International Conference on Innovation and Management

IAM2016S

Kuala Lumpur, Malaysia

July 12-15, 2016

IAM

International Conference on Innovation and Management

Publisher

Kuang Hui Chiu

Published By

Society for Innovation in Management

Contents

Contents

Chair's Message

The committees of the International Conference on Innovation and Management (IAM2016 Summer) are pleased to welcome you to this meeting held at Kuala Lumpur, Malaysia on July 12-15, 2016. On behalf of the organizers, I express my delight in sharing the time with the delegates from all around the world and hope you will have good stay here.

With the rapid development in e-business and technology, enterprises are now facing fiercer threaten and vague opportunity. How to assist enterprises in gaining competitive advantages through technological and managerial innovation has become a crucial issue to the industrial and academic societies. The main objective of IAM International Conference is to provide a venue where business stakeholders, researchers and experts worldwide can share cutting-edge innovative technologies and managerial theories, exchange valuable experience and form collaborative relationships to promote business innovation and management. We believe it is of immense significance to have an opportunity to share the knowledge from all participants.

Among 53 excellent manuscript submissions from 13 countries, 30 of them come from 7 countries have been further selected for presentation in the conference. These papers provide unique insights and are regarded as the research forefront of the key areas including applications of innovation and management in selected industries, innovative systems and knowledge management, contemporary business behavior and data. We would like to express our gratitude to all those who contributed in helping deliver quality content of IAM2016S.

Looking forward for your participation again in our next event.

Conference Chair

<u>Schedule</u>

July 12, 2016 (Tuesday)	
15:00-16:30	Registration (Carlton 8 Foyer, 2th Floor)

July 13, 2016 (Wednesday) 09:30-15:00 Registration	
Room	**Carlton 8 (2th Floor)**
10:00-12:00	Session A
12:00-13:30	Lunch (Luk Yu Tea House, Feast Village)
13:30-15:30	Session B

July 14, 2016 (Thursday) 09:30-15:00 Registration	
Room	**Carlton 8 (2th Floor)**
10:00-12:00	Session C
12:00-13:30	Lunch (Shook! Restaurant, Feast Village)
13:30-15:30	Session D

July 15, 2016 (Friday) 09:30-11:00 Registration	
Room	**Carlton 8 (2th Floor)**
10:00-12:00	Session E
12:00-13:30	Lunch (Fisherman Cove, Feast Village)

Schedule

<u>Agenda</u>

July 13, 2016 (Wednesday)

Session A   10:00-12:00   **Room:** Carlton 8

Session Chair: Yi-wen Fan

National Central University, Taiwan

The Impact of eWOM on the Purchase Intention of Niche Products

Juo-tzu Tseng	National Central University
Yi-wen Fan	National Central University
Yea-Huey Su	National Central University

Research for CODEQ Method

Kuo Ching Hsiang	Ming Chi University of Technology
Chang Chung Fu	WuFeng Institute of Technology
Wang Chao Ching	Ming Chi University of Technology

Numerical Comparison of Three Evolutionary Algorithms

Chiou Ji Pyng	Ming Chi University of Technology
Chang Chung Fu	WuFeng Institute
Lin Chia Ying	Ming Chi University of Technology

The Quantitative Easing Monetary Policy and Corporate value Relevance of Business Strategy, Financial Capital and Intellectual Capital

Kuo-An Tseng	Lunghwa University of Science and Technology
Szu-Wei Yen	WuFeng University
Ching-I Lin	Lunghwa University of Science and Technology
Shih-Hung Tai	Lunghwa University of Science and Technology

Differential Evolution for Network Reconfiguration Problem

Ching Hsiang Kuo	Ming Chi University of Technology
Chung Fu Chang	WuFeng University
Shang Tse Chiang	Ming Chi University of Technology

<u>Agenda</u>

July 13, 2016 (Wednesday)

Session A   10:00-12:00   **Room:** Carlton 8

Session Chair: Yi-wen Fan

National Central University, Taiwan

Empirical Research on the Relationship between Organizational Commitment and Job Performance – A Case Study of Taiwanese Medical Institutions

Chien Chang Yang	Far Eastern Memorial Hospital
Chia Jung Chung	Golden Hospital
Yen Ting Wu	Golden Hospital

Research for HCODEQ Method

Chiou Ji Pyng	Ming Chi University of Technology
Chang Chung Fu	WuFeng University
Wang Yung Lin	Ming Chi University of Technology

The Impact of eWOM on the Purchase Intention of Niche Products

Yi-Wen Fan[1], Juo-Tzu Tseng[2] and Yea-Huey Su[3]

Department of Information Management, National Central University, Taiwan
iwfan@mgt.ncu.edu.tw[1]
ruorose@gmail.com[2]
suesu@mgt.ncu.edu.tw[3]
Corresponding Author: ruorose@gmail.com

Abstract

As highlighted by Anderson's Long Tail concept (2004), the widespread of Internet access provides distribution and sale channels for various niche products as well as few mainstream products in no precedent way. With the development of ICT and EC platforms, more niche products are sold online and generate revenue these days. While many researchers found the significant impact of eWOM on the purchase of mainstream products, fewer attention has focused on the impact of eWOM on niche products. Therefore, this study aims to investigate the impact of eWOM and other factors on the purchase intention of niche products by focus group interview. It is found that eWOM is not as important for niche products as for mainstream products. At the same time, customers emphasize the design and quality of niche products more than price consideration. This study provides insight of factors that ultimately influence customers' purchase intention. Managerial implications for the design, production and marketing of niche products is also included in this paper.

Keywords: Niche product, eWOM, purchase intention

Research for CODEQ Method

Ching-Hsiang Kuo[1], Chung-Fu Chang[2] and Chao-Ching, Wang[3]

Department of Electrical Engineering, Ming Chi University of Technology, Taiwan[1,3]
Department of Electrical Engineering, WuFeng Institute of Technology, Taiwan[2]
kuoching@mail.mcut.edu.tw[1]
cfchang@mail.wfc.edu.tw[2]
kevinw11502@gmail.com[3]
Corresponding Author: kuoching@mail.mcut.edu.tw

Abstract

This paper presents a comparison of the convergence property of CODEQ and differential evolution (DE) methods. The concepts of chaotic search, opposition-based learning, and quantum mechanics are used in the CODEQ method to overcome the drawback of selection of the crossover factor and scaling factor used in the DE method. Only two parameters, population size and the maximum iteration, are necessary for the CODEQ method. So, CODEQ method is a very easy to use for user. To prove the convergence property of the CODEA method, two benchmark functions from the literature are used to compare the performance of the proposed method with differential evolution. Numerical results show that the performance of the proposed method is better than DE method.

Keywords: CODEQ, DE, chaotic search, opposition-based learning, quantum mechanics

Numerical Comparison of Three Evolutionary Algorithms

Ji-Pyng Chiou[1], Chung-Fu Chang[2] and Chia-Ying Lin[3]

Department of Electrical Engineering, Ming Chi University of Technology, Taiwan[1,3]
Department of Electrical Engineering, WuFeng Institute of Technology, Taiwan[2]
jipyng@mail.mcut.edu.tw[1]
cfchang@mail.wfc.edu.tw[2]
joyce52521@hotmail.com[3]
Corresponding Author: jipyng@mail.mcut.edu.tw

Abstract

In this work, one benchmark function is used to compare the computational efficiency and convergence property of the variable scaling hybrid differential evolution (VSHDE) method, hybrid differential evolution (HDE) and differential evolution (DE) methods. The concept of variable scaling factor is used in VSHDE method to overcome the drawback of the fixed and random scaling factor used in original differential evolution (DE) and hybrid differential evolution (HDE). And, the use of variable scaling factor can also alleviate the problem of selection of mutation operator of DE and HDE methods. Two operators including migrating operator and accelerated operator are used in VSHDE method act as a trade-off operator for the diversity of population and convergence property. Migrating operator maintains the diversity of population, which guarantees a high probability of obtaining the global optimum. And, accelerated operator is used to accelerate convergence. And, different from the DE and HDE methods, the scaling factor based on the 1/5 success rule of evolution strategies (ESs) is used in VSHDE method to accelerate searching out the global solution. From the computation results, the performance of the VSHDE is outperforming than the DE and HDE methods.

Keywords: VSHDE, 1/5 success rule, evolution strategies, DE, HDE

The Quantitative Easing Monetary Policy and Corporate Value Relevance of Business Strategy, Financial Capital and Intellectual Capital

Kuo-An Tseng[1], Szu-Wei Yen[2], Ching-I Lin[3] and Shih-Hung Tai[3]

Department of Finance, Lunghwa University of Science and Technology, Taiwan[1]
Department of Marketing and Distribution Management, WuFeng University, Taiwan[2]
Department of Industrial Management, Lunghwa University of S&T, Taiwan[3]
andy@mail.lhu.edu.tw[1]; sword@mail.wfc.edu.tw[2]; ljybibi2307@yahoo.com.tw[3]
Corresponding Author: andy@mail.lhu.edu.tw

Abstract

As the global financial crisis happened in 2008, some corporations experienced financial distress, insolvency or bankruptcy. Governments began implementing a series of Quantitative Easing (QE) monetary policy to be able to quickly recover from the financial crisis. Exploring the QE and corporate value relevance of business strategy (BS), Intellectual Capital (IC) and financial capital (FC), can help formulate appropriate decisions and maintain a stable corporate value in different periods. Therefore, this study explores the corporate value relevance of BS, FC and IC before and after the QE from the contingency perspective of value relevance.

This study explores the information content of each type of BS, IC and FC on corporate value, and the mediating roles of FC and IC are also considered. It combines the knowledge domains of strategy, finance, and IC. Structural equation modeling (SEM) is employed to explore the corporate value relevance of BS, FC, and IC as well as the mediating effect of IC (and FC). The research subjects are the information technology companies listed on the Taiwan Stock Exchange. The research period covers 13 years from 2001 to 2013, and the sample was split into pre-QE and post-QE to determine whether the corporate value relevance of BS, FC, and IC are differed between these two periods.

The corporate value relevance of BS, FC, and IC has been confirmed, and the mediating effects of FC and IC are demonstrated. The significant differences were also found in the relationship among BS, FC, IC and corporate value between pre-QE and post-QE, and the relationship among BS, FC, IC, and corporate value differs between pre-QE and post-QE, which indicates that the QE affects the relationship of BS, FC, IC, and corporate value. The managerial contingency perspective is supported. The results emphasize the importance of timing, and the related changes of environment must be considered when performing business valuation, conducting strategic management, and formulating industrial policies.

Keywords: Quantitative easing, business strategy, financial capital, intellectual capital, value relevance

Differential Evolution for Network Reconfiguration Problem

Ching-Hsiang Kuo[1], Chung-Fu Chang[2] and Shang-Tse Chiang[3]

Department of Electrical Engineering, Ming Chi University of Technology, Taiwan[1,3]
Department of Electrical Engineering, WuFeng University, Taiwan[2]
kuoching@mail.mcut.edu.tw[1]
cfchang@mail.wfc.edu.tw[2]
Feature_Promise@hotmail.com[3]
Corresponding Author: kuoching@mail.mcut.edu.tw

Abstract

This paper presents the differential evolution (DE) for solving the network reconfiguration for power loss reduction and voltage profit enhancement of distribution systems. The network reconfiguration of distribution systems is to recognize beneficially load transfers so that the objective function composed of power losses is minimized and the prescribed voltage limits are satisfied. DE is a stochastic search and optimization method. The fittest of an offspring competes one-to-one with that of the corresponding parent, which is different from the other evolutionary algorithms (EAs). This one-to-one competition gives rise to a faster convergence rate. The other characteristic different from the other EAs is the mutation operator that is based on the difference vector. One three-feeder distribution system from the literature is used to verify the DE is proper used to solve the network reconfiguration problems.

Keywords: DE, EAs, network reconfiguration

Empirical Research on the Relationship between Organizational Commitment and Job Performance – A Case Study of Taiwanese Medical Institutions

Chien-Chang Yang[1], Chia-Jung Chung[2] and Yen-Ting Wu[3]

Department of Human Resources, Far Eastern Memorial Hospital, Taiwan1
Department of Administration, Golden Hospital, Ping Tung, Taiwan[2,3]
yang@mail.femh.org.tw[1]
qcarolq@hotmail.com[2]
wuyengting@hotmail.com[3]
Corresponding Author: qcarolq@hotmail.com

Abstract

This study examined Taiwanese medical institutions and the correlation and influence between organizational commitment and job performance. A total of 600 questionnaires were issued and 285 questionnaires were deemed valid upon collection. The effective rate was 47.5%.

Value commitment, effort commitment, and retention commitment showed significant positive correlations between task performance and choroid performance, respectively. The value of commitment and effort commitment on task performance presented a significant positive effect; value commitment, effort commitment, and retention commitment showed significant positive effects on choroid performance.

Hospital managers should strive to enhance employee organizational identity and coherence, thereby increasing employee loyalty to the organization, hospital excellence, and increased management performance for the achievement of sustainable development.

Keywords: Hospital, organizational commitment, job performance, sustainable development

Research for HCODEQ Method

Ji-Pyng Chiou[1], Chung-Fu Chang[2] and Yung-Lin, Wang[3]

Department of Electrical Engineering, Ming Chi University of Technology, Taiwan[1,3]
Department of Electrical Engineering, WuFeng University, Taiwan[2]
jipyng@mail.mcut.edu.tw[1]
cfchang@mail.wfc.edu.tw[2]
n36956789@gmail.com[3]
Corresponding Author: jipyng@mail.mcut.edu.tw

Abstract

This paper presents a comparison of the convergence property of HCODEQ, CODEQ, and differential evolution (DE) methods. The concepts of chaotic search, opposition-based learning, and quantum mechanics are used in the CODEQ method to overcome the drawback of selection of the crossover factor and scaling factor used in the DE method. However, a larger population size must be used in the CODEQ method. That is a drawback for all evolutionary algorithms (EAs). To overcome this drawback, acceleration operation and migrating operation are embedded into the CODEQ method, i.e. HCODEQ method. The migrating operation can be used to maintain the population diversity, which guarantees a high probability of obtaining the global optimum. And, the aim of the accelerated operation is to speed convergence. However, this faster convergence also leads to a higher probability of obtaining a local optimum because the diversity of the population descends faster during the solution process. So, these two operations can be act as a trade-off operation for the population diversity and convergence to accelerate the search of the global solution. To prove the convergence property of the HCODEQ method, four benchmark functions from the literature are used to compare the performance of the HCODEQ, CODEQ, and DE methods. Numerical results show that the performance of the HCODEQ method is outperformed than the other methods.

Keywords: HCODEQ, CODEQ, DE, migrating operation, accelerated operation

<u>Agenda</u>

July 13, 2016 (Wednesday)

Session B   **13:30-15:30**   **Room:** Carlton 8

Session Chair: Syming Hwang
                    National Chengchi University, Taiwan

Breast Density Prediction: From 2D Mammograms to Digital Breast Tomosynthesis

Jinn-Yi Yeh	National Chiayi University
Si-Wa Chan	Taichung Veterans General Hospital
Tai-Hsi Wu	National Taipei University

Exploring the Value-creating Process of Information Systems in Government Agencies

Fang-Ming HSU	National Dong Hwa University
Chu-Mei Chiu	National Dong Hwa University
Chien-Ho Liao	National Dong Hwa University
Cheng-Fa Chiang	National Dong Hwa University

Discipline Behavior of Day Traders in the Taiwan Futures Market

Syou-ching Lai	Chang Jung Christian University
Hung-chih Li	National Cheng Kung University

The Mobility Analysis Based on Vision Technique for Pedestrians

Chien Chung Liu	National Taichung University of Science and Technology
Son Shin Yang	National Taichung University of Science and Technology
Muh Don Hsiao	National Taichung University of Science and Technology
Zong Min Huang	National Taichung University of Science and Technology
Chuen Horng Lin	National Taichung University of Science and Technology

The Structural Description and Analysis of Big Surveillance Video

Wei-Lin Hsu	National Taichung University of Science and Technology
Chuen-Horng Lin	National Taichung University of Science and Technology
Chun-Chi Lo	National Taichung University of Science and Technology
Muh-Don Hsiao	National Taichung University of Science and Technology

<u>Agenda</u>

July 13, 2016 (Wednesday)

Session B   13:30-15:30   **Room:** Carlton 8

Session Chair: Syming Hwang

National Chengchi University, Taiwan

The Behavior of the Detection for Talking on Cell Phone of Driver Using Image Processing Technique

Jun Hong Song   National Taichung University of Science and Technology

Muh Don Hsiao   National Taichung University of Science and Technology

Chuen Horng Lin   National Taichung University of Science and Technology

Chun Chi Lo   National Taichung University of Science and Technology

Breast Density Prediction: From 2D Mammograms to Digital Breast Tomosynthesis

Jinn-Yi Yeh[1], Si-Wa Chan[2] and Tai-Hsi Wu[3]

Department of Management Information Systems, National Chiayi University, Taiwan[1]
Department of Radiology, Taichung Veterans General Hospital, Taiwan[2]
Department of Business Administration, National Taipei University, Taiwan[3]
jyeh@mail.ncyu.edu.tw[1]
chan.siwa@gmail.com[2]
taiwu@mail.ntpu.edu.tw[3]
Corresponding Author: jyeh@mail.ncyu.edu.tw

Abstract

Digital breast tomosynthesis (DBT) is a promising new technique for breast cancer diagnosis. It has the potential to substantially overcome the tissue superimposition problems occurred on the traditional mammograms in mass detection. However, DBT generates a lot of images so that the work of radiologist will be too heavy. Moreover, breast density has the potential to be used as a predictor of breast cancer risk and is a measure of how well tissue can be seen on DBT images. Therefore, it is necessary to construct an automatic computer-aided diagnosis (CAD) system for DBT image analysis. This study develops a CAD system to predict breast density on DBT images. First, we read images from the mini-MIAS database. After removing tags and pectoral muscles, we can extract the whole breast region which is used for training the 2D CAD system using linear discrimination analysis (LDA). Then the DBT projection images are loaded to predict the breast density. Experimental Results show that LDA outperforms other classification methods such as naïve Bayes, decision tree, multilayer perception, and support vector machine (SVM). Moreover, the accuracy of breast density prediction for DBT is 88.57%.

Keywords: Mammograms, digital breast tomosynthesis, computer-aided diagnosis, breast density, linear discrimination analysis

Exploring the Value-creating Process of Information Systems in Government Agencies

Fang-Ming Hsu[1], Chu-Mei Chiu[2], Chien-Ho Liao[3] and Cheng-Fa Chiang[4]

Department of Information Management, National Dong Hwa University, Taiwan
fmhsu@mail.ndhu.edu.tw[1]
cmchiu@archives.gov.tw[2]
jenhe12c@gmail.com[3]
juenfa7799@gmail.com[4]
Corresponding Author: fmhsu@mail.ndhu.ntpu.edu.tw

Abstract

In the era of knowledge economics, information systems (IS) are fast growing field in government agencies through last decades. However, empirical researches regarding the value-creating process of IS in government agencies are still limited. This study plans to investigate the assimilation of innovation of IS and its impact on performance in government agencies. This study develops a theoretical model that is informed by the literature on innovation assimilation and by structuration theory to explain the aggregated assimilation of IS. Based on previous literature, this study isolated the organizational, technological, and inter-organizational factors that shape the meta-structures for the aggregated assimilation of IS. This study also provides evidence of a substantial impact of the assimilation of these innovations on performance. To propose the empirical findings, this study collects data from agencies with digital signature used in IS. The findings of this study suggest that top management leadership, trust to supplier, IT sophistication, and EDRMS efficacy affect the EDRMS assimilation in government agencies. Then, the EDRMS assimilation affects its system value.

Keywords: Government agencies, information systems, value, assimilation

Discipline Behavior of Day Traders in the Taiwan Futures Market

Hungchih Li[1], Syouching Lai[2] and Chin-Jinny Lee[3]

National Cheng Kung University, Taiwan[1]
Chang Jung Christian University, Taiwan[2]
National Kaohsiung First University of Science and Technology, Taiwan[3]
hcli@mail.ncku.edu.tw[1]
sclai@mail.cjcu.edu.tw[2]
lca5168@yahoo.com.tw[3]
Corresponding Author: hcli@mail.ncku.edu.tw

Abstract

This study uses the measure of discipline proposed by Locke and Mann (2005) to investigate monthly dynamic relationship between the prior discipline behavior, prior profitability and the current discipline behavior using year 2006 and 2007 since the degree of discipline behavior might depend on prior profitability and prior degree of discipline behavior. Through dynamic analysis, this study can explore the real situation of discipline behavior of retail day traders and can thus fill the gap in the literature about discipline behavior. We find no matter which discipline measures is used, there exists "the law of effect" in discipline measure. Also, retail day traders display risk-taking behavior when there are prior profits through increasing duration for losses or increasing maximum exposure, implying higher prior profits will lower down the discipline in cutting losses and exposure.

Keywords: Discipline behavior, profitability, risk taking, the law of effect, retail day traders

The Mobility Analysis Based on Vision Technique for Pedestrians

Chien-Chung Liu[1], Son-Shin Yang[2], Muh-Don Hsiao[3],
Zong-Min Huang[4] and Chuen-Horng Lin[5]

Department of Computer Science and Information Engineering, National Taichung
University of Science and Technology, Taiwan
paradise811727@gms.nutc.edu.tw[1]
sonshinyang@gmail.com[2]
paul@nutc.edu.tw[3]
skyf6@gms.nutc.edu.tw[4]
linch@nutc.edu.tw[5]
Corresponding Author: paradise811727@gms.nutc.edu.tw

Abstract

This study proposes a mobility analysis for pedestrians based on vision technique. The analysis is carried out on the automatic detection system of traffic lights for pedestrians, based on the number of pedestrians and different walking velocities; the aim is to ensure the safety of pedestrians when they are walking through a zebra crossing. In order to acquire the walk velocity of pedestrians, the vision technique's multiple object tracking is adopted in this study for processing. This includes setting up the background of the Gaussian mixture model (GMM), object detection, object tracking based on the adaptive CamShift algorithm, multiple object tracking, etc. With all of the aforementioned methods, walk velocities of pedestrians can then be obtained.

In order to verify the results of this paper, three different experiments are used for the condition of pedestrians' non-overtaking and overtaking actions. First, the accuracy of estimated time is high for pedestrians' walking velocities for non-overtaking actions. Next, the accuracy of the estimated time is high for pedestrians' walking velocities for overtaking actions. The experimental results of the simulation have shown good agreement.

Keywords: Mobility analysis, vision technique, object tracking, pedestrians' model

The Structural Description and Analysis of Big Surveillance Video

Wei-Lin Hsu[1], Chuen-Horng Lin[2], Chun-Chi Lo[3] and Muh-Don Hsiao[4]

Department of Computer Science and Information Engineering,[1,2,3]
Department of Information Management,[4]
National Taichung University of Science and Technology, Taiwan
aup67333@gmail.com[1]
linch@nutc.edu.tw[2]
stupid_810319@yahoo.com.tw[3]
paul@nutc.edu.tw[4]
Corresponding Author: aup67333@gmail.com

Abstract

This paper proposes a structural description and analysis method for big surveillance videos, which can describe the big surveillance videos and provide users with a complete structure for quick searches. In regard to the structural description of big surveillance videos, this study integrates the videos from surveillance servers in cloud server, and applies the videos according to the adaptive tracking algorithm of multiple objects proposed in this paper. After obtaining the region, color, texture and shape feature of the objects being extracted. The objects are categorized into pedestrians and vehicles, to simplify the description of the surveillance video structure. The structural description in this paper for the object of the big surveillance videos on the cloud server are translated into semantic content. Next, the object association dictionary of cloud videos is created based on relational hierarchical structure, which is called structural description of the big surveillance video. The proposed method can provide efficient transmission, manage huge video data, and help managers to quickly select the object and analysis from sub-videos of different surveillance servers.

Keywords: Big data, cloud surveillance video, structural description, tracking of multiple objects, key feature set

The Behavior of the Detection for Talking on Cell Phone of Driver Using Image Processing Technique

Jun-Hong Song[1], Muh-Don Hsiao[2], Chuen-Horng Lin[3] and Chun-Chi Lo[4]

Department of Computer Science and Information Engineering,[1,3,4]
Department of Information Management,[2]
National Taichung University of Science and Technology, Taiwan
Littles712103@gmail.com[1]
paul@nutc.edu.tw[2]
linch@nutc.edu.tw[3]
stupid_810319@yahoo.com.tw[4]
Corresponding Author: Littles712103@gmail.com

Abstract

In this paper, image processing technique is used to detect a driver's behavior of talking through cellular phone. In recent research, it was found that when the driver's attention is diverted from the road condition for more than two seconds, the possibility to cause a traffic accident is greatly enhanced. From a survey made by the governments of North America, it was proved that the proportion of traffic accident caused by driver's behavior of talking through cellular phone was higher than that caused by drunk driving. Therefore, driver's behavior of talking through cellular phone while driving will affect the driving competence of the driver, meanwhile, the accident causing rate will be increased too. Since if a driver talks through cellular phone while he is driving, it could easily lead to traffic accident, this behavior is thus called abnormal behavior; therefore, it should be detected and warned. First, image processing technique accompanied with AdaBoost and Viola-Jones face detector algorithm are used to do initial detection and positioning on human face, then face tracking is carried out, then the areas of five sense organs are positioned, which include the head shape, eye, eyebrow, nose and lip. Then the detection and positioning of ear is carried out, however, since there are lots of losses in the planar information of the ear, therefore, ear will be detected based on the proportion of face; next, both hands and their exercise will be detected, and the tracking of left and right hands will be carried out. Finally, based on the exercise behavior and detention time of the driver's hand in the ear zone, whether the driver is talking through cellular phone is recognized. The result of this study can remind the driver for driving safety so as to reduce the traffic accident causing rate from the driver.

Keywords: Driver's behavior, traffic accident, cellular phone, face detector, face tracking

<u>Agenda</u>

July 14, 2016 (Thursday)

Session C   **10:00-12:00**   **Room:** Carlton 8

Session Chair: C. K. Farn

National Central University, Taiwan

The Free Rider Problem Revisited – Paradigm Shift in the Network Economy

Ya-Wen Lin	National Central University
Chih-Hung Chou	National Central University
Tuo-Ming Huang	National Central University
Cheng-Kiang Farn	National Central University

Evolutionary Variability in Civil Society Organizations in Latin America

Stephen John Beaumont	Centro de Tecnología para el Desarrollo (CENTED)

High Performance Work Practices as a Tool to Increase Malaysian Research and Development Performance

Mohd Shafiq Bin Mohd Hanafi	Multimedia University

Real-Time Remote Monitoring (RTRM) of Marine Ecosystem Using Wireless Sensor Networks

Ahmed N Bdour	The Hashemite University
Zeyad Tarawneh	The Hashemite University
Thakir Almomani	The Hashemite University

Learning Race and Knowledge Transfer among Co-opetitive Subsidiaries of Business Groups: Dual-Embeddedness Perspective

Wenchieh Wu	St. John's University

The Use of Artificial Neural Networks (ANN) in the Multispectral Classification of Landsat Images

Nezar Atalla Hammouri	The Hashemite University
Suhail Sharadqah	Tafila Technical University

The Free Rider Problem Revisited –
Paradigm Shift in the Network Economy

Ya-Wen Lin[1], Chih-Hung Chou[2], Tuo-Ming Huang[3] and Cheng-Kiang Farn[4]

Department of Information Management, National Central University, Taiwan
994403005@cc.ncu.edu.tw[1]
gtcch@hotmail.com[2]
huangduoming@gmail.com[3]
ckfarn@mgt.ncu.edu.tw[4]
Corresponding Author: ckfarn@mgt.ncu.edu.tw

Abstract

Based on individual rational decisions, consumers have a strong tendency to be free riders who take advantage of goods and services without paying, a well-known problem in collective action for common benefits that results in the tragedy of the commons. In a modern network society, why are vendors willing to provide free services or goods to the free riders at an apparent loss? Because the classic economic theory ignored the value added brought by free riders. The objective of this study is to propose a multi-party value exchange framework in which free riders are considered an investment that should be evaluated based on return rather than cost. Free rides then become economic or social incentives that add value to information goods or services. As a result, the market value of this commodity is increased because the network effects caused by free riders can be exchanged and bargained with on both same-side and cross-side markets. The tragedy of the commons effect rarely exists in a network economy, however. Information goods or services represent two related elements; with low incremental and reproduction costs, large-scale usage leads to increased gross profit; in comparison, with network externality, marginal utilities increase with the growing number of consumers. Meanwhile, the adoption of or purchase choices for information goods or services are motivated not only by labelled price but by externalized value. Free rides therefore become key assets that affect network externality and ignite multiple-value exchange cycles in the network economy.

Keywords: Free Rider, Network Externality, Multi-Sided Markets, Network Economy

Evolutionary Variability in Civil Society Organizations in Latin America

Stephen Beaumont

Centro de Tecnología para el Desarrollo (CENTED), Argentina
info@cented.org
Corresponding Author: info@cented.org

Abstract

The form or structure which organizations adopt affects their ability to survive and will ultimately determine if they are successful or not. In some markets, large and highly diversified organizations will be the most successful, while in others, small and flexible organizations will do best. We may see, with the passage of time, how some forms tend to dominate different market segments. This raises the question, why certain organizational forms are more efficient in a particular market?

The reality is that the adaptation of different organizational forms to different markets is one way to achieve survival and success. Given the great diversity of markets, contexts and realities in which Civil Society Organizations (CSOs) operate in Latin America, there will be countless variations in the forms, structures of governance and overall performance of each organization. The important thing would be to know the reasons for such adaptations to better understand the development and evolution of the Third Sector.

This paper analyzes the development of CSOs in their ability to survive, the variations in their form or structure, their adaptation to the environment and their evolution over time, from a multidisciplinary approach.

Keywords: Civil society organizations, non profit organizations, organizational structure

High Performance Work Practices as a Tool to Increase Malaysian Research and Development Performance

Shafiq Hanafi

Faculty of Management, Multimedia University, Malaysia
m_shaq89@hotmail.com

Abstract

Government noticed a weak performance in term of Malaysian patent, intellectual properties' royalties and citation per publication, even though a number of researcher in Malaysia increasing from year to year. This shows that Malaysia lack of quality of R&D personnel. R&D organization has a unique culture and R&D personnel has unique career orientation and rewards preference. Thus, managing R&D personnel is different than other industries. Studies have shown that there is a positive link between HPWP and innovation. Nevertheless, there exists a knowledge gap in the area of HPWP in Malaysia. Thus, this paper would like to investigate the relationship between HPWP and R&D performance.

Keywords: High performance work practices, research and development

Real-Time Remote Monitoring (RTRM) of Marine Ecosystem Using Wireless Sensor Networks

Ahmed N Bdour[1], Zeyad Tarawneh[2] and Thakir Almomani[3]

Civil Engineering Department, College of Engineering, The Hashemite University, Jordan[1,2]

Biomedical Engineering Department, College of Engineering, The Hashemite University, Jordan[3]

bdour@hu.edu.jo[1]

Corresponding Author: bdour@hu.edu.jo

Abstract

Water quality perturbations related to anthropogenic disturbances and industry pressures continue to increase in marine ecosystems. Therefore, effective water quality monitoring programs have become critical for the protection of our water resources. However, without accurate, intensive and long-term data acquisition, the health of the water resources cannot be adequately assessed, effective preservation and remediation programs cannot be run, and program success cannot be properly evaluated.

Herein, this research utilized the recent advances in communication and wireless sensors for the purpose of real time remote monitoring (RTRM) of dynamic marine water quality parameters at various spatial and temporal scales. A platform consists of a robust dynamic integration of three different types of sensors; namely biosensors, physical sensors, and chemical sensors were installed at a selected site at the Red Sea Coast (Gulf of Aqaba, near Haqel City). Biological sensor measures dissolved oxygen (DO) which tracks the upwelling of hypoxic bottom water that cause localized fish kills. Physical and chemical sensors measure various water quality parameters such as pH, conductivity, turbidity, and sediment concentration near river bed.

The station was linked with advanced software applications and hardware components that enable wireless, mobile and Internet computing. A two-way transfer and display of data using RTRM technologies was utilized for data processing via specialized web-based visualization software packages.

This setup establishes integrated methodology for mapping and assessing negative environmental externalities provides a useful tool for the design/development/ implementation of an environmental network for the monitoring of a variety of pollutants over time and space and the assessment of environmental quality of ecosystem.

Ultimately, such system improves statistical and mechanistic modeling in monitoring of water quality trends at local, watershed and regional scales for freshwater, estuarine and marine ecosystems. In addition, it enhances rapid (e.g., real-time) detection of hydrologic variability, recognized as a critical need for early warning systems and rapid response to any harmful events.

Learning Race and Knowledge Transfer among Co-opetitive Subsidiaries of Business Groups: Dual-Embeddedness Perspective

Wenchieh Wu

Dept. of Tourism and Leisure Management, St. John's University, Taiwan
sebwu@mail.sju.edu.com
Corresponding Author: sebwu@mail.sju.edu.com

Abstract

The study investigate that the larger subsidiaries technical capabilities gap at early stage, the weaker competition intense which facilitates collaborative learning race between subsidiaries. As the closer subsidiaries technical capabilities gap; however, the stronger competition intense which forms competitive learning race between subsidiaries that impedes subsidiaries collaborate and support each other. Therefore, subsidiaries need to spontaneous learning and seek for more resources outside to enhance subsidiary technical capability, and sum total of conglomerate knowledge. The study proposed five propositions to bridge theoretical gap and provided growth strategy for conglomerate in practice.

Keywords: Learning race, knowledge transfer, co-opetition, dual-embeddedness

The Use of Artificial Neural Networks (ANN) in the Multispectral Classification of Landsat Images

Nezar Hammouri[1] and Suhail Sharadqah[2]

Department of Earth and Environmental Sciences, The Hashemite University, Jordan[1]
Natural Resources and Chemical Engineering Department, Tafila Technical University, Jordan[2]
nezar@hu.edu.jo[1]
suhail_sharadqah@yahoo.es[2]
Corresponding Author: nezar@hu.edu.jo

Abstract

In this study, two different types of image classifications was performed to extract information about land use / cover for selected basin in Jordan. The first one in Maximum likelihood classifier (MLC) and the other is Neural Network classifier (NNC). Landsat OLI image was used as source of multispectral data to perforce the classifications processes. More than 120 training sites were used to perform both MLC and NNC classifiers. The following classes were used as input training for both classifiers; Urban and Build up areas, water, forest, bare soil, vegetated areas, and non-vegetated areas.

Classification from both MLC and NNC showed variant results. These results were matched with about 20 ground truth check points that were collected from the field. By comparing these points with MLC and NNC classifiers results, it was found that NNC was able to classify the digital numbers of Landsat OLI images more accurately than MLC. NNC was able more to discriminate between bare soil areas and non-vegetated areas and between forest and vegetated areas. In some locations, MLC was not able to differentiate between forest which is naturally occurring vegetation and those that planted by farmers. Furthermore, MLC was failed to identify some of the major highways in the study area where it was classified as bare soil, while NNC method was able to detect these highways and classify them as urban areas.

Keywords: Artificial neural networks, maximum likelihood, land use, land cover, landsat, Jordan

<u>Agenda</u>

July 14, 2016 (Thursday)

Session D   **13:30-15:30**   **Room:** Carlton 8

Session Chair: Su-Houn Liu

Chung Yuan Christian University, Taiwan

Firm Innovativeness and Performance: A Study of Indian Chemical Industry

Jamal A Farooquie   AMU

Kirit R Adhia   RSPL, Ahmedabad

Innovative Technology Applications in Social Enterprises

Ming-Hsien Yang   Fu Jen Catholic University

Ya-Yun Cheng   Fu Jen Catholic University

Chang-Tang Chiang   Fu Jen Catholic University

The Influence of Internationalisation on SME Innovation in Least Developed Countries (LDCs)

Yazid Abdullahi Abubakar   Kingston University London

Chris Hand   Kingston University London

Online User Reviews: Towards an Integrative Perspective

Matthias Bernhard Schulten   Hochschule Furtwangen University

How It Works? An Explore on Using Social Buttons in a Learning Game

Su-Houn Liu   Chung Yuan Christian University

Hsiu-Li Liao   Chung Yuan Christian University

Ting-Shan Kuo   Chung Yuan Christian University

Evaluating the Different Factors Affecting the Educational Attainment of Students at the Faculty of Information Technology at Hashemite University in Jordan

Feras Ahmad Hanandeh   Hashemite University

Firm Innovativeness and Performance:
A Study of Indian Chemical Industry

Jamal A Farooquie[1] and Kirit R Adhia[2]

Department of Business Administration, Aligarh Muslim University (AMU), India[1]
RSPL, India[2]
jamalfarooquie@yahoo.co.in[1]
jeffher@mail.dba.ntpu.edu.tw[2]
Corresponding Author: jamalfarooquie@yahoo.co.in

Abstract

In view of the role of Indian Chemical Industry (ICI) in the economic growth of the country and also the importance of technological developments and innovativeness, the present study aims at examining the effect of technological development and innovation on performance in the context of the ICI. The present paper is based on a larger study conducted by the authors.

The study consists of two major outcome variables- measure of technological development and innovativeness, and gain in performance due to being innovative. Improvement in the performance has been examined in two parts- financial and non-financial. Using the information gathered through the literature survey and based on the guidelines for collecting and interpreting technological innovation data, proposed by the OECD manual, a structured questionnaire was designed to collect the data from 172 firms.

The findings reveal that (a) technological development and innovation leads to significant positive change in financial as well as non-financial aspects of performance, and (b) the R&D investments significantly contribute to technological development and innovation.

Keywords: Chemical industry, firm performance, technological innovation

Innovative Technology Applications in Social Enterprises

Ming-Hsien Yang[1], Ya-Yun Cheng[2] and Chang-Tang Chiang[3]

Department of Information Management, Fu Jen Catholic University[1]
Graduate Institute of Business Administration, Fu Jen Catholic University[2,3]
mhyang@mail.fju.edu.tw[1]
ya-yun@yahoo.com.tw[2]
arthurctchiang@gmail.com[3]
Corresponding Author: mhyang@mail.fju.edu.tw

Abstract

Social enterprises have their unique social missions in addition to the economic missions of regular enterprises. Achieving social missions usually incurs additional costs and thus may negatively influence the growth of these enterprises. The development of social enterprises is currently at the emergent stage and most of them are of small size and lacking of physical resources. Therefore, innovative technology can be applied to help the social enterprises grow. Considering the popularity and strong power of social media, as well as the extreme low cost of adoption, the study aimed to investigate how the social enterprises can use social media as innovative tools in their operations. Based on the theoretical foundation of relationship management, this study proposed a three-stage model that describes how the social enterprises can apply the social media for stakeholder management. The initial model was then modified through the interviews with the executives of three social enterprises in Taiwan. The model specifies the targets, objectives, processes, and means of different application stages and can be employed to facilitate the enterprise's relationship managements with stakeholders. Using the case study method, the study illustrated how the proposed model can be used in practice. The study results revealed that the innovative application of social media is helpful to the business development of social enterprises. In addition to the practical value, this study contributes to integrating the theories of social enterprise development and innovative technology application by proposing a process model of utilizing social media in social enterprises. Moreover, incorporating the factors of technology adoption and structuration, the proposed model can serve as a foundation of further developing an adaptive technology transfer model, which can be used as a guide to extend the successful applications of innovative technology presented in the study to other Taiwanese or foreign social enterprises.

Keywords: Social enterprise, relationship management, innovative technology, social media, stakeholder

The Influence of Internationalisation on SME Innovation in Least Developed Countries (LDCs)

Yazid Abdullahi Abubakar[1] and Chris Hand[2]

Strategy, Marketing and Innovation, Kingston University London, United Kingdom
Y.Abdullahi@kingston.ac.uk[1]
C.Hand@kingston.ac.uk[2]
Corresponding Author: Y.Abdullahi@kingston.ac.uk

Abstract

Small and medium sized enterprises (SMEs) located in the world's poorest countries, the least developed countries (LDCs) of Sub-Saharan Africa, operate in distinctively hostile institutional environments compared to those in advanced economies. Better understanding of the determinants of SME innovation in such environments is important for the development of private sector in Sub-Saharan LDCs, because innovative SMEs are crucial for creating sustainable economic growth. Yet, determinants of SME innovation in LDCs have hardly been studied. Considering the potential relevance of internationalization for SME innovation in LDCs, as means of overcoming domestic environmental hostility, the paper investigates the influence of foreign technology licensing, exports and imports on SME innovation in LDCs.

The study employs data from 1,236 manufacturing SMEs from Sub-Saharan LDCs - Djibouti, Tanzania, Uganda, Zambia and the Democratic Republic of Congo. The findings suggest that unlike in advanced economies where imports and exports are significant for SME innovation, only foreign technology licensing was robustly found to influence SME innovation in Sub-Saharan LDCs, specifically new process innovations. Findings are compared with those from advanced economies in order to identify distinctive features. The implication is that SMEs in Sub-Saharan LDCs need to be supported by different policies compared to advanced economies.

Keywords: Innovation, SMEs, internationalization, least developed countries (LDCs) and Sub-Saharan Africa

Online User Reviews:
Towards an Integrative Perspective

Matthias B. Schulten

Faculty of Digital Media, Hochschule Furtwangen University, Germany
Matthias.Schulten@hs-furtwangen.de
Corresponding Author: Matthias.Schulten@hs-furtwangen.de

Abstract

With the rapid growth of the Internet and the increasing ability of its users to generate and publish content, active online communities have emerged, that provide a wealth of product information in form of online user reviews which increasingly influence consumer impressions of websites and products. Several studies suggest that these impressions are influenced by the goals consumers pursue when reading online user reviews. Unfortunately, little research has explicitly linked goals to online user reviews. Based on literature analyses and qualitative research the author proposes a framework for such a linkage. The framework provides a theoretical account which brings together apparently disparate research streams on online user reviews and allows for the identification of novel constructs that have not been the subject of past research on online user reviews. Moreover, various theoretical and managerial implications can be derived from the framework.

How It Works? An Explore on Using Social Buttons in a Learning Game

Su-Houn Liu[1], Hsiu-Li Liao[2] and Ting-Shan Kuo[3]

Department of Information Management, Chung Yuan Christian University, Taiwan
vandy@cycu.edu.tw[1]
hsiuliliao@cycu.edu.tw[2]
g10194009@cycu.edu.tw[3]
Corresponding Author: hsiuliliao@cycu.edu.tw.tw

Abstract

Learning Games are an emerging field of scholarship and practices focusing on the use of digital gaming platforms and technologies for purposes of education. This study had focus on the effect of the addition of social buttons to a learning game platform. The experiment was conducted in an university located in the Northern part of Taiwan. In total, 106 students participated in the experiment, mostly third year students in the university's Department of Information Management. In the end, 98 students completed the experiment, comprising 51 from the experimental group and 47 from the control group. During the five weeks of the study, each time a player logged on to play the game, the platform would automatically record the data pertaining to their activity, including which activities they took part in, and which other members they interacted with. In general, our research finding indicates that there is indeed a positive effect, and our research corroborates that after the addition of social buttons, students who play in the learning game improved their quality but not their quantity of learning involvement. Eventhough the social buttons do not cause a learner to be more satisfied, they can improve learning outcomes, and increased learner's willingness to continue participating.

Keywords: Serious game, learning game, social buttons

Evaluating the Different Factors Affecting the Educational Attainment of Students at the Faculty of Information Technology at Hashemite University in Jordan

Feras Ahmad Hanandeh[1] and Majdi Yousef Al-Shannag[2]

Department of Computer Information Systems, Faculty of Prince Al-Hussein Bin Abdallah II for Information Technology, Hashemite University, Jordan[1]
Department of Computer Information System, Faculty of Information Technology, Yarmou University, Jordan[2]
Feras@hu.edu.jo[1]
majdis@yu.edu.jo[2]
Corresponding Author: feras@hu.edu.jo

Abstract

This article investigates the possible factors that could affect the Educational attainment of the students at the Faculty of Information Technology in Hashemite University. The article analyzes the student information, background, their academic records, and how those factors enhance their attainment. The student data used in the study is extracted from the student's academic records in the university. The data mining tools and techniques are used to decide which attribute(s) affecting the student's attainment. The results show that the most important factor which affects the students' attainment is the student Acceptance Type. The overall accuracy of the model is 44% which is accepted rate.

Keywords: Data mining, classification, extracting rules

Agenda

July 15, 2016 (Friday)

Session E   **10:00-12:00**   **Room:** Carlton 8

Session Chair: Pei-Ju Lucy Ting

National Taipei University, Taiwan

Risks and Opportunities for Auditors in Government

Lou Yeou Tsong   National Taipei University

The Exploraory Study of Continuous Intention of Usage in Volunteer Service System: The Perspective of Social Exchange Theory

peiling wu   National Taipei University

Kuang-Hui Chiu   National Taipei University

Customer Participation in B2B IT Services: Its Antecedents and Consequences

tom m. y. lin   National Taiwan University of Science and Technology

Jia-Jhou Wu   National Taiwan University of Science and Technology

The Innovations of Business Model of a MICE Company

HUI HUA OUYANG   Chien Hsin University of Science and Technology

Hsiao-Yu Chang   Chien Hsin University of Science and Technology

The Buffering Effect of Corporate Social Responsibility Strategy on Consumer Skepticism

Pei-Ju Lucy Ting   National Taipei University

Hsin-Ju Stephie Tsai   University of Manchester

Risks and Opportunities for Auditors in Government

LOU, Yeou-Tsong

Department of Business Administration, National Taipei University, Taiwan
aa9854@dgbas.gov.tw
Corresponding Author: aa9854@dgbas.gov.tw

Abstract

An effective public sector audit activity strengthens governance by materially increasing citizens' ability to hold their public sector entity accountable. Challenges facing government auditors and comparing and contrasting government and corporate audit functions.

Keywords: Internal auditing, internal control, audit's risk

The Exploraory Study of Continuous intention of Usage in Volunteer Service System: The Perspective of Social Exchange Theory

Pei-Ling Wu[1] and Kuang-Hui Chiu[2]

Department of Business Administration, National Taipei University, Taiwan
Perer0515@gmail.com.tw[1]
khchiu@mail.ntpu.edu.tw[2]
Corresponding Author: Perer0515@gmail.com.tw

Abstract

Disability support services as an important part of social welfare take more and more places in modern government. In order to provide convenient services, many information systems have been introduced. Hence many disabled supporting systems start with good intentions but hit on the unbeaten road. This paper explores how volunteers use information systems for helping the visually impaired and how to keep them using these information systems continuously. We interviewed the blind, the volunteers and the employees in nonprofit organizations (NPO), such as association for visually impaired people. We found there are two types of volunteers who use information systems to help the disabled. The first type treats information systems as an access platform can let them easily helping lots of people just a click. The others need some actual rewards for incentive, e.g. subsidy of mobile phone data transaction fee to let them helping disabled online, rather than face to face. Base on Social Exchange Theory and our finding, we'll give suggestions to NPO for operating information systems to organize virtual volunteer communities.

Keywords: Online volunteer system, social exchange theory, continuance intention of usage, information system success model, micro-volunteering

Customer Participation in B2B IT Services:
Its Antecedents and Consequences

Tom M. Y. Lin[1] and Jia-Jhou Wu[2]

Department of Business Administration, National Taiwan University of Science and
Technology, Taiwan
tomlin@ba.ntust.edu.tw[1]
bluecolorwu@yahoo.com.tw[2]
Corresponding Author: tomlin@ba.ntust.edu.tw

Abstract

This study aims to investigate how customer participation influences the two contrasting
relationship maintenance mechanisms: dedication and constraint, and to identify its
antecedents in the context of Business-to-Business (B2B) information technology (IT)
services. An empirical study was conducted through surveys of 121 firms receiving IT
services in Taiwan. Partial Least Squares method was used to test the conceptual model of
this study. The findings revealed that customer participation exerts significant impacts on
both IT service quality and switching costs. IT service quality positively influences
satisfaction, thereby increasing loyalty. Also, switching costs positively affect loyalty.
Additionally, IT capabilities, organizational compatibility and role clarity were found to
enhance customer participation.

Keywords: Value co-creation, customer participation, service quality, satisfaction, switching
costs, loyalty

The Innovations of Business Model of a MICE Company

Hui-Hua Ouyang[1] and Hsiao-Yu Chang[2]

Department of Business Administration,
Chien Hsin University of Science and Technology, Taiwan
oyhh@uch.edu.tw[1]
fish19921105@hotmail.com.tw[2]
Corresponding Author: fish19921105@hotmail.com.tw

Abstract

The business model studies are still not well defined in recent studies. Preview studies mostly tried to understand business model focus on value creation and value capture. In practical, business models are changeable for environment. This study tries to interpret how the new idea builds a new business model when resources are constraint. The methodology is a case study of a small business programming. New business model is frequently created to fit their environment. The findings are resource rearrangements are important for new business model formation if resources are constrained. Vision is the way to create new business models for customer value.

Keywords: Business model, innovation

The Buffering Effect of Corporate Social Responsibility Strategy on Consumer Skepticism

Ting, Pei-Ju Lucy[1] and Tsai, Stephie Hsin-Ju[2]

Department of Business Administration, National Taipei University, Taiwan

School of Materials, University of Manchester, Manchester, UK

lucyting@gm.ntpu.edu.tw[1]

Stephie.Tsai@manchester.ac.uk[2]

Corresponding Author: lucyting@gm.ntpu.edu.tw

Abstract

Previous research suggests that corporate social responsibility (CSR) can be a firm's communication instrument to stimulate positive consumer behaviour such as positive word-of-mouth. Skarmeas and Leonidou (2013) find that when firms faces allegation concerning social irresponsibility, CSR strategies might aggravate consumers' negative, instead of positive, responses. To complete research in the CSR domain, this study focuses on the condition when a firm lapses into scandal and examines the effect of CSR initiatives on consumers' skepticism and attitude toward that firm. This study integrates three CSR strategy communication factors: proactivity (proactive/reactive), length of time (longer/shorter) and communication sources (internal/external). The results indicate that consumers perceive a firm with moral or ethical character when it conducts long-term engagement CSR strategy. On the other hand, if a company reactively involves in CSR initiatives, consumers will attribute the firm with more egoistic-driven motives. Egoistic-driven attribution relates positively to consumer skepticism and has negative influence on consumers' attitude. On the contrary, values-driven attribution relates negatively to consumer skepticism and has positive impact on consumers' attitude. This research investigates the effect of CSR strategy and the results could provide corporates guidelines as to how to conduct CSR tactics during crisis.

Keywords: Corporate social responsibility, Attribution theory, skepticism, equity, word of mouth

Officers and Organizing Committees

Conference Officers

Conference Chair

Kuang Hui Chiu   National Taipei University, Taiwan

Conference Co-Chairs

C. K. Farn   National Central University, Taiwan
Syming Hwang   National Chengchi University, Taiwan
Cheng-Hsun Ho   National Taipei University, Taiwan
Wenchieh Wu   St. John's University, Taiwan

Treasurer, Executive Secretary

Ching-Chih Chiang   Society for Innovation in Management, Taiwan

Editorial Board

Editor in Chief

C. K. Farn   National Central University, Taiwan

Editorial Board (alphabetical order of first name)

Cheng-Hsun Ho   National Taipei University, Taiwan
Chi-Feng Tai   National Chiayi University, Taiwan
Chih-Chin Liang   National Formosa University, Taiwan
Chun-Der Chen   Ming Chuan University, Taiwan
Hsiu-Li Liao   Chung Yuan Christian University, Taiwan
Jessica H. F. Chen   National Chi Nan University, Taiwan
Kai Wang   National University of Kaohsiung, Taiwan
Kuang Hui Chiu   National Taipei University, Taiwan
Li-Ting Huang   Chang Gung University, Taiwan
Ming Kuei Huang   Forward-Tech, Taiwan
Reiyao Wu   Shih Hsin University, Taiwan
RS Shaw   Tamkang University, Taiwan
RueyMing Lin   Oriental Institute of Technology, Taiwan
Shu-Chen Yang   National University of Kaohsiung, Taiwan
Shu-Hui Lee   National Taipei University, Taiwan

Sze-hsun sylcien CHANG	Shih Hsin University, Taiwan
Wenchieh Wu	St. John's University, Taiwan
Yao-Chung Yu	National Defense University, Taiwan
Zulnaidi Yaacob	University Sains Malaysia, Malaysia

Program Committee

Committee Chair

| Syming Hwang | National Chengchi University, Taiwan |

Program Committee (alphabetical order of First name)

Chen-Fu Chien	National Tsing Hua University, Taiwan
Dah-Chuan Gong	Chung Yuan Christian University, Taiwan
Fan Wang	Sun Yat-Sen University, China
Fen-Hui Lin	National Sun Yat-sen University, Taiwan
Houn-Gee Chen	National Taiwan University, Taiwan
James T. Lin	National Tsing Hua University, Taiwan
Jie-Haun Lee	National Chengchi University, Taiwan
Jr-Jung Lyu	National Cheng Kung University, Taiwan
L. Wang	Tunghai University, Taiwan
Ming Dar Hwang	Tamkang University, Taiwan
Ming-Kuen Chen	National Taipei University of Technology, Taiwan
R. S. Shaw	Tamkang University, Taiwan
Tsungting Chung	National Yunlin University of Science and Technology, Taiwan
Voratas Kachitvichyanukul	Asian Institute of Technology, Thailand
Waiman Cheung	The Chinese University of Hong Kong, Hong Kong
Y. W. Fan	National Central University, Taiwan
Yao-Chin Lin	Yuan Ze University, Taiwan

<u>Guide to Presenters and Session Chairs</u>

1. Please be in the session 10 minutes before the schedule.
2. Session chair should divide the available time equally among all papers to be presented and announce the same to the paper authors and audience. Each paper should be presented within allotted sparing three minutes for discussion.
3. The papers having more than one author will not get any extra time for making their presentations.
4. Session chair should remind the speakers about the time limit three minute before the time he or she is expected to finish the presentation. If a speaker goes beyond the allotted time, session chair should remind her or him to close the presentation.

Projector

During the conference, an LCD projector, screen and laptop (notebook) computer will be provided for each meeting room. Any additional equipment needed is at the discretion of the presenter, and it will be his or her responsibility to provide the extra equipment.

Conference Registration Desk

Pre-conference registration will be open from 15:00 to 16:30 July 12, 2016.
The conference registration desk will be open from 09:30 to 15:00 July 13-14, 2016 and from 09:30 to 11:00 July 15, 2016

Lunch

Five tea breaks and three lunches are included in the conference registration fee. Lunch would be provided for registered (paid) participants only. The lunch time is 12:00-13:30 at Feast Village. The dining restaurant is "Luk Yu Tea House" on 13 July, 2016. The dining restaurant is "Shook! Restaurant" on 14 July, 2016. The dining restaurant is "Fisherman Cove" on 15 July, 2016.

Author Schedule Index

Search for Session

Name	Session
A	
Abubakar, YazidAbdullahi	D
Adhia, KiritR	D
Almomani, Thakir	C
B, C	
Bdour, AhmedN	C
Beaumont, StephenJohn	C
Chan, Si-Wa	B
Chang, ChungFu	A
Chang, Hsiao-Yu	E
Cheng, Ya-Yun	D
Chiang, Chang-Tang	D
Chiang, Cheng-Fa	B
Chiang, ShangTse	A
Ching, WangChao	A
Chiu, Chu-Mei	B
Chiu, Kuang-Hui	E
Chou, Chih-Hung	C
Chung, ChiaJung	A
F	
Fan, Yi-wen	A
Farn, Cheng-Kiang	C
Farooquie, JamalA	D
Fu, ChangChung	A
H	
Hammouri, NezarAtalla	C
Hanandeh, FerasAhmad	D
Hand, Chris	D
Hsiang, KuoChing	A
Hsiao, MuhDon	B

Name	Session
Hsiao, Muh-Don	B
HSU, Fang-Ming	B
Hsu, Wei-Lin	B
Huang, Tuo-Ming	C
Huang, ZongMin	B
K, L	
Kuo, ChingHsiang	A
Kuo, Ting-Shan	D
Lai, Syou-ching	B
Li, Hung-chih	B
Liao, Chien-Ho	B
Liao, Hsiu-Li	D
Lin, Ching-I	A
Lin, ChuenHorng	B
Lin, Chuen-Horng	B
lin, tomm. y.	E
Lin, WangYung	A
Lin, Ya-Wen	C
Liu, ChienChung	B
Liu, Su-Houn	D
Lo, ChunChi	B
Lo, Chun-Chi	B
M, O, P, S	
Mohd Hanafi, Mohd ShafiqBin	C
OUYANG, HUI HUA	E
Pyng, ChiouJi	A
Schulten, MatthiasBernhard	D
Sharadqah, Suhail	C
Song, JunHong	B
Su, Yea-Huey	A

Name	Session		Name	Session
T			**Y**	
Tai, Shih-Hung	A		Yang, ChienChang	A
Tarawneh, Zeyad	C		Yang, Ming-Hsien	D
Ting, Pei-JuLucy	E		Yang, SonShin	B
Tsai, Hsin-JuStephie	E		Yeh, Jinn-Yi	B
Tseng, Juo-tzu	A		Yen, Szu-Wei	A
Tseng, Kuo-An	A		Ying, LinChia	A
Tsong, LouYeou	E			

Name	Session
W	
Wu, Jia-Jhou	E
wu, peiling	E
Wu, Tai-Hsi	B
Wu, Wenchieh	C
Wu, YenTing	A

Search for Paper ID

Name	PID
A	
Abubakar, YazidAbdullahi	P0135
Adhia, KiritR	P0122
Almomani, Thakir	P0151
B, C	
Bdour, AhmedN	P0151
Beaumont, StephenJohn	P0124
Chan, Si-Wa	P0131
Chang, ChungFu	P0127
Chang, Hsiao-Yu	P0148
Cheng, Ya-Yun	P0129
Chiang, Chang-Tang	P0129
Chiang, Cheng-Fa	P0134
Chiang, ShangTse	P0127
Ching, WangChao	P0115
Chiu, Chu-Mei	P0134
Chiu, Kuang-Hui	P0117
Chou, Chih-Hung	P0110
Chung, ChiaJung	P0130
F	
Fan, Yi-wen	P0111
Farn, Cheng-Kiang	P0110
Farooquie, JamalA	P0122
Fu, ChangChung	P0115, P0118, P0132
H	
Hammouri, NezarAtalla	P0153
Hanandeh, FerasAhmad	P0150
Hand, Chris	P0135
Hsiang, KuoChing	P0115
Hsiao, MuhDon	P0112, P0114
Hsiao, Muh-Don	P0113
HSU, Fang-Ming	P0134

Name	PID
Hsu, Wei-Lin	P0113
Huang, Tuo-Ming	P0110
Huang, ZongMin	P0112
K, L	
Kuo, ChingHsiang	P0127
Kuo, Ting-Shan	P0147
Lai, Syou-ching	P0103
Li, Hung-chih	P0103
Liao, Chien-Ho	P0134
Liao, Hsiu-Li	P0147
Lin, Ching-I	P0125
Lin, ChuenHorng	P0112, P0114
Lin, Chuen-Horng	P0113
lin, tomm. y.	P0141
Lin, WangYung	P0132
Lin, Ya-Wen	P0110
Liu, ChienChung	P0112
Liu, Su-Houn	P0147
Lo, ChunChi	P0114
Lo, Chun-Chi	P0113
M, O, P,S	
Mohd Hanafi, Mohd ShafiqBin	P0137
OUYANG, HUI HUA	P0148
Pyng, ChiouJi	P0118, P0132
Schulten, MatthiasBernhard	P0144
Sharadqah, Suhail	P0153
Song, JunHong	P0114
Su, Yea-Huey	P0111
T	
Tai, Shih-Hung	P0125
Tarawneh, Zeyad	P0151

Name	PID
Ting, Pei-JuLucy	P0149
Tsai, Hsin-JuStephie	P0149
Tseng, Juo-tzu	P0111
Tseng, Kuo-An	P0125
Tsong, LouYeou	P0116

W	
Wu, Jia-Jhou	P0141
wu, peiling	P0117
Wu, Tai-Hsi	P0131
Wu, Wenchieh	P0152
Wu, YenTing	P0130

Name	PID
Y	
Yang, ChienChang	P0130
Yang, Ming-Hsien	P0129
Yang, SonShin	P0112
Yeh, Jinn-Yi	P0131
Yen, Szu-Wei	P0125
Ying, LinChia	P0118

Sort by Paper ID

PID	Paper Title	Author(s)	Session
P0103	Discipline Behavior of Day Traders in the Taiwan Futures Market	Syou-ching Lai, Hung-chih Li	B
P0110	The Free Rider Problem Revisited – Paradigm Shift in the Network Economy	Ya-Wen Lin, Chih-Hung Chou, Tuo-Ming Huang, Cheng-Kiang Farn	C
P0111	The impact of eWOM on the purchase intention of niche products	Juo-tzu Tseng, Yi-wen Fan, Yea-Huey Su	A
P0112	The Mobility Analysis Based on Vision Technique for Pedestrians	Chien Chung Liu, Son Shin Yang, Muh Don Hsiao, Zong Min Huang, Chuen Horng Lin	B
P0113	The Structural Description and Analysis of Big Surveillance Video	Wei-Lin Hsu, Chuen-Horng Lin, Chun-Chi Lo, Muh-Don Hsiao	B
P0114	The Behavior of the Detection for Talking on Cell Phone of Driver Using Image Processing Technique	Jun Hong Song, Muh Don Hsiao, Chuen Horng Lin, Chun Chi Lo	B
P0115	Research for CODEQ Method	Kuo Ching Hsiang, Chang Chung Fu, Wang Chao Ching	A
P0116	Risks and Opportunities for Auditors in Government	Lou Yeou Tsong	E
P0117	The exploraory study of continuous intention of usage in volunteer service system: The perspective of social exchange theory	peiling wu, Kuang-Hui Chiu	E
P0118	Numerical Comparison of Three Evolutionary Algorithms	Chiou Ji Pyng, Chang Chung Fu,	A

PID	Paper Title	Author(s)	Session
		Lin Chia Ying	
P0122	Firm Innovativeness and Performance: A Study of Indian Chemical Industry	Jamal A Farooquie, Kirit R Adhia	D
P0124	Evolutionary Variability in Civil Society Organizations in Latin America	Stephen John Beaumont	C
P0125	The Quantitative Easing Monetary Policy and Corporate value Relevance of Business Strategy, Financial Capital and Intellectual Capital	Kuo-An Tseng, Szu-Wei Yen, Ching-I Lin, Shih-Hung Tai	A
P0127	Differential Evolution for Network Reconfiguration Problem	Ching Hsiang Kuo, Chung Fu Chang, Shang Tse Chiang	A
P0129	Innovative Technology Applications in Social Enterprises	Ming-Hsien Yang, Ya-Yun Cheng, Chang-Tang Chiang	D
P0130	Empirical Research on the Relationship between Organizational Commitment and Job Performance – A Case Study of Taiwanese Medical Institutions	Chien Chang Yang, Chia Jung Chung, Yen Ting Wu	A
P0131	Breast Density Prediction: From 2D Mammograms to Digital Breast Tomosynthesis	Jinn-Yi Yeh, Si-Wa Chan, Tai-Hsi Wu	B
P0132	Research for HCODEQ Method	Chiou Ji Pyng, Chang Chung Fu, Wang Yung Lin	A
P0134	Exploring the Value-creating Process of Information Systems in Government Agencies	Fang-Ming HSU, Chu-Mei Chiu, Chien-Ho Liao, Cheng-Fa Chiang	B
P0135	The Influence of Internationalisation on SME Innovation in Least Developed Countries (LDCs)	Yazid Abdullahi Abubakar, Chris Hand	D
P0137	High Performance Work Practices as a Tool to	Mohd Shafiq Bin	C

PID	Paper Title	Author(s)	Session
	Increase Malaysian Research and Development Performance	Mohd Hanafi	
P0141	Customer Participation in B2B IT Services: Its Antecedents and Consequences	tom m. y. lin, Jia-Jhou Wu	E
P0144	Online User Reviews: Towards an Integrative Perspective	Matthias Bernhard Schulten	D
P0147	How It Works? An Explore on Using Social Buttons in a Learning Game	Su-Houn Liu, Hsiu-Li Liao, Ting-Shan Kuo	D
P0148	The Innovations of Business Model of a MICE Company	HUI HUA OUYANG, Hsiao-Yu Chang	E
P0149	The Buffering Effect of Corporate Social Responsibility Strategy on Consumer Skepticism	Pei-Ju Lucy Ting, Hsin-Ju Stephie Tsai	E
P0150	Evaluating the Different Factors Affecting the Educational Attainment of Students at the Faculty of Information Technology at Hashemite University in Jordan	Feras Ahmad Hanandeh	D
P0151	Real-Time Remote Monitoring (RTRM) of Marine Ecosystem Using Wireless Sensor Networks	Ahmed N Bdour, Zeyad Tarawneh, Thakir Almomani	C
P0152	Learning Race and Knowledge Transfer among Co-opetitive Subsidiaries of Business Groups: Dual-Embeddedness Perspective	Wenchieh Wu	C
P0153	The Use of Artificial Neural Networks (ANN) in the Multispectral Classification of Landsat Images	Nezar Atalla Hammouri, Suhail Sharadqah	C