Batch B

By
Core Conferences LLC

Business Management, Society and Human Beings

Education, Business and Architecture Design

Global Peace

Globalisation and Issues of Higher Education

Social Science and Public Affairs

Technology and Environmental Science

Tourism, Travel and Philosophy

Women's Leadership

28 – 29, June 2019
San Francisco, California, US

Editor-in-Chief
Dr. A Senthilkumar

Editors:

Daniel James

CoreConferences 2019

Batch B

Disclaimer:

PREFACE

The CoreConferences 2019 held on 28th – 29st June, 2019, in collaboration with Association of Scientists, Developers and Faculties (ASDF), an International body, at San Francisco, California, US.

CoreConferences 2019 provides a chance for Academic and Industry professionals to discuss the recent progress in the area of Multiple. The outcome of the conference will trigger for the further related research and future technological improvement. This conference highlights the novel concepts and improvements related to the research and technology.

The technical committee consists of experts in the various course subfields helped to scrutinize the technical papers in various fields, support to maintain the quality level of the proceedings of conference which consist of the information of various advancements in the field of research and development globally and would act as a primary resource of researchers to gain knowledge in their relevant fields.

The constant support and encouragement from Dr. S. Prithiv Rajan, ASDF Global President, Dr. Julie Rue Bishop, ASDF International President and Dr. K. Kokula Krishna Hari, ASDF International General Secretary helped a lot to conduct the conference and to publish the proceedings within a short span. I would like to express my deep appreciation and heartfelt thanks to the ASDF team members. Without them, the proceedings could not have been completed in a successful manner. I would like to express my sincere thanks to our management, student friends and colleagues for their involvement, interest, enthusiasm to bring this proceeding of the conference in a successful way.

Dr. A Senthilkumar,

Editor in Chief,
Google Inc., Australia

Organizing Committee

Conference Super Chair

Dr A Senthilkumar, Google Inc., Australia

Conference Co-Chair

Dr Julie Rue Bishop, Australia Research Council

TECHNICAL REVIEWERS

- Sunil Chowdhary, Amity University, Noida, India
- Nasrul Humaimi Mahmood, Universiti Teknologi Malaysia, Malaysia
- P Tamizhselvan, Bharathiyar University, India
- Md Nur Alam, Pabna university of Science & Technology, Bangladesh
- N Suthanthira Vanitha, Knowledge Institute of Technology, India
- Krishnan J, Annamalai University, Chidambaram, India
- T Subbulakshmi, VIT University, Chennai, India
- O L Shanmugasundaram, K S R College of Engineering, Thiruchengode, India
- Moniruzzaman Bhuiyan, University of Northumbria, United Kingdom
- Abdelnaser Omran, Universiti Utara Malaysia, Malaysia
- Hareesh N Ramanathan, Toc H Institute of Science and Technology, India
- R Ragupathy, Annamalai University, Chidambaram, India
- Nida Iqbal, Universiti Teknologi Malaysia, Malaysia
- G Ganesan, Adikavi Nannaya University, India
- Vignesh Ramakkrishnon, Association of Scientists, Developers and Faculties, India
- S Shahil Kirupavathy, Velammal Engineering College, Chennai, India
- Rajesh Deshmukh, Shri Shankaracharya Institute of Professional Management and Technology, Raipur
- Zahurin Samad, Universiti Sains Malaysia, Malaysia
- S Ramesh, KCG College of Technology, India
- R Suguna, SKR Engineering College, Chennai, India
- S Selvaperumal, Syed Ammal Engineering College, Ramanathapuram, India
- Sarina Sulaiman, Universiti Teknologi Malaysia, Malaysia

- Tom Kolan, IBM Research, Israel
- T V P Sundararajan, Bannari Amman Institute of Technology, Sathyamangalam, India
- Arumugam Raman, Universiti Utara Malaysia, Malaysia
- Anirban Mitra, VITAM Berhampur, Odisha, India
- Hardeep Singh Saini, Indo Global College of Engineering, Mohali, Punjab
- Md Haider Ali Biswas, Khulna University, Khulna, Bangladesh
- Mohan Awasthy, Chhattisgarh Swami Vivekanand Technical University, Bhilai, Chhattisgarh
- R Nallusamy, Principal, Nandha college of Technology, Erode, India
- Mohd Helmy Abd Wahab, Universiti Tun Hussein Onn, Malaysia
- A Kavitha, Chettinad College of Engineering & Technology, Karur, India
- A Ayyasamy, Annamalai University, Chidambaram, India
- Mohamed Najeh Lakhoua, ENICarthage, Tunisia
- M K Kavitha Devi, Thiagarajar College of Engineering, Madurai, Tamil Nadu
- Somasundaram Sankaralingam, Coimbatore Institute of Technology, India
- Muhammad Iqbal Ahmad, Universiti Malaysia Kelantan, Malaysia
- Asha Ambhaikar, Rungta College of Engineering & Technology, Bhilai, India
- Pethuru Raj, IBM Research, India
- N Rajesh Jesudoss Hynes, Mepco Schlenk Engineering College, Sivakasi, Tamilnadu, India
- Hari Mohan Pandey, Amity University, Noida, India
- Nor Muzlifah Mahyuddin, Universiti Sains Malaysia, Malaysia
- Sheikh Abdul Rezan, Universiti Sains Malaysia, Malaysia
- Jia Uddin, BRAC University, Bangladesh
- Abdelbasset Brahim, University of Granada, Spain
- R Ashokan, Kongunadu College of Engineering and Technology, India
- Uvaraja V C, Bannari Amman Institute of Technology, Sathyamangalam, India
- E Bhaskaran, Government of Tamilnadu, Chennai, India
- Badruddin A. Rahman, Universiti Utara Malaysia, Malaysia
- Chitra Krishnan, VIT University, Chennai, India
- Sundar Ganesh C S, PSG College of Technology, Coimbatore, India
- S Balamuralitharan, SRM University, Chennai, India

- Balasubramanie Palanisamy, Professor & Head, Kongu Engineering College, India
- Ang Miin Huey, Universiti Sains Malaysia, Malaysia
- G Subbaraju, Shri Vishnu Engineering College for Women, India
- Yu-N Cheah, Universiti Sains Malaysia, Malaysia
- S R Kumbhar, Rajarambapu Institute of Technology, India
- Sunita Daniel, Amity University, Haryana
- P Kumar, K S R College of Engineering, Thiruchengode, India
- Shankar S, Kongu Engineering College, Perundurai, India
- V Mohanasundaram, Vivekanandha Institute of Engineering and Technology for Women, India
- Deepali Sawai, Director - MCA, University of Pune (Savitribai Phule Pune University), India
- S Vengataasalam, Kongu Engineering College, Perundurai, India
- Laila Khedher, University of Granada, Spain
- S Jaganathan, Dr. N. G. P. Institute of Technology, Coimbatore, India
- V Sathish, Bannari Amman Institute of Technology, Sathyamangalam, India
- S Nithyanandam, PRIST University, India
- B Paramasivan, National College of Engineering, Tirunelveli, India
- M Shanmugapriya, SSN College of Engineering, Chennai, India
- Syed Sahal Nazli Alhady, Universiti Sains Malaysia, Malaysia
- K Parmasivam, K S R College of Engineering, Thiruchengode, India
- V Akila, Pondicherry Engineering College, Pondicherry, India
- Mohd Hashim Siti Z, Universiti Teknologi Malaysia, Malaysia
- Zainuddin Bin Zakaria, Universiti Teknologi MARA, Dungun Campus, Terengganu
- Mansoor Zoveidavianpoor, Universiti Teknologi Malaysia, Malaysia
- Guobiao Yang, Tongji University, China
- Abhishek Bajpai, SRM University, Lucknow, India
- N Malmurugan, Mahendra Group of Institutions, India
- K Latha, Anna University, Chennai, India
- Uma N Dulhare, Muffkham Jah College of Engineering & Technology, Hyderabad, India
- M Karthikeyan, Knowledge Institute of Technology, India
- Razauden Mohamed Zulkifli, Universiti Teknologi Malaysia, Malaysia

- Chokri Ben Amar, University of Sfax, Tunisia
- V E Nethaji Mariappan, Sathyabama University, India
- Arniza Ghazali, Universiti Sains Malaysia, Malaysia
- Veera Jyothi Badnal, Osmania University, India
- Hidayani Binti Jaafar, Universiti Malaysia Kelantan, Malaysia
- Pasupuleti Visweswara Rao, Universiti Malaysia Kelantan, Malaysia
- Hanumantha Reddy T, RYM Engneering College, Bellary, India
- M Thangamani, Kongu Engineering College, India
- Marinah Binti Othman, Universiti Sains Islam Malaysia, Malaysia
- M Suresh, Kongu Engineering College, Perundurai, India
- N Meenakshi Sundaram, PSG College of Technology, Coimbatore, India
- P Raviraj, Kalaignar Karunanidhi Institute of Technology, Coimbatore, India
- R Sudhakar, Dr. Mahalingam College of Engineering and Technology, India
- K Suriyan, Bharathiyar University, India
- Mohamed Moussaoui, ENSA of Tangier Abdelmalek Essaadi University, Morrocco
- C Poongodi, Bannari Amman Institute of Technology, Sathyamangalam, India
- Reza Gharoie Ahangar, University of North Texas, USA
- Itebeddine GHORBEL, INSERM, France
- M G Sumithra, Bannari Amman Institute of Technology, Sathyamangalam, India
- L Ashok Kumar, PSG College of Technology, Coimbatore, India
- S Anand, V V College of Engineering, Tirunelveli, India
- T K P Rajagopal, Kathir College of Engineering, Coimbatore, India
- Suganthi Appalasamy, Universiti Malaysia Kelantan, Malaysia
- Rathika P, V V College of Engineering, Tirunelveli, India
- S Geetha, VIT University, Chennai, India
- D Sheela, Tagore Engineering College, Chennai, India
- Fadhilah Mat Yamin, Universiti Utara Malaysia, Malaysia
- K Nirmalkumar, Kongu Engineering College, Perundurai, India
- Mohammed Ali Hussain, KL University, India
- S Balamurugan, Kalaignar Karunanidhi Institute of Technology, Coimbatore, India
- Mohd Murtadha Mohamad, Universiti Teknologi Malaysia, Malaysia
- A Kumaravel, KSR College of Technology, India

- Roesnita Ismail, USIM: Universiti Sains Islam Malaysia, Malaysia
- Vikrant Bhateja, Shri Ramswaroop Memorial Group of Professional Colleges (SRMGPC), India
- P Thamilarasu, Paavai Engineering College, Namakkal, India
- Vijayalakshmi V, Pondicherry Engineering College, Pondicherry, India
- S Senthilkumar, Sri Shakthi Institute of Engineering and Technology, Coimbatore, India
- Nithya Kalyani S, K S R College of Engineering, Thiruchengode, India
- P Shunmuga Perumal, Anna University, Chennai, India
- Sathish Kumar Nagarajan, Sri Ramakrishna Engineering College, Coimbatore, India
- S Natarajan, Karpagam College of Engineering, Coimbatore, India
- M Ayaz Ahmad, University of Tabuk, Saudi Arabia
- C Vivekanandan, SNS College of Engineering, Coimbatore, India
- D Gracia Nirmala Rani, Thiagarajar College of Engineering, Madurai, Tamil Nadu
- Zamira Zamzuri, Universiti Kebangsaan Malaysia, Malaysia
- S Albert Alexander, Kongu Engineering College, Perundurai, India
- K P Kannan, Bannari Amman Institute of Technology, Sathyamangalam, India
- Alphin M S, SSN College of Engineering, Chennai, India
- Veeraswamy Ammisetty, St. Ann's College of Engineering & Technology, India
- K Thiruppathi, Valliammai Engineering College, India
- Helena Karsten, Abo Akademi University, Finland
- Mohamed Saber Mohamed Gad, National Research Center, Egypt
- Subramaniam Ganesan, Oakland University, Rochester, United States of America
- S Ramesh, Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College, India
- S Appavu @ Balamurugan, K. L. N. College of Information Technology, Madurai, India
- S Balaji, Jain University, India
- Selvakumar Manickam, Universiti Sains Malaysia, Malaysia
- Khairul Anuar Mohammad Shah, Universiti Sains Malaysia, Malaysia
- Geetha G, Jerusalem College of Engineering, Chennai, India
- Konguvel Elango, Dhanalakshmi Srinivasan College of Engineering, Coimbatore
- Yudi Fernando, Universiti Sains Malaysia, Malaysia
- Brahim Abdelbasset, University of Granada, Spain
- Sangeetha R G, VIT University, Chennai, India

- Balachandran Ruthramurthy, Multimedia University, Malaysia
- K R Ananth, Velalar College of Engineering and Technology, India
- Wan Hussain Wan Ishak, Universiti Utara Malaysia, Malaysia
- M Venkatachalam, RVS Technical Campus - Coimbatore, India
- Malathi R, Annamalai University, Chidambaram, India
- K Vijayaraja, KCG College of Technology, Chennai, India
- S Selvi, Institute of Road and Transport Technology, India
- Abdul Nawfar Bin Sadagatullah, Universiti Sains Malaysia, Malaysia
- John Augustine P, Sri Eshwar College of Engineering, Coimbatore, India
- Lakshmanan Thangavelu, SA College of Engineering, Chennai, India
- M Marikkannan, Institute of Road and Transport Technology, India
- S Poorani, Karpagam University, Coimbatore, India
- Yaty Sulaiman, Universiti Utara Malaysia, Malaysia
- A S N Chakravarthy, JNTU Kakinada, India
- P Sivakumar, K S R College of Engineering, Thiruchengode, India
- Samuel Charles, Dhanalakshmi Srinivasan College of Engineering, Coimbatore, India
- Jebaraj S, Universiti Teknologi PETRONAS, Malaysia
- David Rathnaraj Jebamani, Sri Ramakrishna Engineering College, India
- Kokula Krishna Hari Kunasekaran, Chief Scientist, Techno Forum Research and Development Center, India
- K Senthilkumar, Erode Sengunthar Engineering College, Erode, India
- Sergei Gorlatch, University of Muenster, Germany
- N Karthikeyan, SNS College of Engineering, Coimbatore, India
- Abdul Aziz Hussin, Universiti Sains Malaysia, Malaysia
- Manvender Kaur Chahal, Universiti Utara Malaysia, Malaysia
- Muhammad Javed, Cornell University, United States of America
- Venkatesh MP, Annamalai University, Chidambaram, India
- Djilali IDOUGHI, University of Bejaia, Algeria
- Geetha V, Pondicherry Engineering College, Pondicherry, India
- P Ganesh Kumar, K. L. N. College of Information Technology, Madurai, India
- R Muthukumar, Shree Venkateshwara Hi-Tech Engineering College, India
- Qais Faryadi, USIM: Universiti Sains Islam Malaysia, Malaysia

- K Thamizhmaran, Annamalai University, Chidambaram, India
- Ashish Chaurasia, RGPV, Bhopal, Madhya Pradesh
- Sanjeevikumar Padmanaban, Ohm Technologies, India
- Asrulnizam Bin Abd Manaf, Universiti Sains Malaysia, Malaysia
- Ahmed Salem, Old Dominion University, United States of America
- Mukesh Negi, TechMahindra Ltd, India
- A Amsavalli, Paavai Engineering College, Namakkal, India
- Mohd Zulkifli Bin Mohd Yunus, Universiti Teknologi Malaysia, Malaysia
- Shamshuritawati Sharif, Universiti Utara Malaysia, Malaysia
- Radzi Ismail, Universiti Sains Malaysia, Malaysia
- Smriti Agrawal, Chiatanya Bharathi Institute of Technology, Hyderabad
- Kamal Imran Mohd Sharif, Universiti Utara Malaysia, Malaysia
- Roselina Binti Sallehuddin, Universiti Teknologi Malaysia, Malaysia
- Zul Ariff Abdul Latiff, Universiti Malaysia Kelantan, Malaysia
- S Karthik, SNS College of Technology, India
- Ganesan Kanagaraj, Thiagarajar College of Engineering, Madurai, Tamil Nadu
- V Vijayakumari, Sri Krishna College of Technology, Coimbatore, India
- Khurram Saleem Alimgeer, COMSATS Institute of Information Technology, Islamabad
- Mehdi Asadi, IAU (Islamic Azad University), Iran
- Mukesh D Patil, Ramrao Adik Institute of Technology, India
- R Sundareswaran, SSN College of Engineering, Chennai, India
- T Krishnakumar, Tagore Engineering College, Chennai, India
- Mohd Helmy A. Wahab, Universiti Tun Hussein Onn, Malaysia
- Sivakumar Ramakrishnan, Universiti Sains Malaysia, Malaysia
- Rohaizah Saad, Universiti Utara Malaysia, Malaysia
- Kathiravan S, National Ilan University, Taiwan
- Vaiyapuri Govindasamy, Pondicherry Engineering College, Pondicherry, India
- P Sengottuvelan, Bannari Amman Institute of Technology, Sathyamangalam, India
- Subash Chandra Bose Jeganathan, Professional Group of Institutions, India
- T Ramayah, Universiti Sains Malaysia, Malaysia
- Abhishek Shukla, U.P.T.U. Lucknow, India
- M Chandrasekaran, Government College of Engineering, Bargur, India

- J Karthikeyan, SSM Institute of Engineering and Technology, India
- Wei Ping Loh, Universiti Sains Malaysia, Malaysia
- Abhay Prabhakar Kulkarni, Director - IICMR, Pune
- Daniel James, Senior Researcher, United Kingdom
- Jinnah Sheik Mohamed M, National College of Engineering, Tirunelveli, India
- Ariffin Abdul Mutalib, Universiti Utara Malaysia, Malaysia
- N Senthilnathan, Kongu Engineering College, Perundurai, India
- Yerra Rama Mohana Rao, Dr. Pauls Engineering College, India
- Sanjay Singhal, Founder, Strategizers, India
- P Ramasamy, Sri Balaji Chockalingam Engineering College, India
- Tamilarasi Angamuthu, Kongu Engineering College, Perundurai, India
- Mohd Hanim Osman, Universiti Teknologi Malaysia, Malaysia
- G A Sathish Kumar, Sri Venkateswara College of Engineering, India
- D Deepa, Bannari Amman Institute of Technology, Sathyamangalam, India
- V Ramesh, Mahatma Gandhi Institute of Technology, Hyderabad
- Dewi Nasien, Universiti Teknologi Malaysia, Malaysia
- R Dhanasekaran, Syed Ammal Engineering College, Ramanathapuram, India
- Singaravel G, K. S. R. College of Engineering, India
- Rathinam Maheswaran, Mepco Schlenk Engineering College, Sivakasi, Tamilnadu, India
- S Prakash, Nehru Colleges, Coimbatore, India
- Aede Hatib Musta'amal, Universiti Teknologi Malaysia, Malaysia
- Ahmed Mohammed Kamaruddeen, University College of Technology Sarawak, Malaysia
- A C Shagar, Sethu Institute of Technology, India
- J Sadhik Basha, International Maritime College, Oman
- Choo Ling Suan, Universiti Utara Malaysia, Malaysia
- Mohammad Ayaz Ahmad, University of Tabuk, Saudi Arabia
- G Arunkumar, Saveetha University, Chennai, India
- Ruba Soundar K, P. S. R. Engineering College, Sivakasi, India
- Norma Binti Alias, Universiti Teknologi Malaysia, Malaysia
- V C Sathish Gandhi, University College of Engineering Nagercoil, India
- Shazida Jan Mohd Khan, Universiti Utara Malaysia, Malaysia
- Zailan Siri, University of Malaya, Malaysia

- Raghvendra Kumar, LNCT College, Jabalpur
- Seddik Hassene, ENSIT, Tunisia
- Ravindra W Gaikwad, Pravara Rural Engineering College, Loni
- Anand Nayyar, KCL Institute of Management and Technology, Punjab
- Alwardoss Velayutham Raviprakash, Pondicherry Engineering College, Pondicherry, India
- Mora Veera Madhava Rao, Osmania University, India
- S Rajkumar, University College of Engineering Ariyalur, India
- Sathishbabu S, Annamalai University, Chidambaram, India
- Aziah Daud, Universiti Sains Malaysia, Malaysia
- Saratha Sathasivam, Universiti Sains Malaysia, Malaysia
- Ali Berkol, Baskent University & Space and Defence Technologies (SDT), Turkey
- Vijayan Gurumurthy Iyer, Entrepreneurship Development Institute of India
- Kannan G R, PSNA College of Engineering and Technology, Dindigul, India
- J Baskaran, Adhiparasakthi Engineering College, Melmaruvathur, India
- Aruna Anil Deoskar, IICMR, Pune, India
- S Senthamarai Kannan, Kalasalingam University, India
- A Padma, Madurai Institute of Engineering and Technology, Madurai, India
- Yousef FARHAOUI, Moulay Ismail University, Morrocco
- Cristian-Gyozo Haba, Technical University of Iasi, Romania
- Mariem Mahfoudh, MIPS, France
- Yongan Tang, Oakland University, Rochester, United States of America
- Chandrasekaran Subramaniam, Professor & Dean, Anna University, India
- M Vimalan, Thirumalai Engineering College, Kanchipuram, India
- Mathivannan Jaganathan, Universiti Utara Malaysia, Malaysia
- Jebaraj S, Universiti Teknologi PETRONAS (UTP), Malaysia
- Anbuchezhiyan M, Valliammai Engineering College, Chennai, India
- P Dhanasekaran, Erode Sengunthar Engineering College, Erode, India
- K Mohamed Bak, Ilahia School of Science and Technology, India
- P Sudhakar, M Kumarasamy College of Engineering, Karur, India
- Doug Witten, Oakland University, Rochester, United States of America
- Dzati Athiar Ramli, Universiti Sains Malaysia, Malaysia

- Shilpa Bhalerao, Acropolis Institute of Technology and Research, Indore, India
- Ata Elahi, Southern Connecticut State University, USA
- Sri Devi Ravana, University of Malaya, Malaysia
- Kumaratharan N, Sri Venkateswara College of Engineering, India
- N Shanthi, Nandha Engineering College, Erode, India
- Julie Juliewatty Mohamed, Universiti Malaysia Kelantan, Malaysia
- A Tamilarasi, Kongu Engineering College, Perundurai, India

Table of Content

Volume	01	ISBN	978-93-88122-08-5
Month	June	**Year**	2019

CoreConferences 2019

The Relationship of Cultural Intelligence and Task Performance: The Case of Taiwan Student Teachers' Internship in Korea

Wei-Yu Liu[1]

Abstract: *Metacognitive CQ and behavioural CQ predicted task performance (Bandura, 2002; cited from Ang, S., Dyne, L. V., Koh, C., & Chandrasekar, N. A., 2007). There is no study explore Taiwan Student Teachers' Cultural Intelligence, nor of their Overseas Internship Performance in Korea context. This study is to explore the relationship of two Taiwan student teachers' cultural Intelligence and their overseas internship performance in one Korea Chinese primary school. The participants were two Taiwan student teachers who graduated from National Dong Hwa University and gained Taiwan government's scholarship to have their internship under the supervision of two instructors in one Korea Chinese primary school. The researcher is their overseas internship supervisor. During their overseas internship, the researcher had line video meeting twice each month from September to December in 2018. Each month they filled out their Cultural Intelligence Questionnaire, internship performance and followed by our discussion. Each month, their instructors also filled out internship performance and followed by our discussion. The results show Carol's overseas internship performance is better than that of Deirdre. Carol's metacognitive CQ, motivational CQ and behaviour CQ is higher than that of Deirdre. However, Deirdre's cognitive CQ is higher than that Carol.*

Data Protection Compliance and The Fourth Industrial Revolution: A South African Higher Education Perspective

Corlia Van Der Walt[1]
[1]University of Johannesburg, South Africa

Abstract: *Data protection and cybersecurity is a growing concern for public higher education institutions in South Africa. One of the most valuable assets for a public higher education institution is undoubtedly its personal information, and with this comes increased responsibilities in protecting this asset. During 2013 the Protection of Personal Information Act of 2013 (the Protection of Personal Information Act) was promulgated, becoming the first comprehensive data protection legislation in South Africa. This Act will impact how public higher education institutions in South Africa collect and process personal information. The Protection of Personal Information Act is not yet fully operational, and therefore its full impact on the higher education environment is still unknown. This paper aims to provide a broad contextual overview of the governance structure of a public higher education institution. Furthermore, it considers public higher education institutions responsibilities relating to data protection and security when collecting and processing personal information in terms of the Protection of Personal Information Act. It also contemplates some of the critical aspects of the Protection of Personal Information Act and highlights various issues of concern relating to data protection compliance that must be considered to achieve compliance. Moreover, it provides some context regarding the Fourth Industrial Revolution and how it can assist public higher education institutions with becoming compliant with the Protection of Personal Information Act.*

International Conference on Global Peace 2019

Collective Reincorporation of Ex-Combatants: Experiences in the Post-Peace Agreement with the FARC-EP in Colombia

Andrea Carolina Jaramillo Contreras[1]

Abstract: *DDR (Disarmament, Demobilization and Reintegration) are essential in countries in which peace operations involve armed groups. This is the case of the peace process in Colombia in which more than 7,000 ex-combatants were involved. As part of the peace agreement, the Colombian government has the compromise to implement a reincorporation process to the ex-combatants but with a prevalence on a collective perspective, which means the implementation of economic, social and political collective actions not just for the ex-combatants but also in benefit of surrounding communities. This approach has not been easy for both the ex-combatants and the government as this is the first reincorporation policy that focuses on a collective perspective in the phase of implementation, going against the approach of the traditional individual mechanism of reintegration. The author employed an ethnography approach to analyse the local characteristics of collective reincorporation in the daily life of ex-combatants and surrounding communities. The study was carried out in three territories where ex-combatants are located, in the department of Caquetá and Antioquia. Using in depth interviews and daily participatory observation, the author identifies that social bonds emerged during conflict times are necessary to build a process of collective reincorporation of the ex-combatants as well as way to attach to the territories in which they are living now, avoiding therefore their returning to illegal armed groups. Hence, the role of surrounding communities plays a reciprocal contribution in the development of the territories. This study found different external and internal aspects that have effects in the success of a collective reincorporation, such as international aid, security conditions, local support, internal organization, sense of belonging to the FARC and to the collectively, and local peacebuilding agency. The fact of having the interplay of external and internal factors lead to analyses the local as a mobile intervention that can fit with the political and economic fluctuation of the territories emerged after the peace agreement.*

International Conference on Technology and Environmental Science 2019

The Development of an Analytical System for Student Support Services

Bundit Busaba[1], Suchai Tanawastien[2], Prinya Tantaswadi[3]
[1,2,3]School of Science and Technology, Shinawatra University, Thailand

Abstract: *The higher education is very essential for people because it concerns with an individual's quality of life improvement, future career possibilities, upper wages and so on. However, many students drop out of the university because of diverse problems. The student problems are divided into five main aspects: learning, financial, social, health and psychological aspect. Some students face with one problem; others face with more than one. To maintain the student retention rate and to increase the opportunity to graduate from the university, the student support services workflow information system (SSS WIS) is necessary for the university. The proposed SSS WIS can screen the student with problems for incubating. In this paper, the education analytics for the student support services is proposed. The experimental results show that the proposed method can raise student retention rates to 92.76 percent.*

Context-Aware Logistics for Transporting Heavyweight and Oversized Power Transformers

Wanpen Pengsomboon[1], Suchai Thanawasien[2], Aekavute Sujarae[3], Pilaspong Subsermsri[4]

[1,2,3]School of Science and Technology, Shinawatra University, Thailand
[4]Logistics System Solution, Thailand

Abstract: *In transportation of heavyweight and oversized cargo, e.g. 100 tons Power Transformer, from the factory to a final destination can be a complicated task which involves planning, transporting, and arrival unloading and installing processes. This research developed a new end-to-end logistic management algorithm, HOCTA, supporting the transportation of heavyweight and oversized shipment in the context of time, location personals, communication and the business regulations involved from the process of disassembling, routing survey, shipment preparation, real-time management of transport to the destination, unloading and assembling the transformer. This logistic management system is to help reduce the mistakes preparation and execution. The architecture and the HOCTA software support the process planning and monitoring the travel on main route, providing context information to avoid obstacle during the transport. Traffic condition, thieves and coordination between the point of origin and destination. In the event that the unforeseeable circumstance occurred, secondary route will be taken. The context will provide useful information for the shipper in decision making whether to use the original or secondary route and once the shipment has reached the destination, the business rules and regulation involved during the inspection, the process of unloading shipments, storage and the supervision of installation process according to the company standards.*

Student Enrolment Management Activities Tracking System

Natedao Thotharat[1], Prinya Tantaswadi[2], Suchai Thanawastien[3]

[1,2,3]School of Science and Technology, Shinawatra University, Thailand

Abstract: *Strategic Enrolment Management (SEM) is a strategic integration of student recruitment for educational institutions. SEM jobs have disintegrated in various departments and this disintegration results in inefficient recruitment management. This article therefore presented an analysis of eleven important processes of SEM which can develop an information technology system to integrate and support the operations of the involved recruitment departments in order to achieve maximum efficiency in marketing, recruitment, guidance, registration, fee payment, orientation, graduation and conversion from students to alumni.*

Education Analytics for Strategic Enrolment Management

Natedao Thotharat[1], Prinya Tantaswadi[2], Suchai Thanawastien[3]

[1,2,3]School of Science and Technology, Shinawatra University, Thailand

Abstract: *This article presents Education Analytics for Strategic Enrolment Management (SEM). The process specifically focuses on 20 SEM procedures of new student recruitment to study at analytic educational institutions. Related terms were defined as follows: (1) Prospect to Student Conversion Analytics (PSCA) referring to the number of students who are regarded as potential prospects to study at an institution, have passed the SEM process, have registered in the system, and have already paid for tuition fees. PSCA evaluated the effectiveness of the SEM process. (2) Student to Alumni Conversion Analytics (SACA) refers to the number of students who could graduate at a specified time. SACA evaluated the effectiveness of the system to support the students to graduate and convert their status to alumni who will play a vital role in SEM recruitment in the future. (3) QML to QSL Conversion Analytics refers to the numbers of the prospects who are interested in pursuing their study at the institution and kept contact for guidance regarding to the study program. This indicates the potential to close the sale. (4) SEM Success Analytics (SSA) indicates whether the SEM operation in that year can accomplish the goal of student recruitment. These four analytics are a means of accomplishing the goal by tracking the performance and success of SEM process.*

Evaluation of Suitability of Human Settlements in Nanjing, China

Xiaohua Yang[1]

Abstract: *The living environment is of great significance to human health. But the suitability of human settlements in Nanjing was not clear. In this paper, an indicator system was constructed which contains four aspects (society- economy conditions, natural environmental quality, public infrastructure and environment resources protection). An evaluation model was established for assessing suitability of human settlements in Nanjing. Increasing proposals on optimizing the human settlement environment of Nanjing are raised to assure the urban sustainable development.*

International Conference on Tourism, Travel and Philosophy 2019

An Empirical Study on Establishing Sustainable Destination Management by Creating Shared Value and 7S Framework

Teng-Yuan Hsiao[1], Nikki Yi-Ni Hsieh[2], Shu-Ling Chang[3]

Introduction

United Nations World Tourism Organization (UNWTO) suggests that sustainable tourism has a major effect on five substantial sectors as follows: (a) strengthening sustainable economic growth; (b) creating employment opportunities and reducing poverty; (c) ensuring resource efficiency and responding to the climate change; (d) conserving the culture value and heritage; and (e) enhancing the public mutual understanding (UNWTO, 2016). Proposed by Global Sustainable Tourism Council (GSTC) in 2016, the Global Sustainable Tourism Council's Criteria for Destinations (GSTC-D) outlines the world's most accepted criteria of sustainable tourism destination. This study believes that it is viable to apply GSTC-D when evaluating the development of a national tourism destination. Scholars further suggest that national scenic areas have the legitimacy of becoming an important area of sustainable destinations (Bieger et al., 2009; Bornhorst et al., 2010; Dredge, 1999).

Due to its narrow population, limited natural resources, frequent natural disasters and special international status, Taiwan urges and is determined to keep pace with UNWTO to promote the sustainable tourism development (National Sustainable Development Network, 2016). Because of its panoramic national scenery, Dapeng Bay National Scenic Area located in southern Taiwan possesses not only rich lagoon ecology, but also land, ocean, airspace sightseeing and recreation experience. Dapeng Bay National Scenic Area is an ideal area for the study of sustainable tourism destination management (Dapeng Bay Scenic Area Administration, 2017). Based on GSTC-D, Creating Shared Value (CSV), McKinsey's 7S Framework (7S), and two-round Fuzzy Delphi technique; this study reviews the literature on responsible tourism, low-carbon and eco-tourism and analyses 15 expert's questionnaires. This study further constructs the indicators of sustainable tourism destination management in national scenic areas in Taiwan and aims to create significant value by applying the result of this study in national scenic areas.

Literature Reviews

Development of Sustainable Tourism

According to the report released by United Nations Framework Conversation on Climate Change (UNFCCC) in 2016, the tourism industry accounts for 5% of global carbon dioxide emissions or 14% if diffusion effect such as the warming effect caused by greenhouse gas was aggregated. If we don't take any concrete actions, the estimated carbon dioxide emission of tourism industry in 2035 will increase three-fold. Centre for Responsible Travel (CREST) further stated that countries around the world should strive to promote responsible tourism. Scholars suggest that responsible tourism is defined as minimizing negative impacts to the environment and society while maximizing business profits to help local residents preserve the culture and biological habitats or species. Therefore, effective destination management will improve its long-term development (CREST, 2016). This research deems both low-carbon tourism and responsible tourism as important issues for sustainable tourism.

McKinsey's 7S Framework (7S) and Creating Shared Value (CSV)

The 7S Framework (Strategy, Structure, Systems, Style, Staff, Skills, Shared values) was proposed by the McKinsey company in 1970

and modified by Tom Peters, Robert Waterman, and Richard Pascale. To meet the intended objectives through understanding about how things are interrelated, these seven elements need to be aligned with local resources systematically (Spaho, 2014). The principle of 7S believes that a successful organization should pursue the integration of the seven hardware and software elements (Shiri, Anvari, & Soltani, 2015). To ensure the effectiveness and harmony of an organization, 7S can be applied to assess and improve the existing operation, transform people's thoughts and pinpoint and adjust the gaps (Lusa & Sensuse, 2011; Mehdi Ravanfar, 2015).

Incorporating 7S, this study adopts the concept of shared value as a theoretical basis for strategic analysis. Established by Michael Porter in 2011, CSV pursues to expand the total value of the economy and society and it aims not only to create business value, but also to generate social value while meeting social needs and solving problems (Porter & Kramer, 2011). This study tends to explore how government operations and management of the national landscape accelerates the shared value chain among local shareholder, industry, and tourists with strategic thinking of CSV to expand the total social value of low-carbon tourism, responsible tourism and sustainable tourism.

Dapeng Bay National Scenic Area and Destination Management Organization (DMO)

Established by the Tourism Bureau of the Ministry of Communications in 1997, the total 2,762.2 hectares of Dapeng Bay National Scenic Area is the 4th national scenic area in Taiwan, which manages both Dapeng Bay and Little Liuqiu national scenic areas (Dapeng Bay Scenic Area Administration, 2017). Dapeng Bay was constructed with a diverse tourism environment and is one of only 13 national scenic areas in Taiwan that has been transformed from the traditional aquaculture industry and combined with local fish farming aquaculture, Dapeng Bay lagoon ecology, mangrove ecosystem and the wetland system (Dapeng Bay Scenic Area Administration, 2017).

The mission of the Destination Management Organization (DMO) is to increase the competitive advantages and effective management of destinations, and eventually to enable the development of community-based tourism destinations (Volgger & Pechlaner, 2014). DMO plays a dual role of both initiator and mediator to ensure its flexibility and to stimulate the motivation of self-responsibility, self-autonomy and self-regulation. Therefore, it is necessary to examine and discuss the management method of DMO in national scenic areas, because an effective and comprehensive destination management will improve its long-term development of an area.

Method

To ensure the reliability and validity of the results, this research adopted two stages of analysis, exploration and demonstration. A content validity examination was performed to review the relevant literature studies and reports. 21 preliminary indicators of constructing the sustainable tourism destination were collected by scrutinizing a collection of literature documents about low-carbon tourism, sustainable tourism and destination management in the past four years. A two-round Fuzzy Delphi expert survey was sent to the same group of 15 experts between October and December 2017, and the response rate was 100% on the first round and 93% on the second round. The results of the survey proved that 24 indicators collected as opinions of a group of experts were consistent. In addition, 13 indicators were screened with the arithmetic mean at 6.929 to construct a precise and accurate scoring system for the empirical research questionnaire design.

Furthermore, 13 indicators were used and blended in the literature review to achieve four critical empirical variables. These variables were Environment-Friendly (EF), Responsible Tourism (RT), Green Trust (GNT), and Destination Revisiting Intension (DRI). An empirical research questionnaire was conducted on visitors of Dapeng National Scenic Area from January to March 2018 and applied a Likert scale of 1-5 as a measurement: 5=totally agree, 4=agree, 3=fair, 2=disagree, 1=totally disagree. A total of 207 questionnaires were collected with a 95.65% effective response rate. Research hypotheses states as follows:

H1: EF has a significantly positive impact on tourists GNT
H2: RT has a significantly positive impact on tourists GNT
H3: GNT has a significantly positive impact on tourists DRI
H4: EF has a significantly positive impact on tourists DRI
H5: RT has a significantly positive impact on tourists DRI
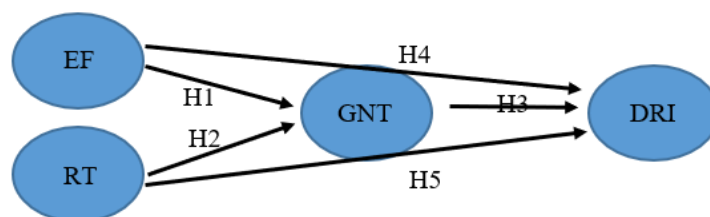
The research structure is shown in Figure 1 below.

Figure 1. Research structure

Results

Analysis of Tourists Empirical Questionnaire

This survey was conducted on visitors of Dapeng National Scenic Area from January to March 2018. Out of 207 questionnaires collected, 198 copies were validated which led to a 95.85% effective response rate. Descriptive statistical analysis of respondents' gender, age, education and location is shown in Table 1.

Table 1. Descriptive statistics

Category	Item	Figure	Percentage	Accumulated percentage
Gender	Male	84	42.4	42.4
	Female	114	57.6	100
Education	Junior high or less	9	4.5	4.5
	Senior high or equivalent	83	41.9	46.5
	Associates/Bachelors			
	Graduate and above	99	50	96.5
		7	35.5	100
Age	Below 20	1	0.5	0.5
	21-35	54	27.3	27.8
	31-40	51	25.8	53.5
	41-50	45	22.7	76.3
	Above 51	47	23.7	100
Location	North Area	39	19.7	19.7
	Central Area	88	44.4	64.1
	South Area	61	30.8	94.9
	East Coast	9	4.5	99.5
	Others	1	0.5	100

The result of this study suggests that a comprehensive set of relevant policies should be established such as water quality and water resource management, the process of land development, preserving local tradition and culture, and maintaining natural landscape and scenery. It would also be beneficial for government to establish sustainable tourism related policies. The independent sample t-test shown in Table 2 was used to investigate if there is significant evidence in gender on the scores of the following issues: business in different industries that should be integrated in a destination, companies that need their own plan or development progress regarding sustainable development, and the willingness of visitors' intention to revisit.

Table 2. Independent sample t-test: gender

		F	Sig.	t	df	Sig.(2-tailed)
1	Equal variances assumed	0.585	0.445	-3.358	196	0.001
	Equal variances not assumed			-3.312	169.379	0.001
2	Equal variances assumed	0.129	0.720	-2.128	196	0.035
	Equal variances not assumed			-2.094	167.764	0.038
3	Equal variances assumed	0.002	0.966	-2.086	196	0.038
	Equal variances not assumed			-2.091	180.521	0.038

The result of one-way Anova proved that there was a significant difference between education level on whether the development and deployment of sustainable tourism destination should be regulated. After applying both Tukey and Bonferroni's post hoc test, the results showed a strong belief that the development and deployment of sustainable tourism destination should be regulated. People who receive a graduate and above degree feel stronger than those that receive an associate's or bachelor's degree; and those who receive an associate's or bachelor's degree feel stronger that those who receive a high school diploma. However, there is no significant difference between people that received a high school diploma and those that did not.

Structural Model Analysis

Structural Model (also known as the Inner Model) was used to analyze the hypotheses proposed in this research, and the explanatory powers of each construct is shown in Figure 2. The confidence interval of correlation coefficient between each latent variable does not include the value of 1, which tells the discriminant validity does exist.
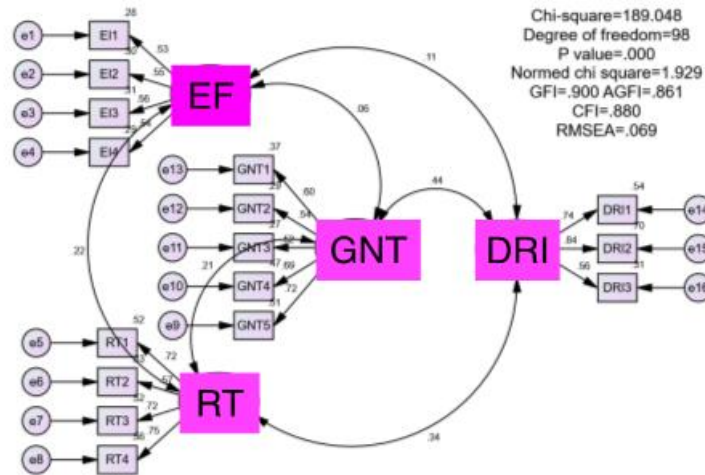

Figure 2. Result of the structural model analysis

The above Figure 2 demonstrates the results of the structural model by Amos 22 software. The Normed Chi-square (NC=χ2/ df) requires a value between 1 to 3 to be considered an ideal fit index and the results of this study was considered acceptable with the value at 1.929. The RMSEA requires a value of 0.05 and 0.08 and the results of this study was 0.069 proving that it is a good fit. The result discovered the confidence interval of EF including 0 which was not significant; therefore, re-analysis was initiated after excluding the item. The re-analysis result showed the mediating effect exists as the total effect of both the confidence interval of Bootstrap; and the indirect effect between 0.015-0.082 did not include 0. Furthermore, because the confidence interval of direct effect also did not include 0, the indirect mediating effect was confirmed. The summary results of research hypotheses of this study is shown in Table 3 below.

Table 3. Result summary of research hypotheses

Symbol	Hypothesis	Result
H1	EF has a significantly positive impact on tourists GNT	Not support
H2	RT has a significantly positive impact on tourists GNT	Support
H3	GNT has a significantly positive impact on tourists DRI	Support
H4	EF has a significantly positive impact on tourists DRI	Not Support
H5	RT has a significantly positive impact on tourists DRI	Support

Conclusion and Discussion

Through the calculation of the statistics of both conservative cognitive value and optimistic cognitive value, the consensus significant values of each indicator remained between five and eight. "Greenhouse Gas Emissions" with a value of 5.7 (GSTC, 2016) is less significant because national scenic areas are not located in industrial neighbourhoods. Energy-saving and carbon reduction policies have been implemented as a necessity for promoting sustainable tourism development. The most significant value at 7.93 is "Respecting Local Culture and Tradition", showing tourists behaviour has gained more serious concerns in public, and anticipating the government to establish policies to protect the local culture and custom. In addition, 13 final indicators were recommended to comply with sustainable tourism development. These indicators are as follows; (a) from a policy aspect five indicators were prioritized as natural landscape and scenic maintenance, local tradition and culture preservation, water quality and water resource management, community participation policy and land use situation, (b) four prioritized indicators were selected from the supply aspect including local communities participation in discussion, flexible tour options despite seasonality, employment opportunities provided by companies and traffic flow planning, (c) four prioritized indicators were collected from the demand aspect including tourist experiences, detailed information of an attraction in a scenic area, respecting local culture and tradition and the security of tourists health and safety.

The compelling findings in this empirical research are as follows. First, the GSTC certification index supplemented by the 7S framework can be constructed as an important reference for the development of sustainable tourism destination management in the national-level scenic areas. Second, constructing the marketing strategies for DMO with a system thinking perspective allows to identify the outcome of possible solutions and to reduce the risk of making wrong decisions. Third, the position of development strategy of CSV in a national scenic area depends on the design and composition of elements in each value chain; including industry, government, academic, local stakeholder, local residences and visitors. Finally, Disseminating the responsible tourism will enhance the green trust of sustainable tourism destination and augment visitors' revisiting intention.

The literature review illustrates that the research topic of sustainable tourism has become the mainstream of policy development both internationally and domestically (UNWTO, 2016; National Sustainable Development Network, 2016). Therefore, further long-term researches on each construct will be recommended to investigate the comprehensive 13 indicators elaborated by this study. Even though issues such as Sustainability, Responsible Tourism and Green Tourism have been extensively discussed, more attention incorporating CSV must be given to promote sustainable tourism destination by government sectors. Finally, the result of this research can be applied to develop a knowledge-based system of sustainable tourism destination management; and with the cooperation of domestic authorities, the knowledge can be disseminated to the entrusted destination operators, tourism operators, service providers, local residences, stakeholders and visitors.

Reference

1. Center for Responsible Travel, CREST. (2016). The Case for Responsible Travel: Trends & Statistics 2016. Retrieved October 29, 2017 from http://www.responsibletravel.org/whatWeDo/The_Case_for_Responsible_Travel_2016_Final.pdf.
2. Bieger, T., Beritelli, P., & Laesser, C. (2009). Size matters! -Increasing DMO effectiveness and extending tourist destination boundaries. Turizam: znanstveno-stručni časopis, 57(3), 309-327.
3. Bornhorst, T., Ritchie, J. B., & Sheehan, L. (2010). Determinants of tourism success for DMOs & destinations: An empirical examination of stakeholders' perspectives. Tourism management, 31(5), 572-589.
4. Dapeng Bay National Scenic Area Administration, Taiwan Tourism Bureau. (2017). Dapeng Bay National Scenic Area Administration Information. Retrieved August 29, 2017 from https://admin.taiwan.net.tw/dbnsa/introductionDbnsa/introductionDbnsa06.htm.
5. Dredge, D. (1999). Destination place planning and design. Annals of tourism research, 26(4), 772-791.
6. Global Sustainable Tourism Council, GSTC. (2016). Destinations Program. Retrieved October 23, 2017 from https://www.gstcouncil.org/es/programas/gstc-destinations-program.html.
7. Lusa, S., & Sensuse, D. I. (2011, September). Enterprise architecture model for implementation knowledge management system (KMS). In ICT Convergence (ICTC), 2011 International Conference on (pp. 208-212). IEEE.
8. Mehdi Ravanfar, M. (2015). Analyzing Organizational Structure based on 7s Model of McKinsey. Global Journal of Management and Business Research, 15(10).
9. National Sustainable Development Network. (2016). The 28th Committee Meeting Minutes of the National Council for Sustainable Development of the Executive Yuan. Retrieved August 15, 2017 from https://nsdn.epa.gov.tw/Files/Meeting/28meeting.pdf.
10. Porter, M., & Kramer, M. R. (2011). Creating Shared Value, Harvard Business Review, January 2011.
11. Shiri, S., Anvari, A., & Soltani, H. (2015). Identifying and prioritizing of readiness factors for implementing ERP based on agility (extension of McKinsey 7S model). European Online Journal of Natural and Social Sciences, 4(1 (s)), 56.
12. Spaho, K. (2014). 7S Model as a framework for project management. Economic and Social Development: Book of Proceedings, 450.
13. United Nations Framework Convention on Climate Change, UNFCCC. (2016). Adoption of the Paris Agreement. Proposal by the President. FCCC/CP/2015/L.9/Rev.1. Retrieved from http://unfccc.int/documentation/documents/advanced_search/items/6911.php?priref=600008831
14. Volgger, M., & Pechlaner, H. (2014). Requirements for destination management organizations in destination governance: Understanding DMO success. Tourism Management, 41, 64-75.
15. World Tourism Organization, UNWTO. (2016). 2017 International Year of Sustainable Tourism for Development. Retrieved August 21, 2017 from Web: http://www2.unwto.org/tourism4development2017.

Individual or Institutional: Approaches to Gender Balance and Leadership

Lorraine Gearing[1]

[1]Coventry University, Coventry, UK

Abstract: Gender pay and female leadership have surfaces as contemporary topics within higher education institutions across the UK. This paper explores some of the external factors that have been a catalyst for raising awareness and how both institutions and individuals have a responsibility to encourage change. The impact of planned initiatives at a single institution are discussed and evaluated to share good practice and challenge weaknesses.

Keywords: Women, Leadership, Gender Balance

Background

There is an increased scrutiny of gender pay gaps in higher education across the UK. The Equality Challenge Unit (ECU) published the existing situation and their recommendations to address the reported issues.

- 13.7% the overall median gender pay gap in HE in 2014/15
- 18.3% the overall mean gender pay gap in HE in 2014/15

Source: ECU (2016) Equality in higher education: staff statistical report

Equal pay is protected by law, however a gender pay gap (GPG) is an indicator that there are fewer women in senior leadership roles at universities and that the balance of women is much higher in low grade and part-time roles. The gap is compared with a national average of 9.1%.

Universities as with other public, private and voluntary sector organisations with 250 employees or more are required to publish their GPG annually.

Other metrics such as vertical and horizontal gender balance may provide a greater understanding of gender issues in HEIs.

In 2018 the CMI published a report on gender inequality "A Blueprint for Balance. Time to fix the broken windows". The report identified clear practical ways in which individuals, managers and institutions could challenge seemingly small behaviours of gender inequality.

The GPG can also be situated within a national and international increase in a range of gender issues. The pay gap and the lack of women in senior positions within higher education is a long-term issue, however the current political climate and media attention has provided a vehicle for change. In 18/19 only 21% of vice-chancellors and 27% of senior's managers are women.

Change cannot be restricted to outward actions although these may have some impact. O'Connor (2014) has identified that "Gendered processes effectively limit the available talent".

The internal culture or ethos of an organisation will restrict or enable processes and interventions. It is suggested that a focus on the

power balance and underpinning belief systems that have to be addressed for any action or intervention to have a permanent effect (O'Connor 2014).

The impact of culture and accepted leadership behaviours is explored through a number of case studies (Fitzgerald 2014). The author compares how collaborative, relational, caring and nurturing qualities that are often associated with women are criticised in a leadership role but those who adopt male behaviours are also criticised.

Approach

Higher Education institutions have taken different approaches. For example, The University of Essex gave an immediate uplift for female professors to completely close the pay gap. Almost all HEIs have set out plans to address the GPG across different areas, including recruitment, promotion, development, flexible working. These initiatives include increased unconscious bias training, review of job adverts and mentoring.

Actions can be implemented at different levels for success but all must begin with recognition that if an HEI has an imbalance of men and women in senior leadership roles, or that it has a gender pay gap, then it must be addressed as a priority. The recognition changes a potential action of including both men and women on interview panels as enough through to selecting recruitment companies with a balanced gender profile and insisting on a blind application and an equal mix of shortlisted candidates. Successful organisations also make full use of active staff networks to champion best practice.

Target setting is common practice for universities: student recruitment, retention, attainment and many other measures to identify the 'top' universities for teaching, student experience, green campus and many other league tables. Measuring gender initiatives enables institutions to evaluate their comparative performance and direction of travel.

It is difficult to evaluate the impact of HEI action plans in the short term. The salary uplift as per the example of Essex University can be criticised as addressing an immediate issue but not the underlying cause or putting measures into place that will ensure the gap remains at zero. Neither does this guarantee an equal proportion of male and female professors.

Most English HEIs have a flexible working policy but it is the responsibility of individuals and managers to endorse this through their own practice. How many women are excluded from last minute early morning meetings or feel that they should apologise if caring responsibilities prevent them from attending. At an institutional level flexible working can be promoted as a positive benefit to an organisation and something that both men and women are encouraged to adopt.

The local approach at my own institution was from different angles. These are outlined in the table below.

Initiative	Impact and Evaluation – Year 18/19
Creation of a Gender Pay Working Group	Detailed data evaluation of grade and role
Unconscious bias training	Central delivery to senior team by external consultant Faculty autonomy for local delivery Professional services delivery to managers and other key staff
Staff network Gender Leadership and Development (GLaD)	International Womens' Day celebration introduced Representation at Equality and Diversity Committee
Women only external leadership programme	16 women enrolled Internal activities to support Each woman assigned an internal coach mentor Networking event with senior leadership team Recognition through graduation event Commitment to continued support and resource for 19/20
Stop period poverty	Donation baskets in female restrooms for sanitary products
Increase recruitment of senior female staff	Appoint new consultant company to address diversity One female PVC appointed

Individuals are encouraged to confront gender bias, adopt their own good practice for example supporting flexible working and develop networking skills for leadership development.

Results

The gender pay gap has not decreased over the past twelve months; however, the institutional actions are long-term. The increased awareness of gender imbalance issues has given confidence to a number of female staffs who feel that they are part of a larger collective

and are empowered to raise their voices. This has included bringing issues of the menopause in the workplace, challenging negative comments and raising the profile of female colleagues.

Reflection

There is a significant amount of work to achieve gender balance, but there is a growing understanding that both the individual and the institution have to drive change. One cannot abstain their responsibility to the other.

There is a reliance on some 'lone voices' to act as role models and their generous example will continue to make a difference.

Selected References

1. https://www.ecu.ac.uk/guidance-resources/employment-and-careers/terms-conditions/equal-pay/
2. https://www.ucea.ac.uk/en/publications/index.cfm/takingaction
3. Fitzgerald, Tanya: Women Leaders in Higher Education (2014) Routledge
4. O'Connor, Pat and Kitchen, Rob (2014) Management and Gender in Higher Education, Manchester University Press

Mitigating the Fallout of Women from Corporate Leadership: What Employers Can Do

Eileen Drew[1]
[1]Trinity Centre for Gender Equality and Leadership, Trinity College Dublin, Ireland

Abstract: This paper concentrates on why women are not progressing into senior management positions in the SME sector in Ireland/UK. Considerable research has been conducted into the issue of women's exclusion and/or the impact of parenthood on women's labour market behaviour. This study focuses on the specific timing of transitional challenges in the mid-career paths of women in small and medium-sized businesses.

The Context-Aware Living Process Smart Home Architecture

Charn Kulthavarakorn[1], Suchai Thanawastien[2], Krissada Maleewong[3], Sudhiporn Prathumtevapibal[4]
[1,2,3]Shinawatra University, Thailand
[4]Panyapiwat Institute, Thailand

Abstract: In this smart home design, we consider, not only the control aspects, but also the contextualized interactions of the family members' living processes that will affect the service needed to meet the living goal of a smart home. The sensors signals are from the physical sensors and the info-sensors, processed from internet based on the specified data-of-interest. The info sensor will provide warning before event and alert on near-event so that the family member can decide how to proceed. The physical sensors, however, when on, imply disruptive events have occurred and some predefined actions must be activated and the home owners can also activate the control array to take certain countermeasure to resolve the problems.

Mediated Command and Control for Smart Home

**Charn Kulthavarakorn[1], Suchai Thanawastien[2], Krissada Maleewong[3],
Sudhiporn Prathumtevapibal[4]**

[1,2,3]School of Information Technology, Shinawatra University, Thailand
[4]Panyapiwat Institute, Thailand

Abstract: The new paradigm of smart home is to view the smart home as the composition of living processes interacting among themselves and with the environment. The active environment can manage the environment with sensors and controls in a pre-specified way. In this paper, we view the environment is implemented with physical sensors and info-sensors. The info-sensor is the distillation of information from internet for providing alert, warning and reminding to the living processes. In this system, a living process engagement room is developed as a centralized tool for all the family members to interact, communicate, find resolution. The physical and info-sensors are all connected to the LPER, all the controls can be activated or reactivated from the LPER. There are other channels in the LPER including chat space, map and video space, note and time-context space to provide warning and alert of those time-sensitive items such as bill-to-pay, doctor appointment, trip schedule, etc. The LPER architecture is therefore provide an innovative method to build smart home that support living processes of home owners, regardless if they at home or stay outside.