2nd International Conference on
Business Management, Social Science
and Sustainable Development
(BMSS-JAN-2019)
Tokyo Japan
January 19-20, 2019

TARIJ

BMSS – Tokyo Japan

2nd International Conference on Business Management, Social Science and Sustainable Development

January 19-20, 2019

Hotel Mystays Ochanomizu Conference Center

Book of abstracts

Volume 02, Issue 17

© Copyright

Disclaimer

Office Address:
7-8-1 Hongo, Bunkyo, Tokyo 113-0034
Email: contact@tarij.com

Organizing Committee

1. **Mr. Metin Gurani**
   Conference Coordinator

2. **Ishida Otaki**

   Conference Coordinator

3. **Hideo Owan**

   Conference Coordinator

Contents

Conference Chair Message

Dr Masayuki Otaki

International Conference on "2nd International Conference on Business Management, Social Science and Sustainable Development" serves as platform that aims to help the scholarly community across nations to explore the critical role of multidisciplinary innovations for sustainability and growth of human societies. This conference provides opportunity to the academicians, practitioners, scientists, and scholars from across various disciplines to discuss avenues for interdisciplinary innovations and identify effective ways to address the challenges faced by our societies globally. The research ideas and studies that we received for this conference are very promising, unique, and impactful. I believe these studies have the potential to address key challenges in various sub-domains of social sciences and applied sciences.

I am really thankful to our honorable scientific and review committee for spending much of their time in reviewing the papers for this event. I am also thankful to all the participants for being here with us to create an environment of knowledge sharing and learning. We the scholars of this world belong to the elite educated class of this society and we owe a lot to return back to this society. Let's break all the discriminating barriers and get free from all minor affiliations. Let's contribute even a little or single step for betterment of society and welfare of humanity to bring prosperity, peace and harmony in this world. Stay blessed.

Thank you.

Dr Masayuki Otaki
Conference Chair
BMSS- Secretariat, 2019

Conference Schedule

Venue: Room 1

9:00 am – 9:15 am	Welcome Reception & Registration
9:15 am – 9:30 am	Opening Ceremony
9:30 am – 9:40 am	Welcome Remarks –Conference Coordinator
9:40 am –9:50 am	Introduction of Participants
9:50 am – 9:55 am	Group Photo Session
9:55am – 10:00 am	Grand Networking Session and Tea Break

DAY 01 Saturday (January 19, 2019)
Session 1 (10:00 am – 12:30 pm)
Venue: Room 1

Track A: Engineering, Technology & Applied Sciences

AMPE-JAN19-101	Automatic Venipuncture Insertion Point Recognition Based on Machine Vision	Cheng-Ho Chen
AMPE-JAN19-102	Passive Filtration System with Embedded Shape Memory Alloys Wires for Unfiltered Splash Lubricated Gearboxes	Mr. Chi Yang
AMPE-JAN19-103	A Low-Power Variable-Gain LNA	Prof. Jian-Yu Hsieh
AMPE-JAN19-104	A Low-Power VCO	Prof. Jian-Yu Hsieh
AMPE-JAN19-105	A Model for Identification of Potential Experts and Leaders Based on Online Discussions	Jiang Liang Hou
TKE-319-101	Using the Numerical Wave Tank to Study on the Non-linear Long Wave Propagation over a Submerged Breakwater	Jen-Yi Chang

Track B: Business, Economics, Social Sciences and Humanities

BMSS-JAN1262019	Sustainability in the automotive interior – Comparison of volume and premium brand manufacturers	Wanja Wellbrock,
BMSS-JAN104-2019	The relationship between Cultural intelligence and in-role performance with the mediating effect of work-family positive spillover	Yuan Ko
BMSS-JAN106-2019	The relationship between emotional intelligence and in-role performance and the mediating role of psychological capital among nurses in Taiwan	Shiou-Min Wang

Lunch Break 12-30 pm to 01-30 pm

DAY 01 Saturday (January 19, 2019)
<u>Session 2(01:30 pm – 03:30 pm)</u>
Venue: Room 1
Track C: Medical, Medicine, Health Sciences

TKM-319-103	The research on adolescent anti-smoking media literacy in Taiwan	An-Chi Hsu
TKM-319-109	Assessing Border Community Readiness for Health Management Prior to the Special Border Economic Zone in Thailand: A Case Study of Sadao District Songkhla Province, Thailand	Sawpheeyah Nima

Track B: Business, Economics, Social Sciences and Humanities

BMSS-JAN108-2019	An empirical study of the key successful marketing strategies from the resource-based perspective	Chien Pin Tang
BMSS-JAN109-2019	To identify the key success competitive factors by chain drugstore	Teng-Chang Hao
BMSS-JAN110-2019	Health behaviour, change in behaviour and personalised nutrition: the conception of lifelong health	Dr. Zoltán Szakály
BMSS-JAN115-2019	Convergence among Cities in China	Shu-hen Chiang
BMSS-JAN118-2019	Semi-Static Hedging and Pricing American Floating Strike Lookback Options	Jr-Yan Wang
BMSS-JAN130-2019	Study of the "Http 404 " and "Reincarnation" phenomenon under the Internet governance in mainland China	Yu-Li Wang

Closing Ceremony

Conference Attendees

The following Scholars/ practitioners/educationist who don't have any paper presentation, however they will be attending the conference as delegates & observers.

Sr. No	Official ID	Name	Affiliation Details
01	*BMSS-JAN105-2019*	Tsung-Hsien Chiang	National Taiwan University, Taiwan
02	*BMSS-JAN110A-2019*	Dr. Károly Pető	University professor, Debrecen University, Faculty of Economics and Business, Institute of Rural Development, Tourism and Sports Management
03	*TKM-319-104A*	Tommy Chun On Lam	University of Queensland (Queensland Health
04	*TKM-319-107A*	Tamar Khmaladze.	Medical college "Panacea"
05	*TKM-319-108A*	Mindia Berelashvili	Medical college "Panacea"

DAY 02 Sunday (January 20, 2019)

City History and Discussion Session

The purpose of the second day conference will be for the participants to learn more about the local history and culture, or get to know the other participants better. Therefore,

Option 1: City History and Culture Tour: All the participants are free to organize your own group tours together and get to know each other better.

Option 2: Discussion Session: All the participants are free to make group discussions on behalf of your same research interest and get a chance to cooperate in the future Research

Track A: Business, Economics, Social Sciences and Humanities

The Relationship between Cultural Intelligence and In-Role Performance with the Mediating Effect of Work-Family Positive Spillover

Yuan Ko[1*], Angela Shin-yih Chen[2]

Abstract Owing to the rapid advancement of technology, the world has become a global village. More and more multinational corporations are developing, and this has forced enterprises to have more expatriates within their organizational structure. However, during their intercultural interaction with the locals, individuals may have problems adapting to various aspects of their new environment. Therefore, how to be accustomed to unfamiliar cultural context has become more and more important. The purpose of the current study was to examine the effects of cultural intelligence (CQ) and work-family positive spillover on individuals in-role performance. We collected data from the Taiwanese who were working overseas and we developed questionnaires through the Internet. By excluding invalid questionnaires, there were 232 responses which were valid. We adopted hierarchical regression to analyze the data and to test the effects of CQ on work-family positive spillover and in-role performance after controlling for gender, age, and English ability, respectively. In addition, we examined the mediating effect of work-family positive spillover on the relationship between CQ and in-role performance. The results showed that CQ had a positive effect on in-role performance. Besides, we found that work-family positive spillover mediated the relationship between CQ and in-role performance. The findings demonstrated that individuals with high CQ would be satisfied with both work and family, and then further enhance ones job performance. It is crucial to strike a balance between work and family. Thence, in the end, our current study provided discussion, theoretical implications, practical contributions, limitations, and recommendations for the future study and management.

[1,2] Dept. of Business and Administration, National Taipei University, New Taipei City, Taiwan
*E-mail: a0952959728@gmail.com

The Relationship between Emotional Intelligence and In-Role Performance and the Mediating Role of Psychological Capital Among Nurses in Taiwan

Angela Shin-Yih Chen[1], Shiou-Min Wang[2*], Tsung-Hsien Chiang[3]

Abstract The purpose of the current study is to examine the effects of emotional intelligence (EI) and psychological capital (PsyCap) on in-role performance. We collect data from nurses in a major medical center in Taiwan. The number of valid questionnaires is 217, and the return rate was 86.8%. We adopt hierarchical regression to analyze the data and to test the effects of EI on PsyCap and in-role performance after controlling for age, gender, education, and seniority, respectively. In addition, we examine the mediating effect of PsyCap on the relationship between EI and inrole performance. The research results show that EI has a positive effect on in-role performance. Besides, PsyCap mediates the relationship between EI and in-role performance. After adding PsyCap to the regression, EI continues to have a significant positive effect on in-role performance. Therefore, we confirm that PsyCap partially mediates the relationship between EI and in-role performance. Our findings demonstrate new knowledge in the field of EI and PsyCap. These findings indicate that individuals with high EI and a positive attitude would show better ability to adjust and performance. In addition, the present study discovers that EI might be the predictor of a person's PsyCap, so both elements could help individuals to perform well in their position.

Keywords: Emotional Intelligence, Psychological Capital, In-Role Performance.

[1, 2, 3] Department of Business and Administration, National Taipei University, New Taipei City, Taiwan
E-mail: ssmwang0703@gmail.com

An Empirical study of the key successful marketing strategies from the resource-based perspective

Chien Pin Tang[*1], Wan-I Lee[2]

Abstract The booming global biotechnology and pharmaceutical industry, the increased demand caused by changes in the global demographic structure, as well as the more actively transnational activities brought about by the liberalization of free trade, have created many opportunities for the global biological industry. The medical biologics industry is an important part of the biotechnology industry., the multinational corporations have a mixture of resources, capabilities and competitiveness, which creates a unique market position. The source of enterprise core competitiveness is come from the collection and integration of internal and external resources and knowledge. Therefore, how to establish the position and the image of the enterprise, as well as obtain the strategic competitiveness of excess profits must constantly examine the resources and capabilities of the enterprise itself. Nowadays, the global medical biologics industry is changing rapidly, Taiwan's medical biologics industry is booming. The mastery of marketing strategy has become an important factor in market success. However, the current medical biologics industry in Taiwan has not been thoroughly studied. To realize Taiwans medical biologics industry marketing strategy and its feature are very urgent indeed. Therefore, this empirical study is based on the four characteristics of the resourcebased view such as: valuable (V), rare (R), inimitable (I) and non-substitutable (N)-VRIN criteria (Armstrong and Shimizu, 2007; Barney, 1991) and focuses on the immune biological medicine in the pharmaceutical industry to explore its key success for the feasibility of marketing strategy practice. For exploring the key success factors, this study emphasis on the immune diseases medicine industry, conducts practical verification to improve the competitiveness of enterprises.

[1]Department of Marketing and Distribution Management,,National Kaohsiung University of Science and Technology, [2]Senior District Sales Manager Janssen Taiwan, Janssen Pharmaceutical Companies of Johnson & Johnson Johnson & Johnson Taiwan Ltd. Room A1, 13F, Cathay Building, 502, Jou-Ru 1st Road, Kaohsiung 807, Taiwan,
[*]E-mail: wilee@nkfust.edu.tw,tcb610417@gmail.com

To Identify the key success competitive factors by chain drugstore

Teng-Chang Hao[*]

Abstract With the rapid development of technology and the Internet, the consumption pattern is constantly changing. The small pharmacies must adapt or face elimination from larger entities. In recent years, the situation has been industrial restructuring. Even the chain drugstore system originally in the pharmaceutical industry has been affected by the chain of industrial mergers. In the positioning of the industry, the pharmacy belongs to the retail service industry. It needs to focus on the innovation of products and services. The customers of the retail pharmaceutical industry still need to provide services online and face-to-face communication on medication consultation and daily maintenance health information. There are solutions for these issues. In recent years, the global population has gradually aged, so many industries are targeting the elderly market and invested resources in the pharmaceutical industry. Regardless of how the environment changes, in order to get rid of the price-competitive pharmacy ecology, it is necessary to identify the superior resources that belong to the enterprise itself, and use organizational capabilities to target resources on the strategic focus. Given the four key characteristics of resource-based theory, including value, rarity, imitation, and irreplaceable exploration. (Barney, 1991; Amit and Schoemaker, 1993; Armstrong and Shimizu, 2007) The purpose of this study was to apply exploratory interviews and key success factors for quantitative methods to enhance the continued competitive advantage of the Pharmacy in the market.

Keywords: Resource-Based View, Chain Drugstore, Aging Market, Key Success Factors

Department of Marketing and Distribution Management National Kaohsiung University of Science and Technology
*E-mail: haoteng0406@yahoo.com

Convergence among Cities in China

Shu-hen Chiang[1*], Shiyu Huang[2]

Abstract High growth associated with serious inequality in Chinas economy has provoked a great deal of controversy. How to display more efficient spillovers is the key to improving the convergence debate as a prerequisite to maintaining economic growth. In this paper, we apply disaggregated data from cities and industries during the 1952-2015 period to explore convergence and spillovers in China. It is found that convergence exists in cities. Besides, a rolling window approach is used to estimate time-varying spillovers across cities.

_____

[1, 2] Department of Finance, Chung-Yuan Christian University Taoyuan, Taiwan
*E-mail: shchiang@cycu.edu.tw

Health Behaviour, change in behaviour and personalised nutrition: the conception of lifelong health

Dr. Zoltán Szakály[1*], Dr. Károly Pető[2]

Abstract The definition of health has significantly changed since the beginning of the 20th century, but it is not clear how much consumers are aware of and regard complementary views their own. Health behaviour is the totality of the types of behaviour connected to health which, as an element of healthy lifestyle, are manifested in behaviour created resulting from health needs and health motives. Staying in good health is influenced by a lot of factors. Regular physical exercise, clean environment, reduction of overwork and, last but not least, balanced diet has a prominent role. In the last twenty years the authors have conducted a lot of representative surveys and focus group researches with the aim to examine the health behaviour, nutrition habits and sustainable lifestyle of the Hungarian population. According to research results, the consumers' interpretation of health goes beyond the classical organic-medical view that is the several-dimension interpretation of health is becoming widespread. People are more or less aware of what they should do in order to stay healthy, but they do not act accordingly. It is indicated by that in most of the cases there is a significant difference between the importance of health protective activities and their frequency. Some 33% of the respondents do not plan to change their present eating habits, which means that a significant ratio of the population has introverted and extremely passive behaviour. For the consumers, the most important inspiration element of switching to a healthier way of life is sufficient financial resources, which is followed by good state of mind and motivation. Personalised nutrition, as a new technology and nutritional basic principle may create a good possibility to improve people's objective state of health, to help change their way of life, and finally, to preserve lifelong health. But Hungarian consumers distrust and are uncertain about new technology despite its obvious benefits. To sum up, people must be supported to be able to switch to a healthier lifestyle considering external conditions and needs (both stimulating and obstructive).

[1]University professor, Debrecen University, Faculty of Economics and Business, Institute of Marketing and Commerce, [2]University professor, Debrecen University, Faculty of Economics and Business, Institute of Rural Development, Tourism and Sports Management
*E-mail: szakaly.zoltan@econ.unideb.hu,peto.karoly@econ.unideb.hu

Semi-Static Hedging and Pricing American Floating Strike Lookback Options

Jr-Yan Wang[*]

Abstract The floating strike lookback option is one useful type of exotic options in financial markets since it can serve as suitable tools for risk management or trading motivation. Although many methods have been developed to price European-style lookback options, there is no analytical solution available for American floating strike lookback options (AFSLOs) even under the Black-Scholes model. This paper proposes a novel method to extend the static hedging approach of Derman et al. (1995) and Carr et al. (1998) to evaluate and hedge AFSLOs. We first employ a technique of changing the numeraire, as suggested by Schroder (1999) and Babbs (2000), to derive a new partial differential equation (PDE) where the relative price of an AFSLO with respect to the underlying asset price must follow, and we next apply the static hedging approach on this new PDE to replicate the AFSLO with a hypothetic static hedging portfolio (HSHP). This paper is the first article to form a static replication portfolio for exotic options using non-tradable hypothetic options that are not existent in the real world. Nevertheless, the proposed method is numerically efficient because (1) the generated option price has the desirable pattern of monotonic convergence when the number of time points with matched boundary increases; and (2) it is much faster than the tree models for recalculating option values for changes in stock price and/or passage of time. After that, this paper further applies the put-call symmetry to transform the proposed HSHP into a semi-static hedging portfolio (SSHP) so that the replication of an AFSLO with plain vanilla calls and puts traded in the real word becomes feasible. The SSHP maintains unchanged for most conditions except those when a new maximum of the underlying asset price is observed. This is the reason why this novel method is called a semi-static hedging approach. The numerical results indicate that our HSHP is efficient for the valuation of the AFSLO. If one considers to match the boundary at 24 time points, the average absolute (relative) pricing error of the HSHP is only 0.0087 (0.12%), and it costs only 0.1028 seconds to evaluate 36 examined options. Moreover, the hedging performance of our semi-static hedging approach is far less risky than that of the commonly-used dynamic delta hedging approach based on tree models. If the hedging portfolio is rebalanced daily, the risk levels of the hedging performance of our method (measured by Value at Risk (VaR)) are lower than the half of that based on the dynamic delta hedging approach implemented on tree models.

Keywords: American Floating Strike Lookback Option; Semi-Static Hedging; Put-Call Symmetry; Dynamic Hedging

[*]Department of International Business, National Taiwan University, Taipei, Taiwan
[*]*E-mail: jryanwang@ntu.edu.tw

Sustainability in the automotive interior – Comparison of volume and premium brand manufacturers

Wanja Wellbrock[1*], Daniela Ludin[2], Linda Röhrle[3]

Abstract Sustainability is regarded as the keyword of the 21st century. The topic of resource conservation is now more relevant than ever. Above all, the automotive industry, which is the most important industry in terms of turnover and the growth engine for Germany, has to deal more intensively with sustainable development and the associated effects and challenges. Automotive manufacturers are under pressure to comply with both political guidelines and internal specifications, as well as with constantly changing individual customer wishes. For the automotive industry, topics such as electric motors, lightweight construction and CO_2 emission reduction are key issues. Nevertheless, the cars interior cannot be ignored. After all, the interior is the part of a car most frequently seen by the driver and must therefore be practical, aesthetically pleasing and at the same time weight saving. The use of natural fibres as alternative materials in the interior plays an important role and is a further step towards greater sustainability. Consequently, the following research question arises: How do the three pillars of sustainability (economical, ecological and social issues) influence automotive interior development at volume brand and premium brand manufacturers and how do customers accept sustainable solutions? The contribution focuses on premium and volume brand manufacturers and identifies significant differences between both customer groups. Based on a literature review on sustainability in the automotive industry, previous efforts to increase sustainability in the automotive interior are highlighted. Subsequently, an empirical study is used to determine the expectations on the customer side regarding more sustainability in the automotive industry in general and in the interior sector in particular and to derive corresponding challenges and potentials for original equipment manufacturers and suppliers. The empirical study is based on an online survey with randomly selected persons via social media. The survey was conducted via Survey monkey. All persons with a minimum age of 18 years were considered. Almost 400 participants fulfilled the desired characteristics.

Keywords: Sustainability, Automotive Industry, Interior, Innovation.

[1, 2, 3] Heilbronn University of Applied Sciences, Germany
*E-mail: wanja.wellbrock@hs-heilbronn.de,wanja.wellbrock@hs-heilbronn.de

Study of the "Http 404 "and "Reincarnation" phenomenon under the Internet governance in mainland China

Yu-Li, Wang[*]

Abstract As of the end of June 2018, the number of Internet users in China reached 802 million and the penetration reached 57.7%. On the one hand, China dedicated to develop the information infrastructure, but on the other hand, it has not lossened the regulation of Internet governance on the freedom of speech aspect. This study meant to explore the intellectual's information receiving habits and the special environment of Chinese Internet realm in the new era. The" secondary data analysis" and in-depth interviews methods were employed, eight reincarnated people and six scholars and experts were interviewed during Nov. 11 2017 to Nov. 27, 2017. The results showed that the intellectuals information sources shifted mainly from the traditional news media to online media and social media such as news outlet of traditional media, Weibo, and Wechat. Http 404 and ID sealed phenomenon are the Internet governance with Chinese characteristics. The sensitive texts were hidden by showing Http 404 or Not Found from the website administrators. Furthermore, people who were labeled as tending to post the sensitive or forbidden texts would be implemented with all kinds of different control techniques. Those control techniques included block a single text, block partial function in Weibo or Wechat friend circle, post a text only exclusive to yourself, ban the ID for few days, and terminated ID either by AI robot or the administrators. Therefore, there are many intellectuals who had experienced several times of being terminated their Weibo or Wechat IDs, and they came through reincarnation. This study also found they used several resistance strategies which include shift time and space strategy, reporting the facts, metaphorical writings, substitute the sensitive words, video strategy, changing digital code strategy, and multiplatform strategy as resistance strategies to fight for freedom of speech.

Department of Mass Communication, Chinese Culture University
Taipei, Taiwan
*E-mail: ylwang1022@gmail.com

Track B: Engineering and Technology, Computer, Basics and Applied Sciences

Using the Numerical Wave Tank to Study on the Non-linear Long Wave Propagation over a Submerged Breakwater

Jen-Yi Chang[*]

Abstract A quadtree-adaptive viscous numerical wave tank implemented third-order cnoidal waves with the free surface resolved by the VOF (volume of fluid) method is established for solving nonlinear long waves in this study. Also, the numerical grid in the model area can be automatically coarsen under a prescribed low resolution such that the time matching is stable without a too small time step by using numerical damping zone. The intense vorticity, boundary layers and free surfaces of the calculating area are automatically refined to prescribed high resolutions. The model is shown to be stable even when multiple adaption criteria are implemented in each case. Furthermore, the results of the simulation of Bragg resonance caused by long waves, velocity in the boundary layers as well as velocity and vorticity fields are compared with other researches. Main large vortices significantly occur near the lee side wall of breakwaters and cause large scours around submerged breakwaters. In addition, the numerical computing is shown to be of similar accuracy but much higher efficiency when compared with the results obtained by conventional numerical methods. For present cases, the computing time of the model with an adaptive mesh is at least 7 times smaller than that with a uniform mesh.

Keywords: Bragg resonance; Nonlinear long waves; Quadtree-adaption; Numerical wave tank

Tainan University of Technology, 529 jhongjheng Rd., Youngkang, Tainan, Taiwan
*E-mail: jychang.lenny@gmail.com

Automatic Venipuncture Insertion Point Recognition Based on Machine Vision

Cheng-Ho Chen[*]

Abstract Venipuncture is a common practice performed in medical institutions. It now relies on welltrained medical staff. The work is inherently risky, requiring skills, experience, and a high degree of focus to avoid discomfort or even danger to the staff themselves or to the patients. The proper insertion point for venipuncture is sometimes difficult to recognize. In recent years, many applications of machine vision and image processing technologies have been used to help physicians, nurses and other medical practitioners in determining the physical conditions of the patients, make the appropriate diagnosis, and reduce the fatigue or other human factors causing misdiagnosis. In this paper, the implement machine vision technologies to assist the recognition of venipuncture insertion point is studied. Two industrial CMOS cameras are used with an infrared light source. The two cameras are placed apart and tilted in a certain angle relative to each other in order to achieve stereo vision of the arm. Light filters are also installed on the lens of the two cameras. The cameras are calibrated beforehand to eliminate distortion. Two images of the arm, one by each camera are captured. The images are then processed through image binarization and morphological algorithms. After image processing, the best needle insertion position, puncture depth and angle are determined. The developed system can improve the efficiency of venipuncture, and reduce the risk of medical staff and patients.

Keywords: Machine vision, Automatic venipuncture, Image processing.

National Chin-Yi University of Technology, Taichung, Taiwan
*E-mail: chench@ncut.edu.tw

Passive Filtration System with Embedded Shape Memory Alloys Wires for Unfiltered Splash Lubricated Gearboxes

Mr. Chi Yang[*]

Abstract In this paper, a new passive filtration system that utilises gravitational force for unfiltered splash lubricated gearbox is presented and analyzed. This filtration system is based on the combination of different types of shape memory alloy (SMA) for the controlling of filtration layers deflection under different conditions. The primary SMA wires are biased by a bending force created by another type of SMA wires that exhibit super-elastic behavior. These wires are embedded in a silicone rubber film. The phase transformation of SMA wires is induced by the change of lubricant temperature. Finite element model based on ABAQUS with a user material subroutine is developed to simulate the thermo-mechanical behaviors of the filtration layers. A prototype passive filtration system is made. The experimental observations on the thermo-mechanical behaviors of the prototype are shown to be in a good agreement with the numerical simulation results. This shows the capability of the numerical model for estimating the mechanical behavior of filtration layers with embedded SMA wires at different temperatures.

Keywords: Filtration System, Shape Memory Alloy, Splash Lubricated Gearbox, Finite Element Analysis, Lubrication

School of Engineering - RMIT University Melbourne, Victoria
*E-mail: chi.yang@student.rmit.edu.au

A Low-Power Variable-Gain LNA

Prof. Jian-Yu Hsieh[*]

Abstract A 0.6-V 2.8-GHz low-power variable-gain low-noise amplifier (LNA) by using 0.18m CMOS process has been proposed. Recently, low-power circuit design has become an important topic because of the energy-hungry components of the advanced portable devices. The radio-frequency (RF) circuits generally cost major power consumption of the portable devices, especially low-noise amplifiers (LNAs). LNAs require efficient power consumption for executing signal amplifying and noise suppressing. Hence, there exists a trade-off between power consumption and power gain (S21). The design parameters of LNAs include low noise figure (NF), high linearity (IIP3), high S21 and low power consumption. By using a tunable negative-feedback capacitor technology, variable gain can be achieved. Depending on different amplitude of the input RF signal, variable gain can improve linearity correspondingly and avoid signal distortion and poor bit error rate (BER). Moreover, forward body biasing, input feedback capacitor, current-reuse and multiple-gate topologies are utilized for realizing low power consumption, small chip area, and high linearity. The LNA chip area occupies 0.9 mm x 1 mm, including pads, and bypass capacitors. The measured power gain ranges from 4 dB to 10 dB under gain control voltage is from 0 V to 0.6 V. The measured IIP3 is 0 dBm. The power consumption is 0.6 mW.

Keywords: Low-Power, Variable-Gain LNA.

Department of Electronic Engneering-National Ilan University, Taiwan
*E-mail: jyhsieh@niu.edu.tw

A Low-Power VCO

Prof. Jian-Yu Hsieh[*]

Abstract A 0.43-V low-power voltage-controlled oscillator (VCO) by using 0.18m CMOS process has been proposed. Generally, low-power circuit design is a popular topic for extending the battery life of the portable devices. The radio-frequency circuits generally cost major power consumption of the portable devices. VCOs should achieve low phase noise, low power consumption, and low cost. However, there exists a trade-off between these design parameters. Because lowering power consumption will result in output voltage swing and phase noise degrade. The VCO chip area occupies 1.66 mm x 1.63 mm, including input impedance matching, pads, and bypass capacitors. By using the forward body biasing, noise filtering and switched biasing techniques, the phase noise and power consumption have been reduced. The forward biasing technique can reduce the threshold voltage of the transistors in the VCO. The noise filtering techniques can reduce the thermal noise contribution of the tail current source. The switched biasing technique can increase the output swing and reduce the flicker noise of the tail current sources. The measured output power is -15 dBm. The measured frequency tuning range is from 2.59 to 2.67 GHz. The measured power consumption is 0.3 mW. The performance of VCOs can be estimated by using an equation called figure of merit which is 193 dBc/Hz.

Keywords: VCO, Equation

Department of Electronic Engneering-National Ilan University, Taiwan
*E-mail: jyhsieh@niu.edu.tw

A Model for Identification of Potential Experts and Leaders Based on Online Discussions

Jiang Liang Hou[*]

Abstract As one has problems or decision issues, he/she always searches for the answers and the useful information on various social networks over the Internet in order to acquire advices from the users with expertise. People depend highly on these users to provide some solutions or references for decision based on their own professional knowledge. On the other hand, manufacturers, advertiser or agencies always try to find the representative opinions of replies from the discussions in the online social networks, then they could identify the users who have leadership to endorse their products or service for increasing sales or visibility. However, people and vendors have to spend a lot of time sifting the useful information from the user's replies. In order to solve the problems, this study develops a model for identification of potential domain experts or leaders based on user replies in online forums. It can be used to recommend potential experts and leaders to users for decision making. By applying the proposed model, people and advertisers can accurately identify the potential experts or leaders and consult them for more effective decisions.

Keywords: Collective Intelligence, Experts Recommendation, Opinion Leaders Recommendation.

Department of Industrial Engineering and Engineering Management,
National Tsing Hua University, Taiwan
*E-mail: adamhou@ie.nthu.edu.tw

Track C: Medical Medicine and Health Study

The Research on Adolescent Anti-smoking Media Literacy in Taiwan

An-Chi Hsu[*]

Abstract The contents of anti-smoking media information limited by government rules which appeared on TVs, newspaper, magazine traditional media changed widely and variously, and at the same time new media (internets) exists in everywhere. As a result, the study on anti-smoking media literacy should be turned into an important topic for us. According to the relative researches on tobacco hazards prevention, the third hand smoking and e-cigarette would be become a new trend, especially e-cigarette had triggered globally emerging health hazards because of inadequate cognition and mistakes toward e-cigarette resulted in tremendous health damage problems on smoking and drugs altogether. Based on the investigation of Health Promotion Administration has showed that e-cigarette smoking's ratio in junior and high school students increased double than before and illustrated that anti-smoking media literacy education should be focused on teenager's correct knowledge and judgement on anti-smoking information from e-cigarette and tobacco products which could be a major task for prevention smoking addiction in the future.

Keywords: Adolescent Anti-Smoking Media Literacy, Third Hand Smoking, E-Cigarette, Tobacco Industry Skills.

Dept. of PR & AD, Shih Hsin University, Taiwan
*E-mail: anchi@mail.shu.edu.tw

Assessing Border Community Readiness for Health Management Prior to the Special Border Economic Zone in Thailand: A Case Study of Sadao District Songkhla Province, Thailand

Sawpheeyah Nima[1*] Virasakdi Chongsuvivatwong[2]

Pongthep Sutheerawut[3]

Abstract Community readiness (CR) refers to the degree to which a community is ready to take an action to address a health issue. Since 2015, the establishment of Special Economic Zones (SEZ) has already carried on in Thai-Malay border. The present study was conducted by using a 2-phasedmixed-methods, aiming to assess the level of CR and preparation and to develop community health management model prior to SEZ in Sadao district, Songkhla province. Data were collected by questionnaires in 450 local people by simple random sampling. An in-depth interview followed by a focus groups discussion was then performed in purposive selected 150 participants, during December 2017-April 2018. The data was finally analyzed by descriptive statistics and content analysis. Overall community readiness scores ranged from 5.85 to 7.01 on a 10-point scale. The mean readiness score, 6.28 (SD = 0.44) corresponds with an initiation level of readiness which referred to an action plan is established and early steps are being taken by leadership to address the issue. Main features of the health management model for SEZ was established by community stakeholders as following: (1) community participation (2) network strengthening (3) knowledge and management (4) communication and (5) healthy public policy approach. These findings indicated that they display a slightly high of CR level. In the next step, targeted capacity building activities will be promoted to archive the health model to SEZ for sustainability.

Keywords: Community Readiness, Health Management, Special Border Economic Zone, Songkhla, Thailand

---

[1, 2, 3] Heath System Management Institute. Prince of Songkla University, Hat Yai, Songkhla, Thailand
*E-mail: sophienima@gmail.com

Scientific Board

Scientific Board for Business, Economics, Social Sciences and Humanities

Iwao Sato, Department of Comparative Contemporary Law, Institute of Social Science, the University of Tokyo, Japan

Hiroyasu Ishikawa, Department of Comparative Contemporary Law, Institute of Social Science, the University of Tokyo, Japan

Nobuhiro Hiwatari, Department of Comparative Contemporary Politics, Institute of Social Science, the University of Tokyo, Japan

UNO Shigeki, Department of Comparative Contemporary Politics, Institute of Social Science, the University of Tokyo, Japan

Kenneth Mori McElwain, Department of Comparative Contemporary Politics, Institute of Social Science, the University of Tokyo, Japan

Professor TAOKA Fumio, Faculty of Education, Department of Sociai Studies, Kyoto University of Education, Japan

Contact Us

Website:
http:// tarij.com

In case of any query please feel free to contact at:

contact@tarij.com

Upcoming Events

http://tarij.com/eger-february-2019/

http://tarij.com/emeg-march-2019/

http://tarij.com/bsed-april-2019/

http://tarij.com/keas-may-2019/

http://tarij.com/bshds-june-2019/

http://tarij.com/iebs-july-2019/

http://tarij.com/pbar-aug-2019/

Venue

Hotel Mystays Ochanomizu Conference Center
Address: 2-10-6 Kandaawajicho, Chiyoda-ku, Tokyo 101-0063 Japan

2nd International Conference on
Business Management, Social Science
and Sustainable Development
Tokyo Japan