the uncertainty becomes a normal situation and it is soon to move into next generation of digital transformation and AI era.

**Keywords:** COVID-19, Supply Chain Disruption, Dynamic Capability, Supply Chain Resilience, Information Technology, Operation Performance, PLS SEM

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No.ICBEM-23-0366-Poster

## An Automatic Trading System based on Python and Qt

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### Abstract

The primary focus of this study is to develop an automatic trading system using Python and Qt that enhances order placement speed and enables efficient risk control. The system adopts the Model-View-Controller (MVC) design pattern and primarily deals with Taiwan index options as the main trading product. Among the currently popular algorithmic trading systems in Taiwan, three stand out: Multicharts (MC), XQ, and Python. MC has the highest usage cost, which includes software subscription fees and data transmission fees. XQ comes in second regarding expenses. For traders with limited funds, Python, being a zero-cost option, presents itself as the most favorable choice. The implemented programmatic order placement system uses Python and Qt to create a fast order placement interface. Traders can easily click relevant buttons based on their order requirements. This streamlined interface allows for the swift sending of preset order signals, stop-loss orders, and other order types to the brokerage firm for timely execution. Furthermore, the system offers an automatic order placement feature with configurable options. Traders can select their desired trading products and set intervals for automatic order placement, along with specifying the quantity for each order and the total number of orders. This feature empowers traders to efficiently manage their portfolios through the system's automated order placement capabilities.

**Keywords:** Python, Qt, PyQt, API, program trading, risk control, MVC

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No.ICBEM-23-0368-Poster

## Why are Taiwanese Learning Vietnamese?

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### Abstract

Taiwanese learning Southeast Asian languages may help Taiwan enhance economic, cultural, and educational collaborations; foster mutual benefits, and align with the goal of sustainable development by cultural understanding. Based on self-determination theory, this study explores the motivational factors for Taiwanese people's learning Vietnamese and develops a Vietnamese language learning motivation scale. The participants of this study were learners who participated in Vietnamese MOOCs courses, and a total of 800 learners' complete data were collected. Among them, 400 data were used for exploratory factor analysis (EFA) and 400 data were used for confirmatory factor analysis (CFA) using R software. The results indicate there are five motivational factors for Vietnamese language learning. The Vietnamese language learning motivation scale demonstrates good reliability and validity, with a Cronbach's coefficient of .92 for the overall scale (18 items) and subscale coefficients ranging from .72 to .98. The results of EFA and CFA indicate that the five-factor model best fits the data and exhibits good criterion-related validity. Based on the research results, applications of the Vietnamese language learning motivation scale and suggestions for future study are discussed.

**Keywords:** learning motivation, self-determination theory, Vietnamese language, language learning motivation Scale

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No.ICBEM-23-0372-Poster

## The Study Among Memorable Tourism Experience, Place Attachment and Word-of-Mouth Behavior

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### Abstract

In order to promote local in-depth tourism, many townships or tourist attractions have launched in-depth guided tours. It is hoped that through more than an hour of guided tours, tourists will have a deeper understanding of the local history and culture, and then get a satisfactory travel experience, so that they can develop emotional attachment to the place and follow-up behavior. This study took tourists participating in guided tours as the research object, and received 392 valid questionnaires to verify the relationship between memorable tourism experience, place attachment and word-of-mouth behavior. The results indicated that memorable tourism experience would significantly affect the sub-dimension of place attachment, and different sub-dimension of place attachment would have different impacts on word-of-mouth behavior.

**Keywords:** Memorable tourism experience, Place attachment, Word-of-mouth

QR code for full paper review



No.ICBEM-23-0386-Poster

## Financing Obstacle, Gender and Country Culture: Cross-country Evidence

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### Abstract

Access to finance is critical for firms, especially for small and medium businesses. This study investigates the impact of the firms' gender feature and the country culture on financing obstacles. Using data from 92 sample countries, the empirical results show that gender and country culture are factors correlated with firms' perceptions of access to finance and the collateral required when firms apply for loans. Female managers/owners have some advantages in terms of access to finance, both in subjective and objective considerations of obstacles. In a country with higher individualism, collectivism or uncertainty avoidance index, the probability of being asked collateral is lower. Firm characteristics and macro conditions are factors related to the ease of access to finance. The results provide policy implications for design loan-related regulations.

**Keywords:** Access to finance, Country culture, Gender, Objective obstacle, Subjective obstacle

QR code for full paper review



No.ICBEM-23-0398-Poster

## **Factor Affecting the Decision in Using the Way of Buy Now, Pay Later (BNPL) to Purchase Products Through Online Applications in Thailand**

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### **Abstract**

These days, there is a wider selection of payment methods available in Thailand. Buy now, pay later (also known as BNPL) is one of the most recent and innovative solutions available today. This aim to study Factors affecting the decision to use BNPL to purchase products through online applications in Thailand. A literature review examined variables were modify from Technology Acceptance Model (TAM). A quantitative questionnaire was conducted online using Google-Forms, as respondents were asked about their BNPL usage and attitudes, along with six hypotheses formulated in this thesis. Entrepreneurs can use the data to develop methods for effectively incentivizing in BNPL payment via online applications.

**Keywords:** BNPL, Consumer decision, Online application, Technology Acceptance Model, Perceived usefulness, Perceived Ease of use

QR code for full paper review



No.ICBEM-23-0408-Poster

## **A Study on the Improvement of the Service Quality of Security Personnel from the Perspective of Job Demand-Resources Model**

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### **Abstract**

Service quality is the most important aspect of the service industry. In the security industry, the service quality of security personnel also needs to be concerned. If the service quality of security personnel is not good, it will threaten the community's safety. This study aims to explore how to improve the service quality of security personnel based on job demand- resources model and effort-reward imbalance model. Data collection is conducted by a paired sample of security personnel and households (one to three). The data (366 questionnaires from safety personnel and 879 from households) were analyzed by structural equation modelling. The results showed that the mentality of the security personnel did affect the service quality perceived by the households, and the mediating effects of effort-reward imbalance and occupational identification exist, but the moderating effect of salary did not exist. Finally, this study will put forward relevant suggestions for security managers based on the research results.

**Keywords:** security personnel, Job Demands-Resources model, effort-reward imbalance, occupational identification, service quality

QR code for full paper review



No.ICBEM-23-0412-Poster

## Taxation on Crypto Assets in Taiwan

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### Abstract

Since 2013, the Taiwanese government had taken a conservative position that crypto assets are speculative commodities for regulatory and tax purposes. Stimulated by large fraud incidents the prevalence of crypto asset transactions, the government decided to establish a categorized regulatory system according to the functions of crypto assets: CBDC, security coin, payment coin and utility coin, which will be regulated by different agencies.

**Keywords:** Crypto Assets, Regulatory Framework, Anti-Money Laundry

QR code for full paper review



No.ICBEM-23-0321-Poster

## **KY Company's Governance Risk Early Warning Strategy - Taking Konyou KY Hollowing Case as an Example**

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### **Abstract**

In the past, the main way to find out whether the company has governance risks was to give an "unqualified opinion" on the financial report of the company after an audit by the accountant to represent that the financial report is credible, and investors also take this as the main reference for investment. However, in August 2020, the Konyou KY tunneling case occurred, and the senior collective disappeared soon, followed by the disastrous situation that many KY companies, such as VHQ, Taodi, Kaiyi, and Yingrui, lost money overnight and their stock prices plummeted. Since KY Company itself is an overseas company, it is not easy to check the epidemic situation, and it is easy to have blind spots. However, even for ordinary non KY companies, even if the accountant has no reservations, there is still no guarantee that the company has no problems, which makes investors face uncontrollable risks. In order to solve this problem, this paper proposes an early warning strategy to predict the degree of corporate governance risk based on the abnormal trend of stock prices to remind investors to avoid investing in related companies. In addition, combined with the other three characteristics can more easily warn the company in advance of governance risks: the shareholding of directors and supervisors has decreased significantly, the shareholding of foreign investors has decreased rapidly, and the shareholding of large investors has slowly shifted to individual investors. This paper takes Kangyou KY as an example of audit, and uses the above focus to audit. The results show that there are obvious anomalies in these early warning features. The preliminary verification of the audit focus proposed in this paper can early warn of possible corporate tunneling risks.

**Keywords:** KY company, corporate governance, tunneling effect, abnormal judgment

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No.ICBEM-23-0322-Poster

## Why Can Sustainable Leadership Promote the Willingness to Adopt an Environmental Strategy?

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### Abstract

This paper intends to develop environmentally psychological ownership to propose how sustainable leadership affects environmental strategy adoption through the moderating effect of environmentally psychological ownership based on upper echelons theory. This paper interviewed three professors to collect the transcript and adopted qualitative coding analysis to validate the three propositions. The analysis results in support all propositions and can build an important milestone for environmental sustainability.

**Keywords:** Environmental Strategy; Environmentally Psychological Ownership; Sustainable Development; Sustainable Leadership.

QR code for full paper review



No.ICBEM-23-0323-Poster

## **An EOQ Models for Non-instantaneous Deteriorating Items with Expiration Dates under Linearly Time-dependent Holding Cost and Preservation Technology Investment**

**Jui-Jung Liao<sup>1\*</sup>, Sung-Lien Kang<sup>2</sup>, Wen-Lin Kuo<sup>3</sup>**

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### **Abstract**

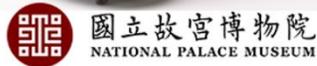
This paper studies non-instantaneously perishable items with expiration dates, in practical situations, the deterioration rate increases as much as the items approaches to the expiration date and the decay in potential worth of items can be increased by using preservation technology. By the efforts of investing in reducing the deterioration rate, the holding cost will increase continuously to preserve the freshness or the useable condition of the items in the storage period. Based on above arguments, we discuss that (1) the holding cost is a linearly increasing function of the storage time and (2) the preservation technology investment affects not only the deterioration rate but also the length of the non-deterioration period. This paper studies the replenishment cycle time problem for non-instantaneously perishable items with expiration dates under above conditions. The corresponding optimal solution is proved theoretically.

**Keywords:** Inventory; Supply Chain Management; Non-instantaneous Deteriorating Items; Preservation Technology Investment; Expiration Dates

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## City Tour



國立故宮博物院  
NATIONAL PALACE MUSEUM

National Palace Museum



TAIPEI 101

Taipei 101



中正紀念堂  
CHIANG KAI-SHEK  
MEMORIAL HALL

Chiang Kai-Shek Memorial Hall

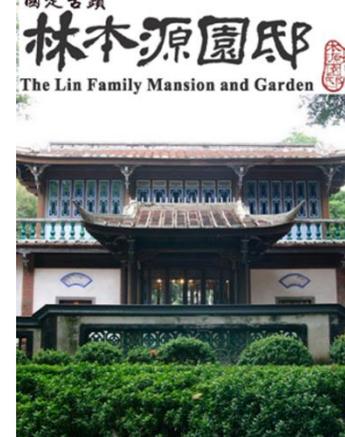


艋舺  
龍山寺  
Lungshan Temple

Lungshan Temple



Hsing Tian Kong



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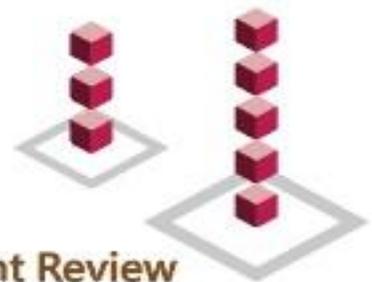
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