# **APDSI-ICOSCM-ISOMS 2014**

Global and Sustainable Supply Chain in the 2010s

The 19th Asia-Pacific Decision Sciences Institute Conference (APDSI 2014)

The 8th International Conference on Operations

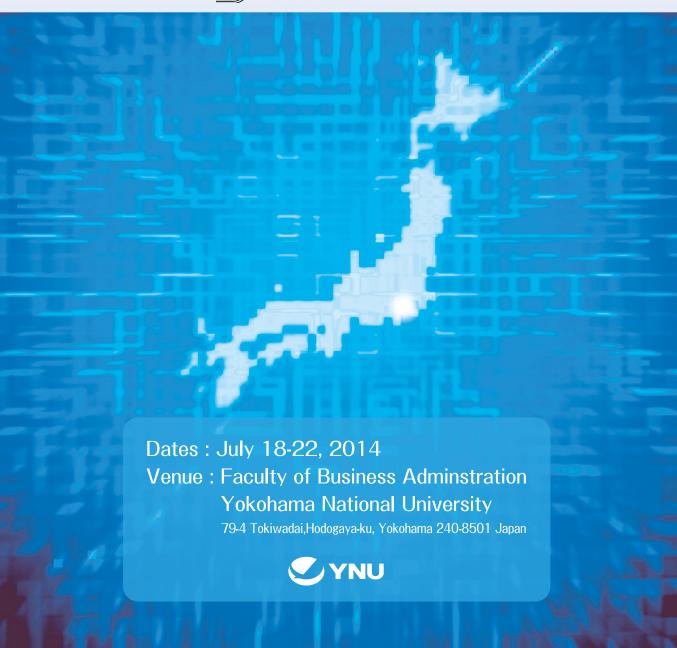
and Supply Chain Management (ICOSCM 2014)

The Fourth International Symposium on Operations Management and Strategy (ISOMS 2014)



ASCOM

**JOMSA** 



The 19th Asia-Pacific Decision Sciences
Institute Conference (APDSI 2014)
The 8th International Conference on
Operations and Supply Chain Management
(ICOSCM 2014)

The Fourth International Symposium on Operations Management and Strategy (ISOMS 2014)

APDSI-ICOSCM-ISOMS 2014

Global and Sustainable Supply Chain in the 2010s July 18-22, 2014, Yokohama National University, Japan

Conference Venue: Faculty of Business Administration, Yokohama national University 79-4 Tokiwadai, Hodogaya-ku, Yokohama 240-8501 Japan Classrooms 106, 105, 207, 206 at Lecture Hall 1 Business (N3-5)

Registration: Friday, July 18, 18:30-20:00 at Lecture Hall 1 Business (N3-5) Saturday, July 19, 8:30-18:00 at Lecture Hall 1 Business (N3-5)

18:30-20:00 at Lecture Han 1 Business (N3 5)

Sunday, July 20, 8:30-17:00 at Lecture Hall 1 Business (N3-5)

Monday, July 21, 8:30-16:30 at Lecture Hall 1 Business (N3-5)

Access to the Venue: http://www.ynu.ac.jp/english/access/index.html Campus Map: http://www.ynu.ac.jp/english/access/map\_campus.html

Asia-Pacific Decision Sciences Institute
Association of Supply Chain and Operations Management
Japanese Operations Management and Strategy Association
Yokohama National University

**Conference Program** 

<u> </u>				
	APDSI-ICOSCM-ISOMS 2014 Time Table: Friday, July 18, 2014			
18:30-20:00	Registration @N3-5 Lecture Hall 1 Business			

	APDSI-ICOSCM-ISOMS 2014 Time Table: Saturday, July 19, 2014			
9:00-9:15	Opening Ceremony @Classroom 106 (N3-5 Lecture Hall 1 Business)			
	Plenary Speech @Classroom 106			
9:15-10:15	A Global Perspective of Operations Management Research			
	Wake Forest University Prof. Brooke A. Saladin			
10:15-10:30	Break			
10:30-12:00	Parallel Sessions @Classrooms 106, 105, 207, 206			
12:00-13:15	Lunch @ Porty (S1-5 University Hall, 3F)			
13:15-14:45	Parallel Sessions @Classrooms 106, 105, 207, 206			
14:45-15:00	Break			
15:00-16:30	Parallel Sessions @Classrooms 106, 105, 207, 206			
16:30-16:45	Break			
16:45-18:15	Parallel Sessions @Classrooms 106, 105, 207, 206			
18:30-20:30	Reception @ Renga-Kan (S1-4 Cafeteria I)			

	APDSI-ICOSCM-ISOMS 2014 Time Table: Sunday, July 20, 2014			
9:00-10:30	Parallel Sessions @Classrooms 106, 105, 207, 206			
10:45-11:00	Break			
10:45-12:00	Plenary Speech @Classroom 106 Supply Chain and Service Innovations in China South China University of Technology and China-Europe International Business School Prof. Xiande Zhao			
12:00-13:15	Lunch @ Porty (S1-5 University Hall, 3F)			
13:15-14:45	Parallel Sessions @Classrooms 106, 105, 207, 206			
14:45-15:00	Break			
15:00-16:30	Parallel Sessions @Classrooms 106, 105, 207, 206			
16:30-16:45	Break			
16:45-17:30	APDSI General Assembly @Classrooms 106			
18:30-21:00	Dinner @Camelot Hotel			

	APDSI-ICOSCM-ISOMS 2014 Time Table: Monday, July 21, 2014		
9:00-10:30	Parallel Sessions @Classrooms 106, 105, 207, 206		
10:45-11:00	Break		
	Plenary Speech @Classroom 106		
10:45-12:00	Supply Chain and Logistics Solution at Mitsubishi Fuso		
	Mitsubishi Fuso Truck and Bus		
12:00-13:15	Lunch @ Porty (S1-5 University Hall, 3F)		
13:15-14:45	Parallel Sessions @Classrooms 106, 105, 207, 206		
14:45-15:00	Break		
15:00-16:30	Parallel Sessions @Classrooms 106, 105, 207, 206		
16:45-17:00	Closing Session @Classrooms 106		

	APDSI-ICOSCM-ISOMS 2014 Time Table: Tuesday, July 22, 2014		
8:00-12:30	Nissan Oppama Plant Tour		

## Greetings

### Welcome to APDSI-ICOSCM-ISOMS 2014!

Conference Chair Yoshiki Matsui, Yokohama National University

It is my honor and pleasure to hold the joint conference of the 19th Asia-Pacific Decision Sciences Institute Conference (APDSI 2014), the 8th International Conference on Operations and Supply Chain Management (ICOSCM 2014) sponsored by Association of Supply Chain and Operations Management, and the Fourth International Symposium on Operations Management and Strategy (ISOMS 2014) sponsored by Japanese Operations Management and Strategy Association in Yokohama, a gateway to the Western culture. As a representative of the hosting organization, Yokohama National University (YNU), I would like to welcome all the participants in the joint conference to the campus of YNU with comfortable natural environment, and wish them meaningful and exciting moments to widen their perspectives and deepen their understandings on the decision Sciences, supply chain management, operations management and strategy. This joint conference picks up a contemporary main theme, Global and Sustainable Supply Chain in the 2010s, emphasizing on the big challenges in supply chain and operations management.

I hope this joint conference may be a good start of collaboration among three organizations sharing common and similar disciplines and goals, APDSI, ASCOM, and JOMSA.

Due to difficult economic situations caused by terrible earthquakes and subsequent accidents at the power plants, it is not easy to hold an international conference in Japan. On the other, we can have excellent plenary speakers, Prof. Brooke Saladin, Prof. Xiande Zhao, and Mitsubishi Fuso Truck &Bus. They will talk about many current issues operations and supply chain managers are tackling with and give us deep insights into what we should do as academics to overcome the difficulties at present and in the future. With the presentations of interesting and pioneering works, this joint meeting may provide the best opportunity to closely interact and network each other for possible future collaborations.

Taking this opportunity, I would like to show my appreciation to plenary speakers, authors of papers, presenters at parallel sessions, organizing and program committee members, and student support staff for their enormous efforts to realize this conference. I hope all the delegates may really enjoy the program and build academic relationships steadily. All the best!

## The Journal of Japanese Operations Management and Strategy

The mission of The Journal of Japanese Operations Management and Strategy (JOMS) is to serve as the primal research journal in operations management in Japan. The journal publishes academic research into the problems and concerns of managers who design and manage the product and process in manufacturing and service industries. It covers all the operations related issues such as the effective and efficient management in product development, procurement, production, distribution and marketing, manufacturing/operations strategy, decision makings in global operation, supply chain management, and service sciences among others. The journal welcomes the submission of rigorous and scientific research papers using any research paradigm such as social science, case study, and mathematical modeling.

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# Conference Session Schedule

	APDSI-ICOSCM-ISOMS 2014 Time Table: Friday, July 18, 2014
18:30-20:00	Registration @N3-5 Lecture Hall 1 Business

	iness)
Plenary Speech @Classroom 106 9:15-10:15 A Global Perspective of Operations Management Research Wake Forest University Prof. Brooke A. Saladin 10:15-10:30 Break Classroom 106 Classroom 105 Classroom 207 C	
Wake Forest University Prof. Brooke A. Saladin  10:15-10:30 Break  Classroom 106 Classroom 105 Classroom 207 C	h
10:15-10:30   Break   Classroom 106   Classroom 105   Classroom 207   C	
Classroom 106 Classroom 105 Classroom 207 C	
	lassroom 206 ession: Services
	ession. Services ement
	: Ja-Shen Chen
Chair: Motonari Chair: Jiahua Weng	
Tanabu	
A1-1 B1-1 C1-1 D1-1	VING IDGA
	YING IPGA EL TO
	ORE THE
	ICAL FACTOR
BY CONSIDERING   management tactics,   performance:   FOR I	IMPROVING
	ICE QUALITY
	OTEL JSTRY
SERVICE Behavior: Supervisor Osam Sato, Yoshiki	001111
	g-Chan Cheng,
Ruey-Shan Guo, Kitanaka, Yutaka Cheng	g-Ta Chen, Ya-
o o insurato chen ana	Chang and Yu-
Jia-Ying Chen and Yu-Han Huang Shuang-Shii Chuang Shimada Chun	Hsueh
A1-2 B1-2 C1-2 D1-2	
	lti-facet Service
	lence Model
DEVELOP on Organizational Organizational	O1 M : 1
	Chun Tsai and Lin Lin
11:00-11:30 ENHANCING Moderating Role of Atsuko Ebine	1 13111 13111
SUSTAINABILITY Future Orientation	
IN SUPPLY CHAIN	
Jih-Hua Yang and	
Nattakarn Ching-Ying Huang Sahayacharin and	
Rawinkhan Srinon	
A1-3 B1-3 C1-3 D1-3	
	IMPACTS OF
COMPETITIVE PEOPLE'S for Accurately PROC DIMENSIONS: A PERCEPTIONS OF Determining RECO	
	OVERY MUNICATION
	ONSUMER
11:30-12:00 GLOBAL Huanjie Luo and Engineer-to-Order BEHA	AVIORS
MANUFACTURING Motonari Tanabu Products at	
	en Chen, Hua-
Hung Nguyen Jiahua Weng, Ming	Weng and Han-
Shingo Akasaka and	1001
Hisashi Onari	
12:00-13:15 Lunch @ Porty (S1-5 University Hall, 3F)	

	Classroom 106	Classroom 105	Classroom 207	Classroom 206
	A2 Session: Human	B2 Session: Quality	C2 Session: Service	
	Resource	Management	Innovation	
13:15-14:45	Management	Chair: Anh Phan	Chair: Fei Liu	
	Chair: Kakuro			
	Amasaka A2-1	B2-1	C2-1	
	IMPACT OF	QUALITY	The Impact of Trust-	
	SURFACE ACTING	MANAGEMENT	Building	
	ON EMOTIONAL	MEASURES IN	Mechanisms and	
	EXHAUSTION AND	FOOD SUPPLY	Trust Transference	
	CUSTOMER-	CHAIN: AN	on Online Group	
13:15-13:45	PERCEIVED	OVERVIEW AND	Buying	
	SERVICE QUALITY: MODERATION OF	CASE STUDIES IN HONG KONG	Chun-Der Chen,	
	SALES	HONG KONG	Mei-Ju Chen,	
	ORIENTATION	Simon S. M. Yuen	Edward C.S. Ku and	
		and Calvin W. O.	Yi-Fei Chuang	
	Hsiao-Ling Chen and	Cheng		
	Fong-Yi Lai	Do o	C2-2	
	A2-2 Influence of Gamified	B2-2 RELATIONSHIP	C2-2   Service Innovation	
	Ethics Training	BETWEEN	Management for	
	Programs on Ethical	SERVICE QUALITY	Hotel Business	
	Decision Making	AND CUSTOMER		
		SATISFACTION ON	Wan Yee Lah and	
13:45-14:15	Wenyeh Huang	ATM SERVICE:	Ja-Shen Chen	
		CASE STUDY OF A PRIVATE		
		COMMERCIAL		
		JOINT STOCK		
		BANK IN VIETNAM		
		Nham Phong Tuan		
	A2-3	B2-3	C2-3	
	ESTABLISHMENT	RETAILER	Service Innovation	
	OF A STAFF	SERVICE	Based on Service-	
	ALLOCATION	QUALITY,	Dominant Logic	
	METHOD	CUSTOMER	under Network	
	REFLECTING	SATISFACTION	Convergence Environment: A	
	CUSTOMER INFORMATION	AND CUSTOMER LOYALTY:	Case Study of Tesla	
14:15-14:45	~EXAMPLE OF	EMPIRICAL	Motors	
	SERVICES IN	EVIDENCE IN		
	GUEST ROOMS AT	VIETNAM	Fei Liu and	
	JAPANESE-STYLE	Al. Dl	Zhaoquan Jian	
	HOTEL~	Anh Phan, Ha Nguyen, Minh		
	Daiki Okihara,	Nguyen and Yoshiki		
	Masahiro Nakamura	Matsui		
	and Kakuro Amasaka			
14:45-15:00		Br	eak	
	Classroom 106	Classroom 105	Classroom 207	Classroom 206
	A3 Session:	B3 Session: Supply	C3 Session: Strategic	
	Information and Knowledge	Chain Management Chair: Galia	Sourcing Chair: Daesik Hur	
15:00-16:30	Management	Novakova	Chair Daesik Hui	
	Chair: Hyun-Seok			
	Hwang			

	40.1	Do 1	00.1	I
	A3-1	B3-1	C3-1	
	A Framework for	EFFECT OF LONG-	Dynamic dual	
	Intelligent Mind	TERM ORIENTED	capacity sourcing for	
	Mapping using	CULTURE ON	new ethical drugs	
	Collaborative	COMMUNICATION		
15:00-15:30	Filtering	AND PROCESS	Hiroko Okajima,	
		EFFICIENCY IN	Susan Xu and Hui	
	Su-Yeon Kim and	SUPPLY CHAIN	Zhao	
	Sang Hoon Lee			
	ang mon zee	Qingyu Zhang and		
		Mei Cao		
	A3-2	B3-2	C3-2	
	Contributing	SUPPLIER	Absolute Supply	
	Knowledge To	GOVERNANCE	Chain Strategy :A	
	Electronic Knowledge	EFFECTIVENESS:	culture underlying	
	Repository System	MODERATION	high performance	
		EFFECTS OF	companies	
	Jin Young Lee, Hee-	ECONOMIC		
15:30-16:00	Woong Kim and Bo	DEVELOPMENT	Michiya Morita, Jose	
	Yeon Lee	AND NATIONAL	Machuca and James	
		CULTURE	Flynn	
		Chenlung Yang,		
		Shuping Lin,		
		Suyuan Lien and		
		Chwen Sheu		
	A3-3	B3-3	C3-3	
	CLUSTERING	Innovative Supply	When does directed	
	CORPORATE	Chain Technologies	sourcing work?	
	BRANDS BASED ON	for Management	Addressing top tier	
		Decisions		
	SOCIAL METRICS:	Decisions	suppliers' discontent	
16:00-16:30	A CASE STUDY OF		D '11 II '1	
	THE AUTOMOBILE	Galia Novakova,	Daesik Hur, Hyojin	
	INDUSTRY~	Kamen Spassov and	Kim and Jinseok	
		Shahram Taj	Yang	
	Hyun-Seok Hwang,			
	Dojin Kim and			
	Youngju Bang			
16:30-16:45			reak	
	Classroom 106	Classroom 105	Classroom 207	Classroom 206
	A4 Session: Decision	B4 Session: e-	C4 Session: Supply	
16:45-18:15	Analytics	Commerce	Chain Management	
10.49 10.19	Chair: Akimasa	Chair: Su-Wen Chen	Chair: Eddine Dahel	
	Tanaka			
	A4-1	B4-1	C4-1	
	ONLINE REVIEW	Exploring a fit-	Moderation impact	
	MINING FOR THE	compatibility model	of national culture	
	PREDICTION OF	in using mobile	on relationship	
	MOVIE REVENUE	value-added services	between information	
l	GENERATION		technology and	
16:45-17:15		Hsin-Wei Wang, Su-	supply chain	
	Seung Yeon Cho,	Wen Chen and Hsin	integration	
		Hsin Chang	megration	
	Hyun-Koo Kim,	115III CHAIIg	Odlahiahia Cambald	
	Beomsoo Kim and		Odkhishig Ganbold,	
	Hee-Woong Kim		Anh Phan Chi and	
			Yoshiki Matsui	

17:15-17:45	A4-2 Strategic Use of Uncertainty through Mystery Discounts Thunyarat Amornpetchkul	B4-2 What drives online consumers to spread eWOM: Experience and motivation Su-Wen Chen	C4-2 The Diffusion of Supply Chain Innovation in Healthcare Delivery: A Unique Supplier Model for Industry/Academy Partnership in Asia Pacific	
			Carl Briggs, Robert Webb and Ross Anderson	
17:45-18:15	A4-3 How Dynamic capability explains company growth in rapid change -An Approach from Japanese social networking industry - Akimasa Tanaka and Ryo Sato	B4-3 Facilitating relational maintenance through Facebook fans page: An application of the commitment-trust theory Su-Wen Chen, Hsin- Wei Wang and Ming- Chi Lee	C4-3 Global Supply Chain Coordination Nasr-Eddine Dahel	
18:30-20:30		Reception @ Renga-l	Kan (S1-4 Cafeteria I)	

APDSI-ICOSCM-ISOMS 2014 Time Table: Sunday, July 20, 2014					
	Classroom 106 Classroom 105 Classroom 207 Classroom 2				
9:00-10:30	A5 Session: Information and Knowledge Management Chair: Jung-Hoon Lee	B5 Session: Operational Performance Chair: Hua-Hung Weng	C5 Session: Management of Technology and Innovation Chair: Shu-Ping Lin	D5 Session: Supply Chain Management Chair: Poomporn Thamsatitdej	
9:00-9:30	A5-1 Investigating the relationship between IT capability and supply chain agility for different strategic types Hsiao-Lan Wei, Pei-Hung Ju and Robert Sanjaya	B5-1 Developing a Higher Reliable CAE Analysis Model of The Mechanisms that cause Bolt Loosening in Automobiles Ken Hashimoto, Takehiro Onodera and Kakuro Amasaka	C5-1 SHAPING RADICAL AND INCREMENTAL SERVICE INNOVATIONS THROUGH ORGANIZATIONAL AGILITY: INSIGHTS ON IT CAPABILITY AND ORGANIZATIONAL LEARNING Hung-Tai Tsou and Hsuan-Yu Hsu	D5-1 Reusable luggage tag for mobile tracking and sustainability development  Yin Cheung Eugene Wong and Wai Hung Collin Wong	
9:30-10:00	A5-2 Effects of intellectual capital and supply chain learning on supply chain responsiveness: an empirical study in China  Xiande Zhao, Shanshan Zhang, Zhiqiang Wang and Waiman Cheung	B5-2 The Effects of External Industrial Competition and Internal Business Competitive Strategy on Corporate Tax Avoidance Meijuh Huang	C5-2 ERP Post- Implementation Success: IT Quality vs. Service Quality Pei-Fang Hsu	D5-2 SUPPLY CHAIN RETURN AND RISK MANAGEMENT - A DELPHI STUDY AND AN INTEGRATED OPTIMIZATION MODEL Wai Hung Wong	
10:00-10:30	A5-3 A STURY ON THE DEFINITION OF SMART CITY Jung-Hoon Lee, Beob-Guen Jeong and Dasom Kim	B5-3 INVESTIGATING THE IMPACT OF DESIGN FACTOR ON GREEN SERVICE DELIVERY IN CUSTOMER'S PERSPECTIVE: AN EXPERIMENTAL DESIGN IN TAIWAN'S CONVENIENT STORE Hua-Hung Weng and Chun-Jing Yang	C5-3 Identification of Healthcare Cloud Service Demand Shu-Ping Lin, Chen- Lung Yang, Han- Chung Pi and Thao- Minh Ho	D5-3 CATEGORIZATION OF SUPPLY CHAINRISK FACTORS IN HEALTHCARE SERVICE OPERATIONS: APPLICATION OF Q- SORT METHOD  Poomporn Thamsatitdej and Tritos Laosirihongthong	
10:30-10:45		•	reak		
10:45-12:00	Plenary Speech @Classroom 106 Supply Chain and Service Innovations in China South China University of Technology and China-Europe International Business School Prof. Xiande Zhao				
12:00-13:15	Lunch @ Porty (S1-5 University Hall, 3F)				

	Classroom 106	Classroom 105	Classroom 207	Classroom 206
13:15-14:45	A6 Session: Case studies of Operations and Business Strategy Chair: Dae Soon Hong	B6 Session: e- Commerce Chair: Yu-Hui Fang	C6 Session: Information and knowledge Management Chair: Qiang Zhou	D6 Session: Management of Technology and Innovation Chair: Chaoan Lai
13:15-13:45	A6-1 A CASE STUDY ON APPLICATION OF G-RD TO BUSINESS INTEGRATION AFTER M&A Tetsu Saito and Koshichiro Mitsukuni	B6-1 UNDERSTANDING ONLINE CUSTOMER REPURCHASE INTENTION: THE PERSPECTIVES OF EXPECTATION— CONFIRMATION MODEL, TRUST, AND JUSTICE Chun-Ming Chang and Chiahui Yen	C6-1 Exploring knowledge impacts of IS journals based on the influences of peer journals and knowledge network Chien Hsiang Liao, Eldon Y. Li and Hsiuju Rebecca Yen	D6-1 A study of CEO transformational leadership, organizational factors and product innovation performance: a theoretical framework and scale measurement Tharnpas Sattayaraksa and Sak un Boon-Itt
913:45-14:15	A6-2 A CASE STUDY ON THE CLOUD COMPUTING SERVICES IN KOREA  Jong Un Lee, Kyungjin Seo and Hee-Woong Kim	B6-2 Exploring members' collaborative stickiness intention towards social network sites: The facebook case of group buying communities Chiahui Yen, Ming-Chang Chiang and Lu-Jui Chen	C6-2 AN EXPLORATORY STUDY ON THE FACTORS AFFECTING ONLINE BENEVOLENT COMMENT Yoon-Jung Jang, Eun-Young Cho and Hee-Woong Kim	D6-2 Case study on Corporate Entrepreneurship program for innovation Beob Geun Jung, Jung Hoon Lee andHyewon Lee
14:15-14:45	A6-3 DETERMINANTS OF SUCCESSFUL CORPORATE ENTREPRENEURS HIP: THE ROLE OF AUTONOMY, PROCEDURAL JUSTICE AND HARMONIOUS PASSION - THE CASE OF GOOGLE -  Dae Soon Hong, Jung Hoon Lee and Dong Ug Seo	B6-3 ANTECEDENTS OF INTENTION TO SWITCHING: A CASE OF INTERACTIVE INFORMATION TECHNOLOGY SERVICE Yu-Hui Fang and Kwei Tang	C6-3 The Business Value of Enterprise Resources Planning System (ERP): A Preliminary Literature Review Qiang Zhou, Xiling Cui and Tien-Sheng Lee	D6-3 Cost Sharing Decision for Complex Product Co-Development in Supply Chain Chaoan Lai
14:45-15:00		Br	! reak	
21 10 10 00	Classroom 106	Classroom 105	Classroom 207	Classroom 206
15:00-16:30	A7 Session: Decision Analytics Chair: Chih Wang	B7 Session: Innovative Education Chair: Beiyu Yang	C7 Session: Finance Chair: Li-Yu Chen	D7 Session: Healthcare Management Chair: Yen-Ju Lin

	A7-1	B7-1	C7-1	D7-1
	Prognosis of Bone	Understanding User	Limited Attention,	Patient Cost-Sharing
	Metastasis from	Acceptance of Mobile	Attention Allocation	and Healthcare
	Lung Cancer by	Serious Games: An	and Liquidity	Utilization in Early
	Bayesian Network	Empirical Study	Provision	Childhood: Evidence
15:00-15:30				from a Regression
	Yu-Wei Chen and	Jiunn-Woei Lian and	Wei-Ju Chen	Discontinuity Design
	Shi-Woei Lin	Ho-Li Hsu		
				Hsing-Wen Han,
				Hsienming Lien and
				Tzu-Ting Yang
	A7-2	B7-2	C7-2 TAX	D7-2
	Quantifying	The evaluation of an	CLIENTELE	Determinants of the
	influences caused by	innovative	EFFECT IN	cross-region Health
	local environmental	debriefing method:	MAINLAND	Care Utilization
	attributes for pricing	Applying Surrogate	CHINAESE STOCK	
15:30-16:00	houses: swarm-	Decision Maker	MARKET	Hsing Wen Han
	inspired projection	method in real		
	approach	business class	Xia Pan, Qiang	
			Zhou, Grace Meina	
	Jieh-Haur Chen and	Beiyu Yang and	Lee and Yi Jiang	
	Hsuan-Yu Lee	Motonari Tanabu		
	A7-3		C7-3	D7-3
	A novel approach to		Strategic Alliance	Applying the Two
	fulfill customer-		Networks and Initial	Stages Least Square to
	driven product		Public Offerings	Explore the Impact of
	positioning and			Income on Health
16:00-16:30	product		Li-Yu Chen	
	recommendation for			Yen-Ju Lin
	smart phones and			
	wearable devices			
	Chih Wang			
16:30-16:45	Break			
16:45-17:30	APDSI General Assembly @Classroom 106			
18:30-21:00	Dinner Party @Camelot Hotel			

	APDSI-ICOSCM-ISOMS 2014 Time Table: Monday, July 21, 2014			
	Classroom 106	Classroom 105	Classroom 207	Classroom 206
9:00-10:30	A8 Session: Information and Knowledge Management Chair: Chae Rin Lee	B8 Session: International Business Chair: Annette Helling-Benze	C8 Session: Management of Technology and Innovation Chair: Jin-Kwan Lin	D8 Session: Marketing Chair: Arthur Cheng- Hsui Chen
9:00-9:30	A8-1 Investigating Factors Affecting the Adoption of Cloud ERP System: A Transaction Cost Economics Perspective Chun-Der Chen, Chia-Huei Ho, Chin- Tsai Lin and Yi-Fei Chuang	B8-1 Global Auto Industry: Sustainability Strategies for Future Growth Minoo Tehrani, Rawan Bukhamseen and Francesca Montemarano	C8-1 A CLOUD COMPUTING TECHNOLOGY FORESIGHT STUDY WITH SCENARIO PLANNING APPROACH Wei-Hsiu Weng and Woo-Tsong Lin	D8-1 The Impact of Purchase type on Happiness and Sharing: The Moderating Role of Materialism  Yung-Chuan Huang, I- Ling Ling and Chih- Hui Shieh
9:30-10:00	A8-2 IDENTITY FRAUD: EMPOWERING INDIVIDUALS  Judy Watson, Don Kerr and David Lacey	B8-2 GLOBAL STRATEGIC ALLIANCES IN SERVICE INDUSTRIES  Yuan-Ling Chen, Chiu-Ping Chen, Julia Lin and Yung Chung Wei	C8-2 THE RELATIONSHIP BETWEEN TIE STRENGTH, ABSORPTIVE CAPACITY, AND INNOVATION PERFORMANCE IN INNOVATION NETWORKS: EVIDENCE FROM CHINA Xueyuan Liu, Wenjing Ding and	D8-2 THE EFFECT OF SENSORY CUES AND NEED FOR TACTILE ON PRODUCT EVALUATION Chih-Hui Shieh, I- Ling Ling and Yung- Chuan Huang
10:00-10:30	A8-3 FACTOR ANALYSIS OF THE MOTIVATION ON CROWDFUNDING PARTICIPANTS: AN EMPRICAL STUDY OF FUNDER CENTERED REWARD TYPE PLATFORM Chae Rin Lee, Jung Hoon Lee and In Sook Jeon	B8-3 Corporate Social Responsibility (CSR): Strategic Implementation and Online Disclosure of the Mining Industry  Annette Helling- Benze, Don Kerr, Peter Innes and Michael Clements	Xiande Zhao  C8-3  Patent Analysis of the Orchid Industry in Taiwan  Jin-Kwan Lin	D8-3 The Study of the Relationship between Brand Crisis Type and Response Strategy- Regulatory Focus Perspective Arthur Cheng-Hsui Chen and Yi-Ling Chang
10:30-10:45	Break			
10.00 10.40		Plenary Speech	@Classroom 106	
10:45-12:00	Supply Chain and Logistics Solution at Mitsubishi Fuso Mitsubishi Fuso Truck & Bus			
12:00-13:15	Lunch @ Porty (S1-5 University Hall, 3F)			

	Classroom 106	Classroom 105	Classroom 207	Classroom 206
	A9 Session:	B9 Session: Logistics	C9 Session:	D9 Session: Strategic
	Accounting and	and Inventory	Marketing and	Management
13:15-14:45	Performance	Management	Distribution	Chair: Daniel Prajogo
	Measure	Chair: Ching-Chung	Chair: Daisuke	
	Chair: Ravi Kathuria	Kuo	Amano	Do 4
	A9-1 Trilogy of Start-up,	B9-1 AN INVENTORY	C9-1 THE INFLUENCE	D9-1 Functional Integration
	Being Mergence and	MODEL FOR NON-	OF PRODUCT	in recently
	Acquisition, Go into	INSTANTANEOUS	LIFECYCLE ON	amalgamated/ de-
	Bankruptcy: The	DETERIORATING	THE DEMAND	amalgamated councils
	Case a Taiwanese	ITEMS WITH	MANAGEMENT	
	Start-up High-tech	PRICE- AND	PROCESS IN	Oscar Imaz-Mairal,
	Firm Broken-hearted	STOCK-	SUPPLY CHAINS	Bishnu Sharma and
13:15-13:45	to Insolvency	DEPENDENT	NT / 1'	Don Kerr
	Mei-Hsiu Tsai, Chun-	SELLING RATE UNDER PARTIAL	Natalia Szozda and Artur	
	An Li and Kun-Mei	BACKLOGGING	Świerczek	
	Pan	AND INFLATION	DWICICZCK	
		Kuo-Lung Hou,		
		Yung-Fu Huang and		
		Li-Chiao Lin		7.
	A9-2	B9-2	C9-2	D9-2
	Intellectual Capital Reporting by Qatari	Can customers' active searches for	The formation of Demand Chains	How country of origin affects purchasing
10.45 14.15	Listed Companies	unavailable products	driven by Internet of	intention: the case of
	Listed Companies	replace a supply	Things and Cloud	mobile phone in
13:45-14:15	Abdulrahman Anam	chain contract?—A	Computing	Taiwan
	Ousama	numerical approach		
			Yu Cui and	Qi-Run Qin, Chun-
		Hisashi Kurata	Masaharu Ota	Hsun Chen and Yuh-
	10.2	Do 9	C0. 2	Yuan Tsai
	A9-3 ALIGNMENT	B9-3 A Study of Plane	C9-3 DEVELOPMENT	D9-3 Contrasting the
	BETWEEN	Boarding Strategies	OF CUSTOMER	strategic drivers of
14:15-14:45	PERFORMANCE	in the U.S. Airline	SATISFACTION	responsive versus
	METRICS AND	Industry	FUNCTION BASED	efficient supply chain
	BUSINESS		ON KANO'S	management
	STRATEGY: DOES	Ching-Chung Kuo	QUALITY MODEL	
	IT IMPACT	and Jun Ma		Daniel Prajogo
	ORGANIZATIONAL		Daisuke Amano and	
	PERFORMANCE?		Yasutaka Kainuma	
	Ravi Kathuria and			
	Lorenzo Lucianetti			
14:45-15:00		Br	eak	

	Classroom 106	Classroom 105	Classroom 207	Classroom 206
	A10 Session: Crisis	B10 Session:	C10 Session:	D10 Session:
	Management and	Decision Analytics	Logistics and	Marketing
15:00-16:30	BCP	Chair:	Inventory	Chair: Hideaki
	Chair: Hirotomo	Watchareephorn	Management	Kitanaka
	Soeta	Chaimongkol	Chair: Prabir Bagchi	
	A10-1 Supply chain	B10-1 Applied Analytics in	C10-1 Effect of Purchasing	D10-1 Alliance Outcomes:
	resilience to natural	Manufacturing: a	Size Variability on	What Really Matters?
	disasters	Case Study in the	Inventory	
		Automotive Industry	Performance: Do	Li-Wei Wu, Chung-Yu
15:00-15:30	Yoshiki Matsui		More Customers Buy	Wang and Ya-Ting Wu
		Jongsawas	Less or Do Fewer	
		Chongwatpol	Customers Buy	
			More?	
			Hisashi Kurata	
	A10-2	B10-2	C10-2	D10-2
	Development of	EVALUATING THE	PRICE-SETTING	Understanding the
	Logistics Model for	CRITERIA OF	NEWSVENDOR	Pricing Decisions in
15:30-16:00	Disaster Relief	SOCIAL MEDIA	MODELS FOR	Taiwanese
	Operations	NETWORK USERS-	INNOVATIVE	Metropolitan Business
	•	STUDY BASED ON	PRODUCTS AND	Hotels
	Hirotomo Soeta and	FACEBOOK,	ITS EXTENSION	
	Yasutaka Kainuma	TWITTER AND	TO THE TWO-	Wei-Ting Hung, Jui-
		PINTEREST	ECHELON SUPPLY	Kuo Shang and Fei-
			CHAIN	Ching Wang
		Enmi Yau and Chen		
		Yu Lin	Xiuyan Ma	
	A10-3	B10-3	C10-3	D10-3
		Composite Forecasts	Role of Logistics	A Study of
1000 1000		Accuracy for	Integration for	relationship among
		Automobile Sales in	Supply Chain	Customer Evaluation
		Thailand	Excellence	for Employees,
		XX	D II D II I	Customer Satisfaction,
16:00-16:30		Watchareephorn	Prabir Bagchi and Arshad Alam	and Customer
		Chaimongkol	Arshad Alam	Behavioral Intentions
				in Service Encounter
				Hideaki Kitanaka,
				Yoshiki Matsui and
				Osam Sato
16:45-17:00	<u></u>	Closine	r Session	Osam Dato
10.45-17.00	Closing Session			

	APDSI-ICOSCM-ISOMS 2014 Time Table: Tuesday, July 22, 2014
8:00-12:30	Nissan Oppama Plant Tour (Meeting Place: TBA)

### Access Information

College of Business Administration, Yokohama National University
79-4 Tokiwadai, Hodogaya-ku, Yokohama 240-8501 Japan
Registration Desk is located in the entrance lobby of the Lecture Hall 1 Business (N3-5).

### Transportation to Yokohama

The following are some of the most convenient routes available to reach Yokohama Station:

From Tokyo Station to Yokohama Station—30 minutes by JR Tokaido Line or Yokosuka Line From Tokyo Narita Airport to Yokohama Station—90 minutes by JR Narita Express From Tokyo Narita Airport to Yokohama City Air Terminal (YCAT)—120 minutes by Airport Limousine Bus From Tokyo Haneda Airport to Yokohama Station—20 minutes by Keihinkyuko Line From Tokyo Haneda Airport to Yokohama City Air Terminal (YCAT)—30 minutes by Keikyu Bus \*YCAT is located in the Yokohama Sky Building by the East Exit of Yokohama Station.

#### How to reach YNU from Yokohama Station

### By Train

[Yokohama Municipal Subway] to the Main Entrance of YNU

The Nearest Station: [Yokohama Municipal Subway] Mitsuzawa-kamicho Station

About a 16 min. walk

[Sotetsu Line] to the South Gate and South Side Gate of YNU

The Nearest Station: [Sotetsu Line] Wadamachi Station

About a 20 min. walk

Yokohama Municipal Bus

### By Taxi

About 15 minutes from the West Exit of Yokohama Station. It costs around 1500 yen one way.

### By Bus

15-20 minutes from the bus terminal at the West Exit of Yokohama Station. It costs 210 yen one way.

Platform	Destination	Bus Stop Getting Off	Entrance to the University			
11	Junkan- sotomawari: Route 202	Yokohama-shindo	South Side Gate			
		Okazawa-cho	Main Entrance			
14	Junkan-uchimawari: Route 201	Yokohama-shindo	South Side Gate			
		Okazawa-cho	Main Entrance			
Kanachu						
Platform	Destination	Bus Stop Getting Off	Entrance to the University			
14	Nakayama-ekimae : Route 1	Yokohama-shindo	South Side Gate			
		Okazawa-cho	Main Entrance			
Sotetsu Bus						
Platform	Destination	Bus Stop Getting Off	Entrance to the University			
10	Yokohama-kokudai	Yokohama-kokudai	South Gate			
10	Kotsu Saibansho Junkan	Okazawa-cho	Main Entrance			
9	Kamadaijuutaku-dai 3	Kamadaijuutaku-dai 1	West Gate			
9	Kamihoshikawa (via Kamadai)	Kamadaiiuutaku-dai 1	West Gate			

# Campus Map

### From the main gate of YNU to the Lecture Hall 1 Business (N3-5)

Enter the main gate, go straight 50 m, passing through the Security Officers' Station.

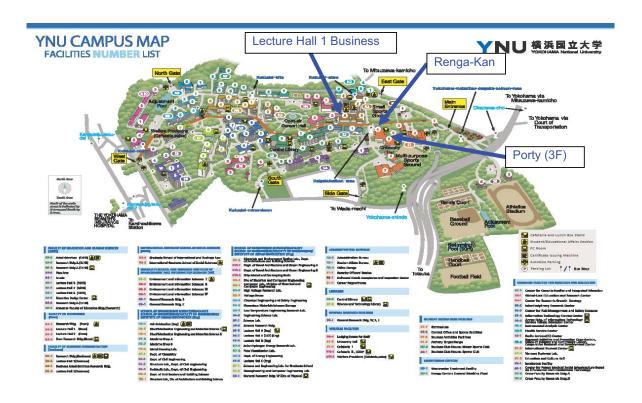
Turn left and go upstairs.

Go straight along the main street and cross a road.

Continue going straight along the main street 100 m.

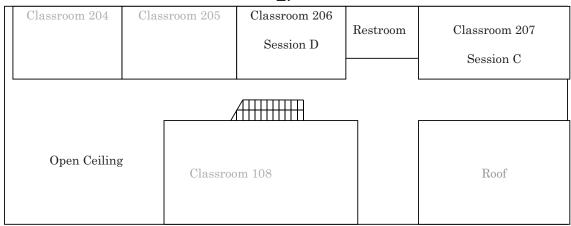
Turn right and go upstairs a little.

You will find the entrance to the Lecture Hall 1 Business on your right.

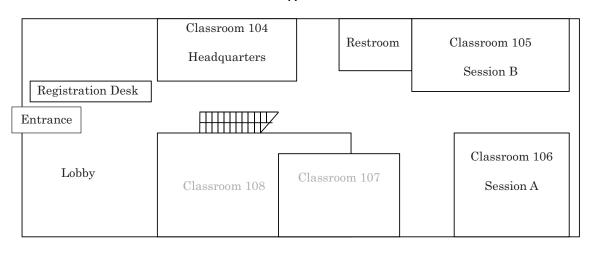


# Layout of Lecture Hall 1 Business

2F



1F



## **Conference Organization**

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Yoshiki Matsui, Yokohama National University, Japan

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Yasushi Narushima, Yokohama National University, Japan

Anh Phan, University of Economics and Business, Vietnam National University, Hanoi,

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# APDSI-ICOSCM-ISOMS2014

# **Abstracts**

- Saturday, July 19, 2014, 10:30 am 12:00 pm
- ■A1 Session (Classroom 106): Supply Chain Management

Chair: Hung Nguyen (RMIT Vietnam)

# A1-1 AN OPTIMAL SUBSIDY STRATEGY OF MANUFACTURER BY CONSIDERING DISTRIBUTOR PROVIDING REPAIRED SERVICE

Ruey-Shan Guo, National Taiwan University Ming-Huang Chiang, National Taiwan University Jia-Ying Chen, National Taiwan University Yu-Han Huang, National Taiwan University

Green supply chain (GrSC) has been receiving significant attentions and concerns in recent years. As remanufacturers needs more supply of used products, the economic incentive is required to attract customers to return their used products. This study investigates the optimal subsidy and pricing policy of a manufacturer in the green supply chain, suggesting that the flow of returned items is variable, and is affected by the amount of subsidy provided by the manufacturer. Moreover, this study considers a distributor who sells the usable products, purchased from the manufacturer, and repaired products, produced by the distributor, to the customers at the same time. A two-stage game model is proposed to derive the optimal pricing policy of the manufacturer, considering the interaction between a manufacturer and a distributor within the context of price competition. A sensitivity analysis is conducted to discuss how manufacturer's and distributor's profit will be influenced by consumer valuation, return rate and the ratio of new product cost to remanufactured product cost. According to the results, the subsidy mechanism not only enhance the profit of the manufacturer, but also the profit of overall supply chain. Finally, this study suggest that the manufacturer should consider the demand side, production cost, and the impact of subsidy policy in order to set up appropriate subsidy policy and pricing policy.

# A1-2 THE CONCEPTUAL FRAMEWORK TO DEVELOP COORDINATION MECHANISM ENHANCING SUSTAINABILITY IN SUPPLY CHAIN

Nattakarn Sahavacharin, University of the Thai Chamber of Commerce Rawinkhan Srinon, University of the Thai Chamber of Commerce

Sustainable supply chain management (SSCM) has been increasingly drawing attention from researchers. Generally, there are three main aspects of sustainability namely environment, social and economic. Although all are similarly important, very limited amount of research has been done regarding incentives or remuneration scheme/mechanism to attract coordination for sustainable supply chain. Therefore, this paper aimed to explore research direction on sustainable supply chain in the last decade focusing on economic aspect in order to clarify the objective of SSCM specifically in pragmatic, and to explore research directions on coordination mechanism for sustainability. Through the systematic literature review, a conceptual framework of considering criteria coordination mechanism that enhance sustainability in supply chain was proposed in order to be a guidance for further study on designing coordination mechanism aiming to enhance sustainability in supply chain.

# A1-3 GSCM AND ITS COMPETITIVE DIMENSIONS: A CONFIGURATION APPROACH IN GLOBAL MANUFACTURING INDUSTRY Hung Nguyen, RMIT Vietnam

This study of GSCM examines manufacturing industry across 11 countries from the 2013 Global Manufacturing Research Group study. Through developing taxonomy of GSCM dimensions, this study examines whether the choice of action programs and manufacturing performance differ depending on the levels of attainment supply chain foundation and environmental monitoring capabilities.

The research model simulated the growing dependence of SCM members on setting environmental goals and expectations; conducting internal monitoring of their environmental activities and

extending that to suppliers for monitoring and evaluation.

The results from the manufacturing industry indicated that there appeared to be consistent three major patterns of GSCM, the Dominant, Green Internal and Green Demonstration. The Dominant invested on almost all aspects of GSCM, especially in development of a strong supply chain foundation. The other two patterns represented a fragmented approach in environmental monitoring system and had very little efforts on supply chain foundation. The Dominant gained the most benefits both in environmental and operational performances while the other two groups were lag behind. The fragmented investment in environmental initiatives would not guarantee the operational performance. It is confirmed that the manufacturers, which are successful in working on this simultaneous improvement on all objectives, are also those that are experiencing higher payoffs from various improvements. However, firms in these patterns did not differ significantly in their financial measures like market share, profit and sales.

## ■B1 Session (Classroom 105): Human Resource Management

Chair: Motonari Tanabu (Yokohama National University)

B1-1 Subordinates' Machiavellianism, Self-efficacy and Impression management tactics, effect on Organizational Citizenship Behavior: Supervisor Perspective Hsu-Yao Chen, National Cheng Kung University Shuang-Shii Chuang, National Cheng Kung University

Most studies of impression management focus on the behaviors from subordinate to superiors. However, the tactics of impression management manipulated between colleagues are ignored. To clarify the difference of personality and effect of organization civic behavior, the study introduces the concept of tactic of impression management. The analysis result can explain the development of organization citizenship behavior. Based on the questionnaires collected, it is from different industries of managers and employees which allocated two sources to collect samples to avoid common method variance. There are total 297 questionnaires. The valid rate of recovery reaches 96.1%. The data is analyzed through relevant analysis and structural equation to testify study and submits the hypothesis. The result shows that the variant personality between colleagues will indeed influence individual adopted the tactic of impression management. The tactics of supplication and intimidation are intermediate variables of Machiavellianism and organization citizenship behavior respectively. However, the general self-efficacy and specific self-efficacy will influence organization civic behavior without intermediate effect of impression management.

B1-2 The Effects of Abusive Supervision on Organizational Citizenship Behavior: The Moderating Role of Future Orientation
Jih-Hua Yang, National Cheng Kung University
Ching-Ying Huang, National Cheng Kung University

In this study, we examined the effects of abusive supervision on organizational citizenship behavior. Beyond this, we also investigated the moderating role of future orientation. Data was collected from 650 pairs of managers and subordinates, of which 584 pairs returned with valid data. The probability of total effective retrieval is 89.84%. Results of moderating effects did show that future orientation moderates positively the relationship between abusive supervision and organizational citizenship behavior. Based on our findings, some limitations, implications, and directions for future research are discussed as well.

# B1-3 CHINESE PEOPLE'S PERCEPTIONS OF TELEWORK Huanjie Luo, Yokohama National University Motonari Tanabu, Yokohama National University

The advancement of ICTs has changed working styles and locations of western developed nations; teleworking is well-known and widely applied to enhance working efficiency, working life quality,

balancing work-family life, etc. On the other hand, although telework is on the way more than 10 years in China, there are still a number of people, even the on-the-job staffs, are unfamiliar with the concept of 'telework'. However, it is said that many Chinese people were familiar with the concept of SOHO, which is a type of Telework. In order to make clear of these confusions, a succession of surveys was conducted. These surveys are the first study to investigate the people's perceptions of and their attitudes toward 'telework' in China. The results show that perceptions about SOHO are significantly different between two groups ("Working Experience Group" and "No Working Experience Group"). On the other hand, perceptions of other concepts on telework are almost identical between two groups.

## ■C1 Session (Classroom 207): Manufacturing Management

Chair: Jiahua Weng (Waseda University)

C1-1 Importance of coordination of plant activity for new product development performance:

contribution of groupware
Osam Sato, Tokyo Keizai University
Yoshiki Matsui, Yokohama National University
Hideaki Kitanaka, Takushoku University
Yutaka Ueda, Seikei University
Tomoaki Shimada, Kobe University

Coordination of plant activity is important to succeed new product development (NPD). However, coordination of plant activity is not a simple task. Many factors relate to the success of the coordination, including human factor and organizational factor. Besides, application of information systems contributes to the coordination. It is widely recognized that new product development is a highly interdependent process. Some past researches studied the effect and relationships of these factors. For example, Mishra & Shah (2009) find that collaborative competence has a direct impact on NPD project performance. Luo et al. (2010) find that internal coordination capability has a positive effect on collaborative product development performance. However, empirical studies that endorsed the complex cause-effect relationships among these factors are not many. Especially, inclusion and illustration of significant contribution of information systems has not been easy.

After a set of literature review, we conduct an empirical study, and show significant contribution of groupware for coordination of plant activity. A structural equation model (SEM) was built and tested after some preliminary data analysis. We employed human cooperation within a plant as human factor. We used integration between functions as organizational factor. Introduction of groupware also contribute to the coordination of plant activity as well as above factors. Besides, we show that the coordination of plant activities is important to improve new product development performance. The data include 266 samples from nine industrialized countries: Japan, Finland, Italy, Korea, Spain, the United States, Austria, Germany, and Sweden. Finally, this study offers recommendations to managers and academics and suggests avenues for future research.

# C1-2 A Trial Research on Visual Expression of Organizational Communication Atsuko Ebine, Surugadai University

Any successful management needs right diagnostics which requires a standard model which fully grasps the essence of an object. Preceding works empirically present that managing quality-creating activities is equivalent to managing organizational communication at a manufacturer. In this sense, an observation of an organizational communication state can give an effective diagnosis of an organizational management state. This method has an advantage that the diagnostics is free from the difference of innumerable manufacturing processes of various products. The present study aims at accomplishing the construction of a model of communication, IFM (Interacting Field Model) which can be a standard model for diagnostics of an organizational communication state. The model consists of four items; (1) elementary process of communication, the simplest process of common understanding with a single flow of informational transmission between two persons, (2) space-time diagram of communication, emphasizing the significance of a time axis, (3) a simple formula of

communication level, including a trial evaluation of the contents, and (4) matrix expression of an organizational communication state, like a tomography. Major guidelines of the model construction are (1) to compose a complicated system with the simplest unit, (2) to express a time axis explicitly, which justifies communication between the same person, (3) to take into account a quality factor of contents for the evaluation of a level of communication activity, (4) to allow a negative value for the communication level, and (5) to express visually and stereoscopically with a color scale to help intuitive understanding. The model is applicable to (1) simulation to understand various features of organizational communication, (2) organizational design, (3) organizational management, (4) observation methodology design, (5) management diagnostics design, (6) education, etc..

C1-3

A Support System for Accurately Determining Functional Specifications of Engineer-to-Order Products at Quotation Stage
Jiahua Weng, Waseda University
Shingo Akasaka, Hitachi, Ltd.
Hisashi Onari, Waseda University

The target engineer-to-order (ETO) products have two features. One is that the conceptual design has already been completed for each functional unit of the product. However, since the usage of a product varies among customers, compilation design is required for individual customers. The second feature is that the production lead time is significantly longer than the customers' expect delivery lead time. Consequently, the ETO firms have to prepare parts/modules in advance by empirical estimation. Therefore, it is important to grasp customers' real needs at the quotation stage, so that the firm can efficiently start designing, engineering and production preparing. However, currently, our target ETO firms are facing on a big problem that the proposed product functional specifications need to be frequently changed not only during the quotation stage but also even after the contract is conducted. These changes lead to additional costs and time loss for design/engineering, production and parts supply departments of the firm. Moreover, though they have a large number of inquiries, less of them become orders, yielding low sale revenue.

In order to increase profit of such firms, a case study is conducted to clarify the reasons of the above problems. Furthermore, a support system is proposed for assisting the sales staff to accurately determine the product specifications. The core part of this system is a product functional structure model built by defining customers' requirement specifications, product functional specifications, functional structure elements, and by evaluating relationships among these specifications. In this paper, drilling machines are taken as an example. Detailed definition for customers' requirement specifications and product functional specifications are conducted, and constraints among these two kinds of specifications are clarified. A sub-system is also developed for detecting and correcting conflict among specifications.

## ■D1 Session (Classroom 206): Services Management

Chair: Ja-Shen Chen (Yuan Ze University)

D1-1

APPLYING IPGA MODEL TO EXPLORE THE CRITICAL FACTOR FOR IMPROVING SERVICE QUALITY OF MOTEL INDUSTRY

Ching-Chan Cheng, Taipei College of Maritime Technology Cheng-Ta Chen, Taipei College of Maritime Technology Ya-Yuan Chang, National Chung Hsing University Yu-Chun Hsueh, Taipei college of Maritime technology

The motel industry is a highly competitive industry with high resource investment requirements and high customer and innovation demands. Therefore, finding out the critical factors for improving service quality has become an important issue. The purpose of this study is to apply the Importance-Performance & Gap Analysis (IPGA) in order to determine the critical service quality factors, and to develop their improvement strategy. This study selected the customers of 10 famous Motels in Taipei City as the subjects, and 362 valid questionnaires were returned. The IPGA result showed there are

14 items located in the second quadrant (Concentrate here), which were the service quality items most in demand for urgent improvement of Motels industry. The improvement priorities of 14 items were fully discussed in the context. In particular, priority should be given to making improvements in the areas of bathrooms and empathy. Finally, the study expects that the IPGA results may be used as a reference for improving the service quality of Motel industry, then to enhance consumer intention to Motel and enterprise competitiveness in the Motel competitive market.

D1-2 A Multi-facet Service Excellence Model Ming-Chun Tsai, Chung Hua University Chien-Lin Lin, Hsing Wu University

In previous studies, there was a series of service quality improvement methods including IPGA to verify the service quality gap, the integration of Decision-Making Trail and Evaluation Laboratory (DEMATEL) method and service triangular pattern to explore the root causes of service quality gap, and based on the achieved root causes to utilize Quality Function Deployment (QFD) approach to seek for the most effective service design improvement solutions. Accordingly, this study further developed a multi-facet service excellence model including a service quality root causes model and a service quality improvement model. The achieved findings hope to provide future researchers and managers with useful references for service quality management and improvement.

D1-3 THE IMPACTS OF PROCESS RECOVERY COMMUNICATION ON CONSUMER BEHAVIORS
Ja-Shen Chen, Yuan Ze University
Hua-Hung Weng, Yuan Ze University
Han-Ming Tsai, Yuan Ze University

The characteristics of services such as intangibilities and inseparability make it difficult for business to operate service perfectly and prevent service failures during service delivery. Successful complaint management should not only be restricted to a company's efforts to handle problem and mend customer satisfaction after service failure, but also make a company learn from customer comments and complaints in order to improve its service process to avoid similar failures. Process recovery communication (PRC) or feedbacks to consumers that portray how firms have executed complaint-based process improvement are important. The current study examines the impact of PRC on consumer behaviors by conducting two studies. The results show that PRC positively impacts consumers' overall satisfaction and positive emotion and also decrease negative emotion after service failure. In addition, PRC has positive impact on consumer behaviors whether consumer experiences outcome failures or process failures. After the service process is recovered, companies should communicate with customers through personal touch or mass media to enhance customer behaviors if companies want to maximize the return on complaint management efforts.

- Saturday, July 19, 2014, 13:15 pm 14:45 pm
- ■A2 Session (Classroom 106): Human Resource Management

Chair: Kakuro Amasaka (Aoyama Gakuin University)

A2-1 IMPACT OF SURFACE ACTING ON EMOTIONAL EXHAUSTION AND CUSTOMER-PERCEIVED SERVICE QUALITY: MODERATION OF SALES ORIENTATION
Hsiao-Ling Chen, National Cheng Kung University
Fong-Yi Lai, National Pingtung University of Science and Technology

This study aims to examine the moderating effect of sales orientation on the indirect relationship between surface acting and service quality mediated by emotional exhaustion. The empirical results obtained from the data collected from salespersons-customer dyads in the service industry in Taiwan, including 127 salespersons and 631 of their customers indicate that surface acting increases

emotional exhaustion and thus worsens the customer's perception of service quality. The above indirect relationship between surface acting and service quality is moderated by sales orientation. Specifically, this relationship is stronger when sales orientation is higher.

# A2-2 Influence of Gamified Ethics Training Programs on Ethical Decision Making Wenyeh Huang, Yuan Ze University

Among all functional positions in an organization, salespeople seem to be independent contractors rather than employees of the organization because they have high degree of autonomy. Indeed, attention has been paid to business ethics training (Izzo & Vitell, 2003) since it could raise individual's tendency of taking ethical behaviors (Delaney and Sockell, 1992). However, decision making is considered one of the most difficult goals to achieve in a training program (Kahneman, 2011). Thus, a training method that facilitates learners' autonomy, sustains learning motivation, and improves ethical decision making is needed.

Therefore, this study proposes that employing games in ethics training program will help achieve abovementioned goals. Specifically, this current study attempts to examine whether or not a gamified ethics training program will improve learners' learning motivation and moral reasoning. Experimental designs which manipulated training methods into gamified, role-play, and discussion was conducted. The control group involving instructional training methods was included. In total, two hundred and eight participants were randomly assigned into these four groups. Each participant was instructed to fill out questionnaires measuring their cognitive moral development and learning motivation both before and after the experiment.

Results showed that the improvement on cognitive moral development is the largest in the gamified group, and the smallest in the control group. Additionally, the control group showed the lowest learning motivation. These findings suggest that gamification is effective in improving learners' cognitive moral development and learning motivation, and help companies develop effective ethics training programs for salespeople.

# A2-3 ESTABLISHMENT OF A STAFF ALLOCATION METHOD REFLECTING CUSTOMER INFORMATION ~EXAMPLE OF SERVICES IN GUEST ROOMS AT JAPANESE-STYLE HOTEL~

Daiki Okihara, Aoyama Gakuin University Masahiro Nakamura, Aoyama Gakuin University Kakuro Amasaka, Aoyama Gakuin University

As staff at Japanese-style hotel must provide meticulous hospitality, the way staff members are allocated can have a significant effect on the evaluation of the hotel. In order to increase customer satisfaction (CS), factors such as customer information, time spent with the customer, and staff members' capabilities must be taken into account when deciding the allocation of the hotel's customerfacing staff. It is absolutely vital that the allocation of staff takes such factors into account to prevent the quality of service from deteriorating. Additionally, as customer preferences differ depending on the customer, it is also necessary to quickly and effectively allocate staff based on customer information. At the same time, staff allocation must also take into account both CS and employment costs. Thus, this research investigates the hospitality provided at high-class Japanese-style hotel. We propose a method of allocating hospitality staff for each day based on multivariate statistical analysis and mathematical programming to reflect customer information and take into account both CS and employment costs, in place of the existing implicit staffing methods that rely on experience. Specifically, a regression formula is created to estimate the level of CS for all customer and staff combinations based on customer preferences, staff capabilities, and the compatibility between the customer and the staff member. Then, a staff allocation method is proposed, using mathematical programming to take into account employment costs and CS. This allocation method enables the optimum staff to be allocated for each situation, and also allows for unexpected changes.

## ■B2 Session (Classroom 105): Session: Quality Management

Chair: Session: Anh Phan (University of Economics and Business – Vietnam National University, Hanoi)

# B2-1 QUALITY MANAGEMENT MEASURES IN FOOD SUPPLY CHAIN: AN OVERVIEW AND CASE STUDIES IN HONG KONG

Simon S. M. Yuen, The Hong Kong Polytechnic University Calvin W. O. Cheng, The Hong Kong Polytechnic University

Food is an indispensable item in the daily life of people. Quality and safety food is not only important to the health of people, but also to the sustainable development of a country. Therefore, the issue of stability and quality of food supply chain has become a global concern. This paper examines the common quality management measures currently applied in food supply chain and describes three Hong Kong cases in which food companies adopt those quality management measures in managing their food supply chains.

# B2-2 RELATIONSHIP BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION ON ATM SERVICE: CASE STUDY OF A PRIVATE COMMERCIAL JOINT STOCK BANK IN VIETNAM Nham Phong Tuan, University of economics and business, VNU Hanoi

One of key challenge for Vietnamese commercial banks is how to compete in the market place with commonly undifferentiated services. The aim of this study is to investigate the impact of service quality performance on customer satisfaction on ATM service in a commercial bank in Vietnam Bank in Vietnam. This study applies SERVPERF framework to analyze the data collected from a questionnaire survey and found that ASSURANCE and TANGIBLES factors significantly impacts on the customer satisfaction.

# B2-3 RETAILER SERVICE QUALITY, CUSTOMER SATISFACTION AND CUSTOMER LOYALTY: EMPIRICAL EVIDENCE IN VIETNAM

Anh Phan, University of Economics and Business Ha Nguyen, University of Economics and Business Minh Nguyen, University of Economics and Business Yoshiki Matsui, Yokohama National University

This study investigates the relationship between retailer service quality, customer satisfaction and customer loyalty by conducting questionnaire survey on 664 buyers in several supermarkets in Vietnam. This questionnaire was constructed with 49 retail service quality items covering 6 service quality dimensions namely Physical aspects, Reliability, Personal Interaction, Problem solving and Policy and Information of goods, and 3 customer satisfaction items and 2 customer loyalty items. Statistical analysis results indicate the significant link between customer loyalty, customer satisfaction, and such dimensions of service quality as Problem solving, Policy and Personal Interaction. From these findings, managerial as well as theoretical implications have been discussed.

## ■C2 Session (Classroom 207): Service Innovation

Chair: Fei Liu (South China University of Technology)

C2-1 The Impact of Trust-Building Mechanisms and Trust Transference on Online Group Buying Chun-Der Chen, Ming Chuan University
Mei-Ju Chen, Chienkuo Technology University
Edward C.S. Ku, National Kaohsiung University of Hospitality and Tourism
Yi-Fei Chuang, Ming Chuan University

While many other Internet business applications have fallen by the wayside, the online group buying continues to be a highly popular avenue for web-based trade. However, lots of new online group buying sites have emerged, thereby intensifying competition among these websites since the Internet makes it relatively easy to switch from one website to another that provides the same products or services. Likewise, understanding the determinants influencing consumer's group buying intention and related behaviors will be vital for maintaining the closed relationships with existing customers and thus facilitating new relationship with potential ones. Based on the perspectives of trust building mechanisms proposed and trust transference, the primary objectives of this research are twofold: (1) to investigate determinants of trust in online group buying website and trust in initiator and their influences on users' participation intention in online group buying and (2) to explore the effect of trust transference from online group buying website to group buying initiator. The proposed model is tested on real-world data collected from group buying consumers of several well-known marketplaces. Results show that both trust in website and trust in initiator could positively increase buyers' intention to participate group buying. Moreover, as expected, the effect of trust transference (from online group buying website to initiator) is significant. Moreover, Our findings also show that structural assurance and situational normality have significant effects on consumer's trust in online group buying website, and both disposition to trust and user endorsement have significant effects on consumer's trust in initiator. Implications for practitioners and researchers are also addressed in this study.

C2-2 Service Innovation Management for Hotel Business
Wan Yee Lah, UCSI University
Ja-Shen Chen, Yuan Ze University

International tourism has been one of the major vehicles of economic development in many developing countries. In this study, we propose a research model to examine the impacts of the technology-organization- environment contexts on service innovation management and the consequence of competitive advantage for hotel industry. A survey-based methodology was conducted. An empirical survey from hotels was used to test the model and hypotheses. The findings lead to technological context and organizational context positively affect on service innovation management. The service innovation management is positively related to its sustainable competitive advantage.

C2-3 Service Innovation Based on Service-Dominant Logic under Network Convergence Environment: A Case Study of Tesla Motors
Fei Liu, South China University of Technology
Zhaoquan Jian, South China University of Technology

In recent years, accompanied by a series of major breakthroughs in the fields of ICT (information and communication technology represented by big data, cloud technology, traditional industry boundaries have been becoming blurred and melting, cross-industry convergence trend has been constantly strengthened and upgraded. In the meantime, customers' demands worldwide will be more and more highly personalized, experienced, socialized and dynamic, the traditional industrial economy based on goods dominant logic are being gradually subverted and replaced by the new network economy (service-oriented economy) based on service-dominant logic (SDL). Under this background, through integrating SDL and OI theories, this paper discusses theoretically the concepts and connotations of service and service innovation based on SDL, and proposes a conceptual model of open integrated service innovation and dynamic evolution mechanism based on SDL, and then tests empirically the conceptual framework and the corresponding propositions by taking Tesla Motors (a spectacular star in the new energy electric cars industry, and also a typical emerging network convergence enterprise) as an example. This study will help to promote the further development and improvement of service science and service innovation theories under the network convergence environment, and the results of this paper are of important decision-making reference value for enterprises to create and sustain competitive advantage, as well as for governments to formulate relevant industrial policies under today's network convergence environment.

- Saturday, July 19, 2014, 15:00 pm 16:30 pm
- ■A3 Session (Classroom106): Information and Knowledge Management

Chair: Hyun-Seok Hwang (Hallym University)

A3-1 A Framework for Intelligent Mind Mapping using Collaborative Filtering Su-Yeon Kim, Daegu University
Sang Hoon, Daegu University

In knowledge and information society, the importance of idea becomes more and more increasing. It is required to identify and formulate ideas for individuals and organizations. To create new idea, we usually use brainstorming or mind mapping technique. Brainstorming can support group discussion, while mind mapping is usually used for personal purpose. It is essential to provide some clues for users for intelligent mind mapping. In this paper we propose an intelligent model to recommend proper keywords for mind mapping based on collaborative filtering technique.

A3-2 Contributing Knowledge To Electronic Knowledge Repository System
Jin Young Lee, SAMSUNG SDS
Hee-Woong Kim, Yonsei University
Bo Yeon Lee, Yonsei University

This paper aims to investigate motivation factors affecting the knowledge contribution to a Knowledge Management System (KMS) from the psychological empowerment perspective. Knowledge contribution beyond the mandated knowledge sharing requires employees an active motivational orientation toward the contribution behavior. Psychological empowerment represents one's motivational orientation that can portray an individual's self-governing influence on the relevant behavior. This study develops a research model based on the psychological empowerment theory to examine those antecedents of knowledge contribution. This study further proposes antecedents of psychological empowerment, the motivation of knowledge contribution, in terms of work environment design (i.e., job characteristics and information systems characteristics). We test the research model at the individual level based on the survey data collected from employees at an organization with a KMS. This study contributes to the information systems literature, especially knowledge management literature, by advancing the theoretical understanding of knowledge contribution based on the extension of psychological empowerment theory. This study also has practical implications for the management and application of KMS by providing guidance on how to promote an employee's knowledge contribution to a KMS.

ESTABLISHMENT OF A STAFF ALLOCATION METHOD REFLECTING CUSTOMER INFORMATION ~EXAMPLE OF SERVICES IN GUEST ROOMS AT JAPANESE-STYLE HOTEL~
Hyun-Seok Hwang, Hallym Univ.
Dojin Kim, Hallym Univ.
Youngju Bang, Hallym Univ.

Since the Internet provides a way of expressing and sharing Internet users' minds, corporate marketers want to acquire measurable and actionable insights from the web data. In this study we propose a framework for clustering brand names of the automobile industry using social metrics gathered on the social media. We calculated the brand name distances based on the total number that all pairs of brand names are mentioned together. These distances are used to project the brand name onto a 2-dimensional space using multidimensional scaling. After the projection we found the clusters of brand names and identified the characteristics of each cluster.

## ■B3 Session (Classroom 105): Supply Chain Management

Chair: Galia Novakova (Sofia University)

B3-1 EFFECT OF LONG-TERM OR

EFFECT OF LONG-TERM ORIENTED CULTURE ON COMMUNICATION AND PROCESS EFFICIENCY IN SUPPLY CHAIN

Qingyu Zhang, Shenzhen University Mei Cao, University of Wisconsin - Superior

To improve process efficiency, firms have attempted to align goals and collaboratively communicate with supply chain partners. However, a firm's culture (e.g., long term vs. short term oriented) might complicate the collaborative efforts. The objective of the study is to explore the impact of long-term oriented culture on goal congruence and collaborative communication, and further on process efficiency of supply chain. Data was collected through a Web survey of U.S. manufacturing firms. Structural equation modeling (LISREL) was used to analyze the data. The results and implications are discussed in the paper.

B3-2 SUPPLIER GOVERNANCE EFFECTIVENESS: MODERATION EFFECTS OF ECONOMIC DEVELOPMENT AND NATIONAL CULTURE

Chenlung Yang, Chung Hua University Shuping Lin, Chung Hua University Suyuan Lien, Chung Hua University Chwen Sheu, Kansas State University

Transaction Cost Economics (TCE) suggests that firms choose governance mechanisms to ensure fulfillment of contractual obligations and safeguard against opportunism for their outsourcing activities. This study examines how buying organizations govern supplier contracts to improve manufacturing competitiveness. The effectiveness of three primary methods of governance: contractual governance, coordination governance, and information sharing governance, is examined. A research model is developed to decipher the relationships between transaction attributes, governance mechanisms, and performance. Furthermore, we study the moderating effects of economic development and national culture on the effectiveness of the three governance mechanisms. SEM analysis is performed using the data collected from 987 manufacturing plants from 19 countries, and several important findings are presented that would advance the theory and practice in outsourcing. First, we find empirical support for the effects of contractual, coordination, and information sharing governances in improving manufacturing performance. The effectiveness of different governance mechanisms is not equal and is contingent on the nature of the outsourcing. For instance, contractual governance is very effective for mitigating the risk from market, technology, behaviorism and special investment. Both coordination and information sharing governances lessen the opportunistic behavior resulting from asset specificity, but they are not effective when facing environmental uncertainty. Furthermore, the effectiveness of governance mechanisms is moderated by both economic development and national culture. The developed markets and countries with strong uncertainty avoidance prefer to use contractual governance to reduce the opportunistic behavior, while emerging markets and countries with low uncertainty avoidance consider information sharing governance to be more effective.

B3-3 Innovative Supply Chain Technologies for Management Decisions
Galia Novakova, Sofia University
Kamen Spassov, Sofia University
Shahram Taj, Lawrence Technological University. Department of Management and Marketing

In this paper we seek to identify how to accelerate innovation in order to promptly respond to the market demand as well as how to map web generation to the Supply Chain Management (SCM) technologies. Our investigation reveals the important alignment of e-business with the SCM perspective, and the advantages that cloud computing can provide over a traditional, enterprise resource planning (ERP) systems. Furthermore, the authors link the emerging SC solutions with the

continued developments in recent web generations. Finally, the paper draws conclusions about the advent of new technologies in favour of the SCM.

## ■C3 Session (Classroom 207): Strategic Sourcing

Chair: Daesik Hur (Yonsei University)

C3-1 Dynamic dual capacity sourcing for new ethical drugs Hiroko Okajima, Towson University Susan Xu, The Pennsylvania State University Hui Zhao, The Pennsylvania State University

Capacity management for new drugs is one of the most challenging tasks facing pharmaceutical manufacturers due to long lead times to acquire capacity, significant risks in product launching failure, volatile and growing demand and costs, and extremely high service level requirement. Motivated by the growing practice of dual capacity sourcing strategies in the pharmaceutical industry, we introduce a finite period, dual capacity sourcing model where a manufacturer uses two capacity sources to meet demand: in-house capacity that has a longer (two periods) construction lead time but once built can be used throughout the remaining periods, and outsourcing capacity that has a shorter (one period) reservation lead time but can only be used for the next period. We capture three uncertainties frequently observed in practice: product launching risks, and demand and capacity costs. We show that the optimal total (in-house plus outsourcing) capacity is characterized by statedependent base-capacity levels. However, the structure of the in-house capacity policy is intractable because the optimal value function is neither convex nor quasi-convex. Accordingly, we develop two approximate policies: the myopic solution and the convex value function approximation. Our extensive numerical study investigates, among other things, the strategic roles played by each capacity source and their dynamic interactions over the drug's patent protection years. We find the following guiding principles for effective dual capacity sourcing: (1)largely postpone long-term investment before product launch and rely primarily on short-term outsourcing to meet demand in the early years; (2)quickly expand in-house capacity up to a slightly overage level soon after product launch and rely primarily on in-house capacity to meet demand in the intermediate years; and (3)use both the already built in-house capacity and outsourcing to meet demand in the late years.

C3-2 Absolute Supply Chain Strategy :A culture underlying high performance companies Michiya Morita, Gakushuin University
Jose Machuca, University of Seville
James Flynn, Indiana-Purdue University

We proposed a concept of strategic management cycle of which high level cycle leads to high performance manufacturing over time. In this study we show the most significant factor explaining the difference of the strategic management cycle's level among firms exists in operations. As a driver to develop effective strategic management cycle linking strategy to effective operations, we propose a concept of absolute supply chain strategy. This strategy concept is derived from a normative formula called Little's law and essentially its character is normative. We will show this strategy leads to high performance strategic management cycle by strengthening operational effectiveness and by linking such competitive operations to the strategic aspect of the cycle.

When does directed sourcing work? Addressing top tier suppliers' discontent Daesik Hur, Yonsei University Hyojin Kim, Yonsei University Jinseok Yang, Yonsei University

Directed sourcing practices creates a buyer-top tier supplier-lower tier supplier triad where a buying firm purchases inputs from a lower tier supplier and provides them for the top-tier supplier. Then, the top tier supplier utilizes buyer's direct-sourced items to build a finished product for the buyer. In

this setting, top tier suppliers do not usually have a formal contract relationship with the lower tier suppliers, but are still responsible for coordinating with the lower tier suppliers to deliver final outputs to the buying firm. Prior research reports that directed sourcing contracts are mainly initiated and driven by buying firms because of cost reduction, quality control, technology assurance, and risk reduction. Yet, top tier suppliers have to forfeit additional profit-making opportunities, and may find it difficult to control the lower tier suppliers because of the lack of formal authority. Thus, displeased top tier suppliers may not be sufficiently motivated to meet the expectation of the buying firm, incurring moral hazard problems in directed sourcing context.

In this study, grounded upon the agency theory and inter-organizational governance theory, we aim to explore factors that can reduce the dissatisfaction of top tier suppliers: outcome control, behavioral control, and social control. We assess the effects of the three control mechanisms on top tier supplier's operational performances and their relational satisfaction. Data are collected from 102 Korean manufacturing firms, and the proposed hypotheses are tested. We empirically demonstrate that goal congruence, contract incentives, buyer-driven formal adjustment procedures, and supplier-supplier social control have positively affected top tier supplier's operational performances and its relational satisfaction with the lower tier suppliers.

- Saturday, June 19, 2014, 16:45 am 18:15 am
- ■A4 Session (Classroom 106): Decision Analytics

Chair: Decision Analytics (Yokohama National University)

## A4-1 ONLINE REVIEW MINING FOR THE PREDICTION OF MOVIE REVENUE GENERATION

Seung Yeon Cho, Yonsei University Hyun-Koo Kim, Yonsei University Beomsoo Kim, Yonsei University Hee-Woong Kim, Yonsei University

Since a movie is an experience good, purchase can be decided upon preliminary information and evaluation. There are many ongoing research projects on what impact online reviews might have on movie revenues. The influence of online reviews appears to be significant in products like a movie because it is difficult to evaluate the feature prior to "consuming" the product. Since an online review is regarded to be objective, consumers find it more trustworthy. Contrary to prior research focused on movie review ratings and volume, we focus on movie features mentioned by reviewers on the online movie review website. This research proposes a prediction model for movie revenue generation. We decided 15 criteria to classify movie features collected from online reviews through the online review mining and made up feature keyword list each criterion. In addition, we performed data preprocessing and dimensional reduction for data mining through factor analysis. We suggest the movie revenue prediction model is tested using discriminant analysis. Following the discriminant analysis, we found that online review factors can be used to predict movie popularity and revenue stream. This predictive model has approximately 80 percentile accuracy through cross validation. We also expect using this prediction model, marketers and strategic decision makers can allocate their resources in more parsimoneous fashion.

# A4-2 Strategic Use of Uncertainty through Mystery Discounts Thunyarat Amornpetchkul, National Institute of Development Administration

Recently, several retailers and service providers have experimented with offering a relatively less conventional type of sale promotions, where multiple discount levels are distributed among the consumers (e.g., in the form of scratch-off coupons, sealed envelopes, coupon codes), as opposed to announcing a uniform discount to all consumers. This type of promotions is commonly referred to as "mystery discount." For example, Dell emailed its customers mystery coupon codes that could be worth either 15%, 25%, or 35% off from an online purchase, with the chance of 90%, 9%, and 1%,

respectively. Banana Republic distributed an envelope to each customer upon entering its stores, to be opened immediately to reveal a discount of 25%, 35%, or 50%. Barnes & Noble offered mystery printable coupons worth either 10%, 20%, 30%, 40%, or 50% off a single item, to be revealed at checkout. Under a mystery discount, consumers may be able to discover the acquired discount prior to making purchase decisions (early disclosure), or at the point of purchase (late disclosure). Furthermore, consumers may or may not be informed about the actual distribution of different discount levels. The responses to mystery discounts have been mixed. Some consumers find it disturbing to not know the discount level upfront; while, others find it exciting to have a chance to win a large discount. As for the sellers, some retailers reportedly received a significant gain in revenue from using mystery discounts. Other retailers, however, have not considered adopting this type of promotional discounts. In this paper, we are interested in investigating how each scheme of mystery discounts (early and late disclosure) affect consumer purchase behavior, compared to a conventional price markdown. We also analyze the structure of an optimal mystery discount and examine how retailers can benefit from adopting which type of mystery discounts.

A4-3 Strategic Use of Uncertainty through Mystery Discounts
Akimasa TANAKA, Yokohama National University
Ryo SATO, Yokohama National University

Social network game is prevalent in Japan. The scale in 2013 was 546 billion yen. Compared with consumer game industry, it is 2.2 times. In this industry, GREE and DeNA offering social network infrastructure (hereunder, SNI) has been the leaders. However traditional strategic theory cannot explain the growth. A positioning theory by Porter (1985) says that profitability is decided with level of opportunities and threats in industry. However, for GREE and DeNA, they created the industry by themselves. Hence this theory can not explain the their reason. The resource based theory by Barney(2002) proposed that companies' resource is the key for competition. However this analyzes resources after change. So the theory cannot guarantee valuable in the future. Teece et al.(1997) and Teece (2009) proposed dynamic capability (hereunder, DC) to overcome the issues. DC is a holistic capability that consists of sensing opportunities and threats and capturing and reassignment resources. According to DC, if a company has the capability intentionally, that can cope with change. Hence DC seems be able to explain how SNI grew. First we define factors of sense by using industry structure. Then, we see the relation between SNI and others with penetration rate to know if smartphone's penetration rate is up, SNI executes strategy for that. With this, we can see what kind of trigger SNI uses. As for internal information as sensing, we use service output rate (# of service output/(# of service output + # of service not output)). If the rate is high, it means that it effected their sense. And then, we do the same method for capturing and reassignment. Third and finally, to understand whether SNI executes DC or not, we observe cash flows from investing activities. If it is high, it means DC (investing new thing) is executed. DC is abstract and complicated. However, if the study elucidates how DC proceeds, it will provide companies with framework of strategy under even change.

## ■B4 Session (Classroom 105): e-Commerce

Chair: Su-Wen Chen (National Pingtung Institute of Commerce)

Exploring a fit-compatibility model in using mobile value-added services
Hsin-Wei Wang, National Kaohsiung Marine University
Su-Wen Chen, National Pingtung Institute of Commerce
Hsin Hsin Chang, National Cheng-Kung University

The mobile value-added service market has seen significant growth in the past few years. The most prominent obstacle for a new technology is getting customers to try it for the first time, so this study explained this phenomenon by a fit-compatibility model derived from TTF and SCT Theories base and investigate the relationships among cognitive components (task-technology fit and compatibility), affective component (performance-related outcome expectation, personal outcome expectation and

perceived value) and conative component (resistance to use). In the empirical results, this study adopted a Structural Equation Model to test the interrelationships among all the research constructs and found that several interesting consequences as follows: First, compatibility had higher impact on performance-related outcome expectation and personal outcome expectation than task-technology fit. Compatibility and task-technology fit represent two kinds of fits among the task, the technology and the users. Second, performance-related outcome expectation has a stronger impact on perceived value than personal outcome expectation. Third, this study also demonstrated that perceived value also plays an important role in influencing behavior of resistance to use. In the academic and managerial implication, this study provided a comprehensive perspective by combining cognition-based and personality-based aspects to examine how consumers evaluate overall change related to a new mobile value-added service. Unlike a traditional context, the mobile value-added service is an application in which the interactive interface allows users to conduct transactions by themselves when they move. Therefore, business managements have emphasized on users' personal factors when they predict technology acceptance and use, such as perceived value, outcome expectation, fit and compatibility.

# B4-2 What drives online consumers to spread eWOM: Experience and motivation Su-Wen Chen, National Pingtung Institute of Commerce

Word-of-mouth (WOM) has been shown to play a crucial role for consumers' purchase decision making in traditional marketplace. The advent of Internet provides a wide range of online channels for consumers to share their consumption experience and obtain information from consumers. As more consumers utilize product information from the eWOM network to make purchase decision, what factors drive online consumers to spread eWOM becomes particularly interesting. However, existing research on eWOM has been focused on its impact while little attention has been paid to the drivers of eWOM. Moreover, customer satisfaction is generally regarded as the key antecedent of traditional WOM. Little is known whether the effect of customer satisfaction on eWOM dissemination in the online environment is still effective. Finally, motivation is one of the key constructs of research on understating consumer behavior. The relationship between eWOM motive and intention to spread positive eWOM is still uncovered.

This study proposes a research model of eWOM, and attempts to identify key drivers that influence online consumer's intention to spread positive eWOM. Multiple theories and perspectives, including the expectation disconfirmation model (EDM), motivational theories, and equity theory, are synthesized to hypothesize a spreading positive eWOM model. Research hypotheses are empirically validated using a web-based survey. Our research subjects are online consumers who have sharing their positive consumption experiences via Internet. The results show that well consumption experience increases customer satisfaction and, in turn, enhance online consumer's intention to spread eWOM. Furthermore, customer satisfaction can help to increase customer intrinsic motivation, and then positively affects intention to spread eWOM. The results may provide influential references for practitioners and help them design more effective eWOM marketing to stimulate positive eWOM dissemination.

B4-3 Facilitating relational maintenance through Facebook fans page: An application of the commitment-trust theory
Su-Wen Chen, National Pingtung Institute of Commerce
Hsin-Wei Wang, National Kaohsiung Marine University
Ming-Chi Lee, National Pingtung Institute of Commerce

Facilitating relationship maintenance by relational marketing is an important issue for business firms. Social network sites (SNSs) are powerful tools that enable business firms to communicate to customers and maintain relationships with customers. Facebook has become the top SNSs with millions active users since it accommodates a wide rang of users. Its diversity applications ensure that business firms can create and maintain relationships with customers in the site. Facebook fans page provides channel for promoting a brand, giving customers deep impressions brand stories or culture, and collecting customers' opinions. However, although the popularity of Facebook fans page have been identified as a marketing tool to maintain relationships, little empirical research has investigated whether Facebook fans page facilitate relational maintenance between business firms

and customers. This study proposes a research model which adopted the key mediating variable (KMV) model of relationship marketing of Morgan and Hunt (1994) as a reference model. This study hypothesize that relationship commitment and trust are key constructs, we regard them as mediating variable between four important antecedents (i.e. relationship termination costs, relationship benefit, shared values, and communication) and two outcomes (purchase intention and intention to spared electronic word of mouth). Our research subjects were people who had been participating Facebook fans page. The data were collected using an online survey. The results demonstrate that relationship termination costs have the largest effects on relationship commitment, followed by share values and trust. Relationship commitment exerts a stronger effect on intention to spread eWOM, while trust exerts a stronger effect on purchase intention. This study contributes to demonstrate that the Facebook fans page could facilitate relationship maintenance.

## ■C4 Session (Classroom 207): Supply Chain Management

Chair: Nasr-Eddine Dahel (Monterey Institute of International Studies)

C4-1 Moderation impact of national culture on relationship between information technology and supply chain integration

Odkhishig Ganbold, Yokohama National University Anh Phan Chi, Vietnam National University, Hanoi Yoshiki Matsui, Yokohama National University

Information technology is considered to be a driver that supports supply chain integration while smoothening the integration of business processes in terms of information sharing, coordination of activities and collaboration of functions not only within an organizational, bit also between organizations in the supply chain. But literature suggests its implementation doesn't always improve supply chain integration. In this study, we test the moderation of seven national culture dimensions by Hofstede (2008) on the relationship between information technology capability and supply chain integration based on the data collected from Japanese manufacturing organizations.

C4-2 The Diffusion of Supply Chain Innovation in Healthcare Delivery: A Unique Supplier Model for Industry/Academy Partnership in Asia Pacific Carl Briggs, United States Indiana University, Kelley School of Business Robert Webb, Australia Cook Medical Ross Anderson, Australia Cook Medical

While the positive impact of supplier involvement in the diffusion of supply chain innovation has been well documented across a range of industries (Takeshi, 2001), company sizes, and geographic regions (Birou and Fawcett, 1994; Ragatgz et al. 1997) especially with regards to new product development (Brown and Eisenhardt, 1995, Clark and Fujimoto, 1991), little has been written about its impact on process improvement—"adaptive processes"—and even less about its impact in healthcare. This paper will document efforts to establish a new model of supplier involvement in supply chain innovation diffusion in one community of practice (supply chain management professionals) in one industry (healthcare) in one region of the world (Asia Pacific).

# C4-3 GLOBAL SUPPLY CHAIN COORDINATION Nasr-Eddine Dahel, Monterey Institute of International Studies

This paper addresses the horizontal coordination of production and distribution decisions between plants located in different countries to serve multiple international markets in a changing economic and political environment. Horizontal coordination gives the multinational firm the flexibility to shift production between plants within its global manufacturing network to take advantage of future changes in production and/or transportation costs, trade regulations, exchange rates, competitive moves, or government policies. In reaction to and in anticipation of such changes, the question is to

determine how to adjust the production and distribution activities of the different plants in the network to maximize the global after-tax profit for the multinational firm. Proposed in this paper is a horizontal coordination model that integrates the multi-period production and distribution decisions of the various plants for simultaneous optimization. This model considers multiple products at each plant and incorporates production, inventory and transportation costs as well as governmental regulations such as taxes, export incentives, tariffs, and import quotas.

- ■Sunday, July 20, 2014, 9:00 am 12:30 pm
- A5 Session (Classroom 106): Information and Knowledge Management

Chair: Jung-Hoon Lee (Yonsei university)

A5-1 Investigating the relationship between IT capability and supply chain agility for different strategic types

Hsiao-Lan Wei, National Taiwan University of Science and Technology Pei-Hung Ju, National Kaohsiung University of Applied Science Robert Sanjaya, National Taiwan University of Science and Technology

The key factors of success in today's global marketplace are a firm's skills to respond quickly to the competitive challenges and to sustain its competitive advantage. Supply chain agility is an important element of a company's long term success and continuity because of the dynamic nature of market environments. There are many research feel anxious with the impact of IT capability on supply chain management, especially for agility, and the perception of IT as a competitive appliance in achieving supply chain agility because many studies have shown that improvement and evolution of IT has quickly modify business processes and supply chain agility has been especially influenced. The capability of information that can respond to steadily changing situations is required for the operation of moving goods from customer order over supply, production and distribution of product. It is important that the company become more understand about the role of IT capability in achieving agility because agility in supply chain can decide the effectiveness and efficiency of cumulative efforts. In this study, we focus specifically on supply chain agility and supply chain IT capability for different strategy types. We use four supply chain strategic types to investigate their best IT capability profile for better supply chain agility. These supply chain strategic types are prospectors, analyzers, low-cost defenders, and differentiated defenders. Our conceptual framework contains supply chain agility, supply chain strategic types, and supply chain IT capability. The research results will reveal that the closer a supply chain matches an ideal profile of IT capability and strategy, the better the supply chain agility.

A5-2 Effects of intellectual capital and supply chain learning on supply chain responsiveness: an empirical study in China

Xiande Zha, South China University of Technology; China-Europe International Business School

Shanshan Zhang, South China University of Technology Zhiqiang Wang, South China University of Technology Waiman Cheung, The Chinese University of Hong Kong

Intellectual capital (IC) is critical to company performance in knowledge-based economy. It has been acknowledged that IC influences innovation and company performance. We argue that IC could influence supply chain responsiveness (SCR) in the supply chain context. Further, based on the knowledge-based view, supply chain learning (SCL) is expected to be impacted by IC, and contribute to SCR. A research model is proposed linking IC (human capital, organizational capital, and social capital), SCL (learning from supplier and learning from customer) and SCR. Our model is tested by using a dataset of 300 Chinese manufacturers in high-tech industries. The results show that both human capital and social capital affect organizational capital. Human capital and organizational capital also directly affect SCR, while social capital doesn't. Human capital and social capital positively affect SCL, including learning from supplier and learning from customer. SCL also positively contributes to SCR. Generally, our study provides empirical evidences on the roles of IC in the supply chain context.

A5-3 A STURY ON THE DEFINITION OF SMART CITY Jung-Hoon Lee, Yonsei university

### Beob-Guen Jeong, Yonsei university Dasom Kim, Yonsei university

What is the source of continual development and growth of the city? This question has been paid attention for a long time by researchers and policy makers for urban development. With the rapid expansion of scale of cities, urban planners have made complex management systems and policies to manage food provision, water provision from long distance, waste disposal and traffic management system. The quality of these systems of cities have an important role to determine the quality of citizen's living (The Science Museum, 2004). Through there exist various problems and defects related to metropolis complex people all over the world are centering into the cities continuously.

#### ■B5 Session (Classroom 105): Operational Performance

Chair: Hua-Hung Weng (Yuan Ze University)

B5-1 Developing a Higher Reliable CAE Analysis Model of The Mechanisms that cause Bolt Loosening in Automobiles
Ken Hashimoto, Aoyama Gakuin University
Takehiro Onodera, Aoyama Gakuin University
Kakuro Amasaka, Aoyama Gakuin University

In this study, we developed a highly reliable CAE analysis model of the mechanisms that cause loosening of bolt fasteners, which has been a bottleneck in automobile development and design, using a technical element model for highly accurate CAE that we had previously developed, and verified its validity. Specifically, drawing on knowledge gained from our clarification of the mechanisms that cause loosening of bolt fasteners using actual machine tests, we conducted an accelerated bench test consisting of a three-dimensional vibration load test of the loosening of bolt fasteners used in mounts and rear suspension arms, where interviews with personnel at an automaker indicated loosening was most pronounced, and reproduced actual machine tests with CAE analysis based on a technical element model for highly accurate CAE analysis. Based on these results, we were able to reproduce dynamic behavior in which larger screw pitches (lead angles) lead to greater non-uniformity of surface pressure, particularly around the nut seating surface, causing loosening to occur in areas with the lowest surface pressure. Furthermore, we implemented highly accurate CAE analysis with no error (gap) compared to actual machine tests.

B5-2 The Effects of External Industrial Competition and Internal Business Competitive Strategy on Corporate Tax Avoidance
Meijuh Huang, Fu Jen Catholic University

This study uses Taiwan listed companies from 2001 to 2010 to examine whether corporate internal business competitive strategy and external industrial competition affect the level of income tax avoidance, and to consider their interactive impact on corporate tax avoidance behavior. This study uses book effective tax rate and cash effective tax rate as the proxies for tax avoidance. The empirical results indicate that business competitive strategy has a significant effect on corporate tax avoidance behavior. The result suggests corporate with the aggressive internal competitive strategy (known as prospectors) are more tax aggressive than defenders. Besides, the empirical result also shows industrial competition has a significantly negative association with effective tax rates, implying firms operating in highly competitive industries are more tax aggressive than other firms. Moreover, for the corporate with the prospector competitive strategy, this study finds that its tax avoidance degree would be highest if faced with fiercer external competition environment; on the contrary, the corporate with the defender competitive strategy will have the lowest tax avoidance if faced with an environment lacking in competition.

#### STORE Hua-Hung Weng, Yuan Ze University Chun-Jing Yang, Yuan Ze University

In recent year, environmental issues have evoked people's awareness to environmental protection, starting the trend of green practical management in manufacturing industries. However, few articles examine the green practice issues in service industries. Based on past research of service delivery system, this study aims to investigate green service delivery, including service design factors as antecedents and customer behavior as a consequence factor. Service design factors have four service strategic choices, including structure practice of physical ambient decoration, infrastructure practice of service employee green knowledge training, integration practice of cooperation with upstream suppliers in environmental issues, and experience practice of community activity. This study designs a 2x2x2x2 experiment to analyze the relationships between green strategic choices and green service delivery. According to 400 survey replies, the research finds that all design factors, except structure practice, have positive impacts on customer perceived green delivery. In addition, customer perceived green delivery has a positive impact on customer behavior. This study not only advances the research on green service delivery but also provides the recommendation of green service strategic choices for retailers to participate in green service delivery in the future.

### ■C5 Session (Classroom 207): Management of Technology and Innovation

Chair: Shu-Ping Lin (Chung Hua University)

C5-1

SHAPING RADICAL AND INCREMENTAL SERVICE INNOVATIONS THROUGH ORGANIZATIONAL AGILITY: INSIGHTS ON IT CAPABILITY AND ORGANIZATIONAL LEARNING

Hung-Tai Tsou, Ming Dao University Hsuan-Yu Hsu, Tatung University

Service innovations are central concerns for contemporary firms to obtain sustained competitive advantages in current fast changing markets and innovative customer demandingness. Due to the importance of customers in new product (service) innovation and service operations, a conceptualization of organizational agility is increasing required and emphasized. It behooves businesses to execute innovations and competitive moves with speed, surprise, and competitive disruption has attracted significant attention as a business capability for competing effectively in the current business environments. Further, radical and incremental service innovations have become increasingly more challenging, driving managers to employ different technological resources and organization structures to enhance organizational agility and to attain superior innovation practices that can differentiate from competitors. Therefore, how to utilize IT capability and organizational learning to build organizational agility and how to enhance radical and incremental service innovations via entrepreneurial alertness are strategies to meet this challenge of the organizational agility.

### C5-2 ERP Post-Implementation Success: IT Quality vs. Service Quality Pei-Fang Hsu, National Tsing Hua University

As many firms have adopted ERP systems in past decades, the topic of ERP post-implementation, also called the post go-live stage, emerges to be critical. While previous studies have devoted great attention to ERP system quality in ERP implementation stage, this study aims to investigate ERP service quality in ERP post-implementation success. The need for the investigation appears to be critical due to ever-increasing challenges, from the ERP system itself to ERP service team in the post-implementation stage. Service quality becomes important in the post-implementation stage since ERP users always need support from IS personnel during this phase whenever there is an error to be

corrected, optimization requests to be met, upgrades to be conducted, or even training to be provided. However, little attention has been devoted to service quality despite its significant influence. Based on DeLone and McLean's IS success model, we assess the relative importance of ERP system quality, information quality, and service quality on post-implementation success from users' perspectives, including users' continuance intention to use, satisfaction, and net benefits to individuals. Our research model was empirically examined with data from 151 ERP users in firms. We found that: (1) while service quality is less important than ERP system quality or information quality to ERP post-implementation success, service quality has the strongest impact on user satisfaction. (2) Service quality can enhance the impacts of system quality and information quality on ERP post-implementation success, thus our results highlight the interaction effect of service quality. (3) Each of the quality factors plays a different role in facilitating ERP post-implementation success, and this provides insights to firms regarding how to allocate their resources to improve various quality factors to achieve different dimensions of ERP post-implementation success.

C5-3 Identification of Healthcare Cloud Service Demand Shu-Ping Lin, Chung Hua University Chen-Lung Yang, Chung Hua University Han-Chung Pi, Chung Hua University Thao-Minh Ho, Chung Hua University

This study aims to develop a service demand identification method based on the concept of Kano, and through the utilization of three main dimensions of innovative service use, user interface, and healthcare cloud service use behavior to develop a demand assessment scale toward cloud service application for Taiwan healthcare industry. To confirm the validity of the service demand classification identification method, this research employed healthcare cloud services and diabetes self-management care cloud services as case studies to illustrate the analysis processes. Through survey questionnaires and the convenience sampling method, 311 valid responses out of 500 distributed questionnaires were returned in case of healthcare cloud services and 235 valid responses out of 320 distributed questionnaires were returned in case of diabetes self-management care cloud services. This results show that users have higher willing to adopt the health cloud service system, and the service demand classifications are different between the health cloud services with focusing on prevention and the diabetes self-management care cloud service with focusing on care. In particular, ease of use, responsiveness, confidentiality and reliability will positively affect the adoption of health cloud service, but it will not affect the diabetes self-management care cloud service. This results will provide relevant units in the healthcare industry and service industries with helpful designing and planning references.

## ■D5 Session (Classroom 207): Management of Technology and Innovation

Chair: Poomporn Thamsatitdej (College of Management Mahidol University)

D5-1 Reusable luggage tag for mobile tracking and sustainability development Yin Cheung Eugene Wong, HSMC
Wai Hung Collin Wong, Hang Seng Management College

With more than two billions passengers travelling by air in the world each year, the vast number of lost luggage and disposable paper adhesive luggage tags after each travel is pushing the aviation industry to think of methods to improve luggage tracking and reduce the printed one-off adhesive luggage tags. This paper reviews the current application of Radio Frequency Identification (RFID) in the luggage handling system and proposes the development of one reusable luggage tag to facilitate the aviation luggage handling and tracking process. A framework and components of the RFID for the proposed reusable tag are presented. A database management system and a mobile app on Smartphone device for luggage tracking are proposed. This paper further suggests an initial

framework of the integrated reusable luggage tag as future development. Future studies will cover the methodology of integrating the retail system, luggage tag, airport check-in counter, luggage handling system, aircraft, and the destination airport through the use of the tag, readers, antenna, and mobile devices.

## D5-2 SUPPLY CHAIN RETURN AND RISK MANAGEMENT - A DELPHI STUDY AND AN INTEGRATED OPTIMIZATION MODEL Wai Hung Wong, Hang Seng Management College

Various types of risks and risks management studies in the supply chain context have attracted the attention of the researchers and practitioners in recent years. This study starts by reviewing the literature to understand the trend of supply chain risks studies and supply chain risk management (SCRM) strategies. The review shows that very limited research on managing the whole supply chain risk, and there is no optimization model helping decision makers in planning the production quantity in the supply chain context, with the consideration of all types of supply chain risks costs. Thus, this study identifies the impacts of all types of supply chain risks by conducting a Delphi method to estimate probabilities of occurrence, expected effects and the associated additional costs for each type of risk. The perceptions of both manufacturers and academic on the importance of various types of risks were collected. It is interesting to find out that in terms of risk concerns, respondents tend to put higher weightings on supply and manufacturing risks, while in terms of efforts of managing risks, respondents believe the company should have good control on supply, manufacturing and distribution risks. This study also compares the natures between finance and supply chain risks, and identifies the asymmetry nature of supply chain risk contributing to the complexity in analyzing supply chain risk. This study classifies three types of loss functions for any types of supply chain risks. Lastly, using the findings from Delphi study, a nonlinear programming model is formulated to provide a profit maximization production plan with the considerations of both risks and returns.

# D5-3 CATEGORIZATION OF SUPPLY CHAINRISK FACTORS IN HEALTHCARE SERVICE OPERATIONS: APPLICATION OF Q-SORT METHOD Poomporn Thamsatitdej, College of Management Mahidol University Tritos Laosirihongthong, Department of Engineering Thammasat University

Efficiency of supply chain management is a primary concern of healthcare performance. Supply chain disruptions has caused significant business impact to the healthcare business organizations. Recognition of risk factors can serve as a rigid foundation for achieving better performance of supply chain management. Hence, the purpose of this study is to determine supply chain risk management (SCRM) factors in the context of healthcare service operations. The research begins with gathering potential risk factors from the literature review. Then, Q-Sort method is employed to classify risk factors regarding risk ownerships such as supplier risk ownership supplier-producer risk ownership, producer risk ownership, and customer risk ownership. The results lead to classification of five risk categories, which are useful for risk management practice in health care supply chain context.

- ■Sunday, July 20, 2014, 13:15 pm 14:45 pm
- ■A6 Session (Classroom 207): Case Studies of Operations and Business Strategy

Chair: Dae Soon Hong (Arthur D. Little Korea)

A6-1 A CASE STUDY ON APPLICATION OF G-RD TO BUSINESS INTEGRATION AFTER M&A Tetsu Sait, Hitachi,Ltd.
Koshichiro Mitsukuni, Waseda University

Enterprises renovate their business structure in order to respond to changes in the business environment. In recent years, an organizational renovation involving other enterprises is increasing due to M&A. The enterprise after M&A needs to define and design business functions and management units such as roles, business assignments, organizations, etc. without duplication in order to carry out business process/operation smoothly. Furthermore, the responsibility demarcation or boundary of management units needs to be defined.

It is necessary to design one new business flow diagram after M&A as a TO-BE model from two or more business diagrams of each enterprise which are described as an AS-IS model. However, two or more business diagrams cannot be merged into one business diagram by utilizing business flow diagrams, such as DFD or Swim lane flowchart. Therefore, it is difficult to find duplication of business functions and relations between management units. To solve this problem, this paper proposes Global Relations Diagram of function and demarcation (G-RD). G-RD utilizing square matrix is able to merge two or more business diagrams into one business diagram. G-RD is also able to rearrange functions, because functions are arranged on the diagonal of a square matrix. Moreover, G-RD is able to define the responsibility demarcation or boundary of management units. Thus, G-RD can define not only the relationships of information between functional assignments but also the relationships of responsibilities between power assignments.

This paper introduces a case study in which G-RD was applied to a business process/operation integration. This case study shows that unnecessary duplication of business functions and management units were deleted by utilizing G-RD.

#### A6-2 A CASE STUDY ON THE CLOUD COMPUTING SERVICES IN KOREA

Jong Un Lee, Yonsei University Kyungjin Seo, Yonsei University Hee-Woong Kim, Yonsei University

As the cloud computing is located in the center of ICT eco-system around the world, it has been playing an important role as an IT strategy for the global competitiveness of companies and nations. However, after the government release its plans to lead the world public cloud market in 2009, despite the efforts of companies and relevant ministries, public cloud computing market in Korea has not been working very successfully for four years. It is quite slow in its development. This study aims to identify inhibiting and promoting factors for the successful cloud computing services. For this purpose, we adopt a case study based on a company in Korea. We then analyzed causalities of the extracted factors based on the use of Causal Loop Diagram, presented several key issues, and proposed alternatives for booming cloud computing market. Therefore, this study is considered to support more various practical implications than previous studies that arranged issues and alternatives one-dimensionally. We also can provide a guideline to the government and enterprises which are planning to start cloud computing business, and also expected to revitalize the domestic public cloud computing market.

#### A6-3

DETERMINANTS OF SUCCESSFUL CORPORATE ENTREPRENEURSHIP: THE ROLE OF AUTONOMY, PROCEDURAL JUSTICE AND HARMONIOUS PASSION -THE CASE OF GOOGLE -

Dae Soon Hong, Arthur D. Little Korea Jung Hoon Lee, Graduate School of Information, Yonsei University Dong Ug Seo, Graduate School of Information, Yonsei University

Continual growth based on the innovation is very important for a company and it has big ripple effects. Therefore for this innovation and continuous growth we should pay attention to the corporate entrepreneurship. Until now there has been no analysis about the determinants of successful corporate entrepreneurship in the aspect of the organization and its members.

This paper studies the case of Google to find out the determinants of corporate Entrepreneurship. By understanding 5 characteristics of Google we deliver the exploratory study model for the determinant of corporate Entrepreneurship and propose 6 hypotheses by the classification of autonomy, procedural justice and harmonious passion which influence on corporate entrepreneurship.

- ■Sunday, July 20, 2014, 13:15 pm 14:45 pm
- ■B6 Session (Classroom 105): e-Commerce

Chair: Yu-Hui Fang (Taiwan Tamkang University)

B6-1 UNDERSTANDING ONLINE CUSTOMER REPURCHASE INTENTION: THE PERSPECTIVES OF EXPECTATION-CONFIRMATION MODEL, TRUST, AND JUSTICE Chun-Ming Chang, Aletheia University
Chiahui Yen, Ming Chuan University

Remaining customers' repurchase intention is important for online sellers. By integrating the perspectives of expectation—confirmation model, trust, and justice, this study develops a theoretical model to examine the antecedents of repurchase intention in the online shopping context. Data collected from 191 customers of Groupon were used to test the proposed model. The results show that perceived usefulness, satisfaction, and trust are the key predictors of repurchase intention, while perceived usefulness and trust exert significant effects on satisfaction as well. The results also reveal that confirmation of procedural justice, confirmation of interactional justice, and confirmation of distributive justice have positive effects on perceived usefulness and trust, whereas confirmation of distributive justice exerts significant influence on satisfaction. The implications for theory and practice and suggestions for future research are also discussed.

EXPLORING MEMBERS' COLLABORATIVE STICKINESS INTENTION TOWARDS SOCIAL NETWORK SITES: THE FACEBOOK CASE OF GROUP BUYING COMMUNITIES Chiahui Yen, Ming Chuan University Ming-Chang Chiang, Fu Jen Catholic University Lu-Jui Chen, Ming Chuan University

Online group buying is emerging as an important online business model, in which an initiator takes the initiative and other members participate through a virtual community. Social network sites provide an ideal platform for people sharing interests and encouraging collaborative online shopping. The increasing connection of social network sites accelerates group buying community development and encourages members' collaborative online shopping. Various online group buying communities are built by members in social network sites, and how to retain existing members is critical for a group buying community's long-term development. In this study, we aim to explore members' group buying intention by linking social presence and relationship quality. First, social presence is the degree of salience of other people in the interaction and the consequent salience of interpersonal relationships, and has impact on members' group buying intention in e-commerce social network site environment. Second, relationship quality provides an evaluation of the strength of a relationship between a service provider and a customer, while it is a strong predictor of group buying intention. Moreover, we propose that members' perceived enjoyment, perceived informativness, and emotional support from other members are positively associated with social presence and relationship quality of social network site. This survey was conducted in Taiwan in March 2013 on two online group buying communities of facebook, and then 201 valid questionnaires had been received. Data analysis was carried out to validate our research model, and SmartPLS was used to analyze members' collaborative stickiness intention. The result shows that social presence and relationship quality have impact on members' group buying intention, in turn, influence on collaborative stickiness intention toward social network site.

B6-3 ANTECEDENTS OF INTENTION TO SWITCHING: A CASE OF INTERACTIVE INFORMATION TECHNOLOGY SERVICE

Yu-Hui Fang, Taiwan Tamkang University Kwei Tang, Taiwan National Chengchi University Interactive information technology (IT) service is one of the most popular Web 2.0 tools that can facilitate synchronous communication, collaboration, and social interaction among users via the use of computers and communication networks. Windows Live Messenger (formerly MSN Messenger) has been a leading interactive IT service developed by Microsoft since 1999. However, in 2013, in order to compete against other services, Microsoft closed up MSN Messenger service and began migration of 100 million Messenger users to Skype. Against the background, this study proposes a model of interactive IT service switching that integrates theory of network externalities with the conventional push–pull–mooring (PPM) framework. According to the push-pull-mooring facets, this study takes an extra step to explore such issue and proposes two dissatisfaction components of the migration plan (push factors), four components of network effect (pull factors), switching cost (mooring factors) as the possible antecedents of intention to switching. Accordingly, this study proposed three propositions to develop the model of interactive IT service switching. Related discussion, implications for theory and practice are provided

- ■Sunday, July 20, 2014, 13:15 pm 14:45 pm
- ■C6 Session (Classroom 207): Information and Knowledge Management

Chair: Qiang Zhou (Hong Kong Shue Yan University)

C6-1 Exploring knowledge impacts of IS journals based on the influences of peer journals and knowledge network

Chien Hsiang Liao, Taiwan National Taichung University of Science and Technology Eldon Y. Li, Taiwan National Chengchi University Hsiuju Rebecca Yen, Taiwan National Tsing Hua University

Many prior studies have examined the quality of Information Systems (IS) journals and ranked IS journal based on academic survey and citation analysis. This study aims to investigate the IS journal impact from a different perspective, i.e., knowledge contribution for peer journals in the IS discipline. The data are selected from SSCI and SCI databases by Thomson Reuters (former ISI Web of Knowledge) from 2008 to 2012. Based on the criterion that the journal must have at least five years of citation data, a total of 38 IS-related journals are selected in this study, including 20 SSCI journals and 18 SCI journals. These journals are divided into four groups according to their knowledge impacts for peers journals, namely (1) knowledge market, (2) knowledge provider, (3) knowledge storekeeper, and (4) knowledge sinker. In addition, this study uses social network analysis (SNA) to explore the citation patterns among these IS journals and rank them based on (1) the volume of knowledge flows to peer journals, (2) central control of knowledge flows, and (3) knowledge broker between sub-groups of peer journals. The findings provide some implications for IS scholars and journal editors, such as identifying core journals, tracking research topics and streams (sub-groups), and formulating strategies for IS journal development.

### C6-2 AN EXPLORATORY STUDY ON THE FACTORS AFFECTING ONLINE BENEVOLENT COMMENT

Yoon-Jung Jang, Yonsei University Eun-Young Cho, Yonsei University Hee-Woong Kim, Yonsei University

Information Technology (IT) has influenced the overall living of people and promoted South Korea into an IT powerhouse. However, with the growth of IT, the influence not only from a positive aspect but from a negative is becoming intense. Especially, considering cyberbullying, a systematic abuse of power which takes place by means of information and communication technologies (ICTs), the damage level is being expanded and thus it is being raised as a social problem. To tackle this problem, the research uncovers the factors that have an influence on \_Benevolent Comment', a subset of online

prosocial behavior offering a favorable and a positive comment toward others in the Internet forums. By using a qualitative approach of the 57 interviews, seven driving factors (self-presentation/image enhancement, pleasure/feeling worthwhile/satisfaction, social contribution, companionship/emotional support, reputation, monetary reward, and reciprocity) and two inhibiting factors affecting benevolent comment (social anxiety and time/effort) were discovered as the factors affecting online benevolent comment. The research has its theoretical contribution to analyzing benevolent comment as online prosocial behavior and suggesting driving/inhibiting factors influencing an act of posting a benevolent comment online. The study has its practical implication for developing a campaign/program for shaping a positive online culture.

C6-3 The Business Value of Enterprise Resources Planning System (ERP): A Preliminary Literature Review
Qiang Zhou, Hong Kong Shue Yan University
Xiling Cui, Hong Kong Shue Yan University
Tien-sheng Lee, Hang Seng Management College

ERP implementation has already been a very mature research topic. Implementing ERP successfully is not the end of story, but the beginning of a new journey to realize the full benefits of ERP system. ERP benefit studies explore whether and how ERP creates business value for organizations. The objective of this paper is to explore new research directions in the area of ERP business value. Specifically speaking, we propose the following research avenues, investigating the relationship between ERP systems and innovation performance, conducting longitudinal study in this area, investigating the impact of ERP on supply chain management, and seeking appropriate theoretical framework support.

- ■Sunday, July 20, 2014, 13:15 pm 14:45 pm
- D6 Session (Classroom 206): Management of Technology and Innovation

Chair: Chaoan Lai (South China University of Technology)

D6-1 A STUDY OF CEO TRANSFORMATIONAL LEADERSHIP, ORGANIZATIONAL FACTORS AND PRODUCT INNOVATION PERFORMANCE: A THEORETICAL FRAMEWORK AND SCALE MEASUREMENT

Tharnpas Sattayaraksa, Hatyai University Sakun Boon-itt, Thammasat University

The purpose of this study is to provide a theoretical framework and a scale development process, in order to preliminarily address the reliability and validity of CEO transformational leadership, some key organizational factors, and product innovation performance constructs. The measurement scales were pre-assessed using the Q-sort method and exploratory factor analysis was also conducted to assess the construct reliability and validity. This research established a theoretical framework of CEO transformational leadership, organizational factors including innovation strategy, organizational learning, innovation culture, new product development process, and product innovation performance. Q-sort technique can help improve the content validity and the initial construct validity of CEO transformational leadership, some key organizational factors, and product innovation performance. This study provided the initial developmental steps toward the building of a theoretical framework and scale measurement to allow better understanding of the constructs based on the context of firms in Thailand. This will allow researchers to bring new insights when exploring these constructs under differing operational conditions. The findings address additional steps required towards improved methodological aspects in terms of how to pre-validate and develop a measurement scale in various constructs within alternative domains.

#### D6-2 CASE STUDY ON CORPORATE ENTREPRENEURSHIP PROGRAM FOR INNOVATION : WITH FOCUSING ON THE IN-COMPANY VENTURE SYSTEM AT KOREAN COMPANIES

Jung Beob Geun, Yonsei University Jung Hoon Lee, Yonsei University Hye Won Lee, Yonsei University

By entering international low-growth phase of financial economy, global companies try to find out new business values and establish the sustainable growth by industrializing them. So the in-company corporate entrepreneurship is being paid attention as a method to create value in a company. Currently as the need of in-company venture system is raised as an efficient way to tackle the lowgrowth Korean companies try to find out new innovative business through the system. Also the movement to transplant in-company corporate entrepreneurship into organizational culture is seen to overcome the crisis of low-growth. After analyzing 3 company case, we draw 3 critical success factor for Korean company's Corporate Entrepreneurship program. The first factor is strong will of top management, and the second factor is social and solid process to induce brilliant ideas from company members. The last one is the effort for changing over company's culture. The aim of this study is to drive the characteristics and types of the venture system in Korean companies and to give suggestions for the companies to adopt the system successfully by performing case studies of three Korean companies with different types.

### D6-3 COST SHARING DECISION FOR COMPLEX PRODUCT CO-DEVELOPMENT IN SUPPLY

Chaoan Lai, South China University of Technology

A new type of collaborative chain model containing one system integrator and some suppliers for product co-development was constructed and the cost sharing decision among them was discussed in this paper. This paper is to study the system integrator how to motivate the suppliers to increase the labor effect and the level of R&D innovation and shorten development time through R&D cost sharing, and analyze the system integrator's cost-sharing rate with Game theory. The result shows that the suitable R&D cost sharing policy could inspire the suppliers' effort and reduce development time to obtain profit optimization. It provides a theoretical reference and quantitative guidelines to implement cooperative research and development for innovation.

### ■A7 Session (Classroom 106): Decision Analytics

Chair: Chih Wang (National Chiao Tung University)

A7-1 Prognosis of Bone Metastasis from Lung Cancer by Bayesian Network Yu-Wei Chen, National Taiwan University of Science and Technology Shi-Woei Lin, National Taiwan University of Science and Technology

The aging society of Taiwan and other developed countries entail a solution on how to utilize health care resources to maximize the health and functional capacity of (older) people. In this study, we seek to improve the ability to infer cancer metastasis using Bayesian networks (BN) and to improve the costeffectiveness of treatment using decision networks. The study focuses on the model formulation of metastasis of lung cancer, which is one of the most common cancers in Taiwan and the mortality rates have been increased 12-fold during the past 40 years. In particular, a nationwide database containing more than 35,000 cases of cancer patients in Taiwan was used to describe and predict the occurrence of bone metastasis from lung cancer by using BN. Furthermore, the BN topology for studying bone metastasis was strictly examined by domain experts and doctors to ensure the validity of the network structure. Different indexes for model evaluation and ROC curves were used to compare the results obtained from Bayesian networks and other benchmarking data mining and machine learning approaches such as decision tree and support vector machine. Results from the study can provide useful recommendations and guidelines for how to utilize our health care resources. In particular, this research can help identify effective Bayesian network modeling approaches for issues related to metastasis of cancer, appropriate treatments for patients, and better strategies for health care policy makers.

A7-2 Decision Analytics, IT Applications to Operations/Supply Management, Management of Technology and Innovation
Jieh-Haur Chen, National Central University
Hsuan-Yu Lee, National Central University

Preventing from subjective judgment of housing environmental attributes by appraisers, the research objective is to quantify influences caused by local environmental attributes for pricing houses using the swarm-inspired projection (SIP) approach. Literature reveals 41 typical environmental attributes used to price houses, followed by the data collection which randomly retrieves historic transactions and combines Geographic Information System (GIS) to quantify the attributes. The process for the data collection takes months to have 4135 historic transactions for housing in the Taipei city collected, containing 41 GIS calibrated environmental attributes each. SIP is, afterward, employed to bunch the entire datasets demonstrating 5 clusters based on their corresponding environmental attributes. The results derived from clustering analysis illustrate that practitioners are suggested to significantly adjust the attribute weights of "distance to hospital", "distance to river sidewalk", "distance to downtown", "distance to airport", "distance to highway/expressway", and "quantities of university, park, and library" for high priced housing.

## A7-3 A novel approach to fulfill customer-driven product positioning and product recommendation for smart phones and wearable devices Chih Wang, National Chiao Tung University

In recent years, the market shares of mobile-phone suppliers have dramatically fluctuated, especially when wireless technology was rapidly shifting from the second to the third generation. To avoid market saturation in smart phones, global companies start to develop wearable devices like smart watches or smart glasses because these wearable devices have been recognized as next-generation star products. In order to better understand the strengths and weaknesses of smart alternatives (i.e. phones, watches, and glasses), this paper presents a novel framework to help product planners accomplish product positioning and product recommendation. For conducting product positioning, correspondence analysis (CA) is applied to customer perceptions to visualize which features best characterize different smart alternatives. Then, analytical hierarchy process (AHP) is employed to elicit customers' prior information (initial preferences for smart alternatives). Finally, by means of Naïve Bayes classifier (NBC), product recommendation is accomplished in an unsupervised way. Experimental results justify the validity of the proposed framework, particularly in tackling a scenario in which customer purchase records are lacking in new products.

### ■B7 Session (Classroom 105): Innovative Education

Chair: Beiyu Yang (Yokohama National University)

B7-1 Understanding User Acceptance of Mobile Serious Games: An Empirical Study Jiunn-Woei Lian, National Taichung University of Science and Technology Ho-Li Hsu, National Taichung University of Science and Technology

The popularity of mobile devices has increased in recent years. Mobile devices have become a major platform for modern information systems (IS) and for education. Serious games, which integrate gaming and learning, are no exception. However, previous studies on mobile serious games have rarely been conducted. Therefore, this study evaluated the critical factors that influence user acceptance of mobile serious games. The results, revealed three major findings. First, both enjoyment and playfulness positively affected user satisfaction and flow. Playfulness also affected perceived usefulness. In addition, three critical factors affected users' attitudes toward the mobile serious games: satisfaction, flow, and perceived usefulness. Finally, attitude significantly affected users' willingness to play the mobile serious game. These findings can enhance researchers' understanding of user acceptance of mobile serious games, and can serve as a reference for future academic research and practical applications.

B7-2

The evaluation of an innovative debriefing method: Applying Surrogate Decision Maker method in real business class
Beiyu Yang, Yokohama National University
Motonari Tanabu, Yokohama National University

Surrogate Decision Maker (SDM) method is an innovative debriefing method that can be used for a simulation game to help the players acquire more knowledge. The SDM method is a kind of computer-based simulation analysis tool. It can provide all kinds of possible situations by changing the parameters to get more experience and knowledge. Basically, it can be regarded as a what-if analysis. Since simulation games are commonly used in business education and research nowadays, it is helpful to adopt the SDM method when using business simulation games. In former research, the authors proposed the SDM method, explored the relevant concepts and possible usages of the method, and conducted a series of experiments, both in laboratories and in the field, to probe into and evaluate the impact of this method on different types of players' knowledge acquisition. In this paper, the authors mainly focus on the field experiments that applying the SDM method in real business classes to see the credibility of the effectiveness of the SDM method on players' domain knowledge acquisition and its effects on different levels of players.

Firstly, the relevant concepts and possible usages of the SDM method and the result of former laboratory experiments are briefly discussed. In order to see the real learning effects of the SDM method, the authors designed and conducted field experiments that apply the method in real MBA classes. Secondly, the designation of the field experiments is presented, and thirdly, the real application process is reproduced. Then, the experiment results is analyzed and compared with the former laboratory experiments that applied the SDM method to undergraduate students' learning. Finally, as a conclusion, the impact of the SDM method on players' learning effectiveness is discussed and evaluated based on the comparison and comprehensive consideration of both laboratory and field experiments.

#### ■C7 Session (Classroom 207): Finance

Chair: Li-Yu Chen (Soochow University)

C7-1 Limited Attention, Attention Allocation and Liquidity Provision Wei-Ju Chen, TAMKANG UNIVERSITY

Using data from the Taiwan Emerging Stock Market, we examined the Limited Attention Hypothesis as put forth by Corwin and Coughenour (2008). In the Taiwan Emerging Stock Market, liquidity is wholly provided by market makers. Limited Attention Hypothesis states that if limited attention forces a specialist to allocate effort across stocks, the specialist's ability to provide liquidity for a given stock can be negatively affected by the attention requirements of other stocks in his market-making portfolio. Because the NYSE is an order driven market, most of the liquidity is provided by traders in the limited order book. Specialists provide supplementary liquidity through ex-post price improvement. Although liquidity is influenced by the actions of specialists, it may also be affected by limit orders and the behavior of other traders. Corwin and Coughenour (2008) tested the Limited Attention Hypothesis by calculating the firm-level liquidity of NYSE securities. Their research, however, was limited because the liquidity provided by specialists could not be isolated. In this research, we were able to isolate liquidity because we tested our hypothesis by examining securities listed on the Taiwan Emerging Stock Market, which is a quote driven market. All of the liquidity provisions can be attributed to the actions of market makers. We also calculated market maker level liquidity in our data, enabling us to examine the relationship between a market maker's attention and his liquidity provision, giving us a more accurate view of the relationship between liquidity provision and attention. The empirical results indicate that market makers allocate effort toward their most active stocks, resulting in increased spread and less frequent price improvement for their remaining market making stocks. Thus, our results indicate that the allocation of effort due to limited attention has a significant impact on liquidity provision in stock markets.

#### C7-2 TAX CLIENTELE EFFECT IN MAINLAND CHINAESE STOCK MARKET

Xia Pan, Lingnan College, Sun Yat-sen University Qiang Zhou, Hong Kong Shue Yan University Grace Meina Lee, Tung Wah College Yi Jiang , Dah Chong Hong Holdings Limited

This research explores the ex-dividend day price behavior in China stock market. It collects 330 listed companies quoted on the Shanghai and Shenzhen Stock Exchange, and all of them have distributed cash dividend in 2006, and analyzes how the share price in China stock market reacts to the exdividend day event. Different from the tax clientele hypothesis, we could not find enough evidence to support that the entire samples' price on the ex-dividend day drop proportionally to the dividend paid, regardless of dividend yield. However, the price drop is significantly higher than the dividend distributing amount. This suggests that the stock market in China overreacted to the ex-dividend day event.

### C7-3 Strategic Alliance Networks and Initial Public Offerings Li-Yu Chen, Soochow University

This study investigates the certification effect of a firm's strategic network in initial public offerings. The results indicate that IPO firms not only experience higher offer price, lower underwriter expenses, higher first-day returns and larger IPO offer sizes, but also attract more prestigious underwriter and great institutional interest, when they are in a more important position in their associated strategic network. The evidence further demonstrates that the strategic partners' importance in the network also has significant impacts on various aspects of a firm's IPO. Our overall evidence suggests that the strategic network serves as a useful indicator to distinguish the quality of IPO firms.

#### ■D10 Session (Classroom 206): Healthcare Management

Chair: Yen-Ju Lin (National Taichung University of Science and Technology)

D7-1 Patient Cost-Sharing and Healthcare Utilization in Early Childhood: Evidence from a Regression Discontinuity Design Hsing-Wen Han, Department of Accounting Hsienming Lien, National Chengchi University Tzu-Ting Yang, University of British Columbia

This paper exploits a sharp increase in patient cost-sharing at age 3 in Taiwan that results from young children "age out" cost sharing subsidy, which results in higher patient cost sharing for the children just after their 3rd birthday than the ones just before their 3rd birthday. On average, turning age three (losing eligibility for subsidy) leads price per outpatient visit to increases double (from 60 NT\$ to 120 NT\$) and price per inpatient admission jumps to 1300 NT\$ (from 0 NT\$ to 1300 NT\$). The price variation at children's 3rd birthday allows us to use a regression discontinuity design to examine the causal effect of cost sharing on young children's healthcare demand by comparing the spending and utilization of healthcare for young children just before and after their 3rd birthday. Our results show that the increased patient cost sharing reduces 6% of outpatient care spending for children just after 3rd birthday. The implied arc-elasticity of outpatient care spending is around -0.10. However, the demand of inpatient care for young children does not respond to change in cost sharing even if the variation in inpatient price at age 3 is much larger. This result implies fully coverage of medical cost of inpatient care could improve welfare of young children.

### D7-2 Determinants of the cross-region Health Care Utilization Hsing Wen Han, Department of Accounting, Tamkang University

The barriers to accessing medical care are divided into three types: structural barriers, financial

barriers, and personal barriers. In this study, the accessibility of medical care was evaluated by considering the level of cross-regional health care received by people in Taiwan. We obtained the characteristics of the patients and those of the hospitals that they visited to analyze the accessibility of medical care for patients by using the NHI Research Database (NHIRD). We selected patients diagnosed with osteoarthritis for analysis. The purpose of this study was to observe how factors affect the use of cross-regional health care by residents. The results of this study can be used as a reference for policy investigation.

### D7-3 Applying the Two Stages Least Square to Explore the Impact of Income on Health Yen-Ju Lin, National Taichung University of Science and Technology

This study using the 2005 National Health Interview Survey obtained from the National Health Research Institutes and Bureau of Health promotion. Appling Yitzhaki Index and a two-stage least squares (2SLS) with two-equation simultaneous model to investigate the association of relative deprivation with health status and negative health behaviors. The empirical results indicate that the relative deprivation is an important factor in health status after controlling the socio-demographic characteristics and supports the relative deprivation hypothesis, implying that the higher relative deprivation accompanied with the poorer health status. And the results also support the higher relative deprivation increasing the probability of being a smoker, drinker or betel nut chewer, which indicates that the negative health behaviors plays an important transmission on the relationship between relative deprivation and health status. If the Government is aware of the relative deprivation as a result of unequal distribution of income and lead to worse health, the government not only provides better medical resources to improve individual's health, but also should pay attention to the income inequality, especially avoiding the widened gaps between the rich and the poor.

■ Monday, June 21, 2014, 9:00 am - 10:30 am

## ■A8 Session (Classroom 106): Information and Knowledge Management

Chair: Chae Rin Lee (Korea Local Information Research & Development Institute)

A8-1 Investigating Factors Affecting the Adoption of Cloud ERP System: A Transaction Cost Economics Perspective

Chun-Der Chen, Ming Chuan University Chia-Huei Ho, Ming Chuan University Chin-Tsai Lin, Ming Chuan University Yi-Fei Chuang, Ming Chuan University

Accelerated by the tremendous advent of the Internet and associated information technologies, cloud computing has emerged as a favorable solution to improve an organization's performance and competitive advantage. Cloud ERP system is a major kind of cloud computing application, and companies can benefit from moving to a cloud-based ERP system by decreasing the total cost of ownership, increasing data accessibility and mobility, streaming business processes and transferring the risks and costs of information technology hosting. Despite cloud ERP system adoption is likely to be difficult due to several major inhibitors, and this suggests a need for a better understanding of cloud ERP system implementation intention from firm's viewpoint. However, scant studies have been conducted in examining what factors inhibit firms from adopting cloud ERP system through some theoretical lens. In addressing these research gaps, the objective of this study is to uncover the factors related to transaction attributes affecting the intention of cloud ERP system adoption from transaction cost economics (TCE) perspective. Through empirical data collection and analysis from firms in Taiwan, we found that uncertainty and switching cost indeed positively engender firm's perceived risk. Moreover, results also reveal that perceived risk negatively and switching benefits positively influences the intention of cloud EPR system adoption. Implications for practitioners and researchers and suggestions for future research are also addressed in this study.

A8-2 IDENTITY FRAUD: EMPOWERING INDIVIDUALS
Judy Watson, University of the Sunshine Coast
Don Kerr, University of the Sunshine Coast
David Lacey, University of Sydney

A8-3

An increasing number of individuals are becoming victims of identity crime, yet few understand how to deal with the aftermath of the compromise of their personal information. Frequently, even the organisations that have inadvertently facilitated the crime are not able to offer constructive advice or assistance; victims are often given conflicting advice. This paper takes a victim centric approach to understanding experiences of identity theft and misuse of personal information in order to gain a clearer understanding of the type of education and support individuals require to prevent an instance of identity compromise and/or to cope with the effects of such an event. The findings of six focus groups and a household telephone and online survey, undertaken in New Zealand, indicate that people want to learn more about empowering themselves to cope with personal information compromise. Identity theft is considered to be of serious harm to the community. The results show that a support case management facility would assist in helping individuals to cope with identity crime; furthermore a standard code of practice through which government agencies, businesses and online merchants were accredited would give confidence and empower individuals.

FACTOR ANALYSIS OF THE MOTIVATION ON CROWDFUNDING PARTICIPANTS: AN EMPRICAL STUDY OF FUNDER CENTERED REWARD TYPE PLATFORM
Chae Rin Lee, Korea Local Information Research & Development Institute
Jung Hoon Lee, Yonse University
In Sook Jeon, Yonsei University

As the Internet evolves to Web 2.0 which makes opening, sharing and participating easy and more people use SNS (Social Network Service) on the mobile device the current trend of social movement is being changed. The crowdfunding has drawn attention to get concern, encouragement, talent donation, money and goods support and investment from the people through new media including SNS. As the government expects the success of crowdfunding for economical development and better service through people's participation by expending money procurement and encouraging investment we need to analyze the motivation of crowdfunding investors to encourage them to make it. Therefore the aim of this paper is to analyze the relationship of continual participation of crowdfunding based on the motivation to secure and keep the investors for crowdfunding. The result shows the intention for continual participation to the crowdfunding influences on enjoyment, familiarity, agency credibility and reward and the group of fund-raising to give the control effect has the meaning difference. That is, this study is expected be used as a basic source to activate the platform of crowdfunding in various fields including culture and art by proposing the participation motivations which influence on funder's intention to continual participation for the crowdfunding.

#### ■B8 Session (Classroom 105): International Business

Chair: Annette Helling-Benze (University of the Sunshine Coast)

B8-1 Global Auto Industry: Sustainability Strategies for Future Growth Minoo Tehrani, Roger Williams University Rawan Bukhamseen, Roger Williams University Francesca Montemarano, Roger Williams University

This research examines various sustainability strategies employed by the leading auto manufacturing companies in Japan, US, and the European Union. The employed sustainable strategies are contrasted and evaluated. The study further investigates the operating environment of Japan, US, and the European Union that have the potential of enhancing sustainable practices. The final part of the research examines the impact of the sustainable practices and sets forth recommendations for future growth.

#### B8-2 GLOBAL ALLI STRATEGIC ANCES IN SERVICE INDUSTRIES

Yuan-Ling Chen, I-Shou University Chiu-Ping Chen, I-Shou University Julia Lin, I-Shou University Yung Chung Wei, I-Shou University

Global partnerships and strategic alliances seem to be the effective strategies for service firms to succeed and sustain in the complex and rapidly-change global environment. Thus, in this study, we aim to identify the key factors of strategic alliance within a dynamic business context by using a multilevel framework based on the individual level, firm level, and industry level. Institutional theory, social network theory, resource-based view, transaction cost economics, and resource dependence theory are drawn to strategic alliances and their management. We adopt institutional theory that pays much attention on the importance of regulative, normative and cognitive forces as critical issues in legal aspect. Next, we use social network theory that emphasizes the significance of individuals' social networks as major determinants in social aspect. Finally, we link resource-based view that focuses the leverage of firms' capabilities as major drivers in economic aspect. We hope that this study will advance the theoretical contributions of the strategic alliance dynamics of global service industries. We can provide insightful suggestions for business practices and government policy.

B8-3 CORPORATE SOCIAL RESPONSIBILITY (CSR): STRATEGIC IMPLEMENTATION AND ONLINE DISCLOSURE OF THE MINING INDUSTRY
Annette Helling-Benze, University of the Sunshine Coast

#### Don Kerr, University of the Sunshine Coast Peter Innes, University of the Sunshine Coast Michael Clements, University of the Sunshine Coast

Implementing Corporate Social Responsibility (CSR) initiatives as part of a company's core strategies and operations helps in establishing a long-term profit orientation instead of short-term profit maximisation. Furthermore, responding to key stakeholder preferences complements effective communication strategies and will translate into positive corporate reputation. As key stakeholders expect relevant and transparent CSR disclosure, proactive communication helps to significantly stabilise trust building which is essential for the longevity of a successful company-stakeholder relationship. In the mining industry, significant environmental degradation is a global problem. We suggest that a well-developed communication policy will help to improve the completeness, transparency, accuracy and credibility of voluntary, non-financial reporting.

#### B8-4 CORPORATE SOCIAL RESPONSIBILITY (CSR): STRATEGIC IMPLEMENTATION AND ONLINE DISCLOSURE OF THE MINING INDUSTRY

Annette Helling-Benze, University of the Sunshine Coast Don Kerr, University of the Sunshine Coast Peter Innes, University of the Sunshine Coast Michael Clements, University of the Sunshine Coast

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#### ■ C8 Session (Classroom 207): Management of Technology and **Innovation**

Chair: Jin-Kwan Lin (Ming Chi University of Technology)

C8-1 A CLOUD COMPUTING TECHNOLOGY FORESIGHT STUDY WITH SCENARIO PLANNING **APPROACH** 

Wei-Hsiu Weng, National Chengchi University Woo-Tsong Lin, National Chengchi University

While the importance and value of cloud computing are gradually being realized worldwide, cloud computing related technologies and the priority of adopting these technologies have so far not been clearly recognized. To fill this gap, this paper focuses on the technology planning strategy of organizations that have an interest in developing or adopting cloud computing related technologies. Based on the scenario analysis approach, a technology planning strategy is proposed. In this analysis, thirty cloud computing related technologies are classified into six strategic clusters, and the importance and risk factors of these clusters are then evaluated under two possible scenarios. The main research findings include the discovery that most cloud user device technologies are rated high to medium in importance and high risk in two different scenarios, and that scenario changes will have less impact on mobile cloud application technologies. These results provide a reference for organizations and vendors interested in incorporating emerging cloud computing related technologies.

#### INNOVATION PERFORMANCE IN INNOVATION NETWORKS: EVIDENCE FROM CHINA

Xueyuan Liu, Wuhan University Wenjing Ding, Wuhan University Xiande Zhao, China Europe International Business School

In innovation networks, firm innovation performance is affected by external tie strength and internal knowledge absorptive capacity. This study aims to empirically examine the path relationship between tie strength, absorptive capacity (ACAP) and firm innovation performance. Based on data from 278 Chinese manufacturing firms, this study demonstrates that tie strength is positively related to innovation performance. We also find that ACAP has a positive impact on innovation performance and it mediates the relationship between tie strength and innovation performance. Then we analyze the effect of ownership and industry, and the results show that in private firms and traditional manufacturers, tie strength has no direct effect on innovation outcomes, but it can influence innovation indirectly through ACAP.

### C8-3 PATENT ANALYSIS OF THE ORCHID INDUSTRY IN TAIWAN Jin-Kwan Lin, Ming Chi University of Technology

To get awareness of technological development of the orchid Industry in Taiwan, the purpose of the research uses patents analysis to explore competitive advantage of the industry. After using proper data collection method, the research has 60 effective patents for analysis. In analyzed data of patents presented that most patents belongs to personal than companies. The patents related to orchid concentrate on the two ends of the value chains of the industry. The findings are worth to pay attention for future competitive advantage of the orchid in Taiwan.

#### ■D8 Session (Classroom 206): Marketing

Chair: Arthur Cheng-Hsui Chen (National Yunlin University of Science and Technology)

D8-1 The Impact of Purchase type on Happiness and Sharing: The Moderating Role of Materialism
Yung-Chuan Huang, Tajen University
I-Ling Ling, National Chiayi University
Chih-Hui Shieh, National Kaohsiung First University of Science and Technology

This study investigates how different types of travel products purchase affect happiness based on the indirect effects gained from consumers in choosing their travel products. First, the comparison of hedonic adaptation between consumers' purchasing travel products and material products and the moderating effect of personal qualities (materialism) are discussed.

This study consists of two experiments. 120 samples were collected for experiment I and 150 for experiment II from common people. The result shows that the degree of happiness obtained from experience products lasts longer than that obtained from material products because of the slower progressive decrease of hedonic adaptation. Moreover, through happiness (mediating variable), consumers are more willing to share the products with other people (experiment I ). Interestingly, those with higher tendency to materialism have more difficulty obtaining feelings of higher happiness from experience products (experiment II). Lastly, explanations and suggestions are provided in this study for the advantages of the choice consumers make, to bring benefits of practice in marketing to people from travel industry

# D8-2 THE EFFECT OF SENSORY CUES AND NEED FOR TACTILE ON PRODUCT EVALUATION Chih-Hui Shieh, National Kaohsiung First University of Science and Technology I-Ling Ling, National Chiayi University Yung-Chuan Huang, Tajen University

In this study, two experiments involving a total of 554 participants were conducted. The first

experiment was intended to compare the effects of single sensory cues (haptic or visual) and multi-sensory cues (haptic plus visual) on product evaluation. Results showed multi-sensory cues led to higher product evaluation than single-sensory cues. The second experiment is to analysis the moderation of need for tactile (NFT) between sensory layer and product attractiveness. Results indicated that multi-sensory cues were more effective than single sensory cues in boosting product attraction, the difference also became significant in the presence of NFT. For less NFT participants who have more product attractiveness than single-sensory cues in the condition of multi-sensory cues, but no significant effect for high NFT participants. Based on research findings, some managerial implications were proposed.

D8-3 The Study of the Relationship between Brand Crisis Type and Response Strategy-Regulatory Focus Perspective
Arthur Cheng-Hsui Chen, National Yunlin University of Science and Technology
Yi-Ling Chang, National Yunlin University of Science and Technology

Brand image is the key asset of a market-oriented company which always strives to improve and protect its brand equity continually. Unfortunately brand-relate adverse events are common and typically highly publicized, which reduce the brand confidence in customers and thus affect the attitude toward brand. This study includes Regulatory Focus (promotion and prevention focus) as customers' orientation and crisis response message framing, to discuss whether customers are affected varies with regulatory focus they adopted between different crisis types (performance-related crisis and values related crisis). And whether the efficacy of persuasiveness is varies with regulatory focus message framing in crisis types. A  $2 \times 2 \times 2$  experimental between subject designs was used to test the hypotheses. University students were recruited via convenient sampling, resulted in 277 valid samples. The subjects were randomly assigned to the eight experimental versions.

The major findings indicated that when a brand performance-related crisis occurs, the adverse influence that prevention focus consumers perceived is huger than promotion focus consumers; whereas when a brand values related crisis occurs, the adverse influence that promotion focus consumers perceived is huger than prevention focus consumers. In terms of a performance related crisis response strategy, the efficacy of prevention message framing is more effective than promotion message; whereas the efficacy of promotion message framing is more effective than prevention message in terms of a value related crisis response strategy. When consumer with prevention focus orientation is under Performance-related crisis condition, the prevention focus message framing will lead to a greater persuasion than the promotion focus message framing; whereas when promotion focus orientation consumer is under Values-related crisis condition, the promotion focus message framing will lead to a greater persuasion than the prevention focus message framing.

- Monday, June 21, 2014, 13:15 pm 14:45 pm
- ■A9 Session (Classroom 106): Accounting and Performance Measure

Chair: Ravi Kathuria (Chapman University)

A9-1 Trilogy of Start-up, Being Mergence and Acquisition, Go into Bankruptcy: The Case of a Start-up High-tech Company Broken-hearted to Insolvency Mei-Hsiu Tsai, National Taichung Institute of Technology Chun-An Li, National Yunlin University of Science and Technology Kun-Mei Pan, National Taichung Institute of Technology

The management of a start-up high-tech business will essentially be facing operating risks of high-tech industries and start-up business. Purpose of this study is based on theoretical basis and tries to analyze the life course of a start-up high-tech company (alias company A). By means of in-depth interviews and counseling process, this study explore about Dr. Yan (alias), the head of A company, discussing following topics he faced and what manners he taken when he managing company A:

- 1. What operational risks are there in a high-tech industry? How can a successful high-tech industry doing to respond? What manners should be taken by company A and Dr. Yan?
- 2. What operational risks are there in a start-up business? How can a successful start-up business doing to respond? What manners should be taken by company A and Dr. Yan?
- 3. The requirements for the high-tech industry start-up phase have basic management systems, internal controls and accounting systems, and how about financing for pipeline? Whether company A take attention and do it?
- 4. When the corporate mergers and acquisitions, what factors may be taken into account by acquirers? Whether company A has acquired conditions?
- 5. Poor management, fail to mergers and acquisitions, companies to enter liquidation bankruptcy phase, how about the statutory liquidation bankruptcy procedure? How about legal liability of the head of company? When the physical liquidation of company A, what problem occurred? After clearing in bankruptcy, which liable for real by Dr. Yan?

Oriented to in-depth analysis through management, accounting, financial, legal and other business practices, the results of this study show:

- 1. An outstanding inventor is essential to the success of high-tech industries but not a sufficient condition. Only is a brilliant inventor, not enough to be a successful operator.
- 2. Characteristics of high risk inherent in the high-tech industry and new career, need more backed up by good management systems. The importance of a strong management team that cannot be ignored, the operator must also personally involve in putting.
- 3. Business related legal issues involved in a wide range, if technology could not understood when starting preventive control, once caught up in the action, when you have to pay a high price, it was too late.

### A9-2 Intellectual Capital Reporting by Qatari Listed Companies Abdulrahman Anam Ousama, Qatar University

The paper aims to examine the extent of intellectual capital (IC) disclosure in the annual reports of Qatari listed companies. IC is divided into the three IC categories; internal capital (INC), external capital (EXC) and human capital (HUC). The sample of the study consists of 43 Qatari listed companies. The data were gathered from the annual reports for the years 2012 using a disclosure index. The disclosure index consists of 101 items that divided into the three IC categories. The study employed a content analysis technique using the disclosure index to analysis the annual reports. An item scores 1 if it is disclosed and 0 otherwise. The obtained data was analyzed using descriptive statistics. The paper found that the Qatari listed companies disclosed, on average, 37 percent (mean of 0.368) on IC information in the annual reports for the years 2012. In addition, the paper found that the means of the extent of disclosures for the INC, EXC and HUC are 0.466, 0.465 and 0.235, respectively. Thus, the INC disclosure is considered to be the highest category of whereas HUC disclosure is the lowest category. The results revealed that Qatari listed company do recognize IC, thus report information about them. The paper provides practical implications to understand the current intellectual capital disclosure (ICD) practices by the Qatari listed companies. Therefore, they can identify the strength and weakness in their ICD practices, thus try to improve it towards greater IC reporting for more transparency and users satisfaction. In addition, the paper provides empirical evidence to the authorities and professional bodies in Qatar on the current ICD practices. Thus, it might be useful in developing framework and guidelines on ICD to enhance its disclosure practices. The paper contributes towards the limited IC literature in GCC in general and Qatar specifically. Furthermore, the paper is considered to be a pioneer to examine the current practices of ICD in the annual reports of the Qatari listed companies. In addition, the paper used whole population of listed companies in Qatar, thus it help in understanding and interpreting the findings.

### A9-3 ALIGNMENT BETWEEN PERFORMANCE METRICS AND BUSINESS STRATEGY: DOES IT IMPACT ORGANIZATIONAL PERFORMANCE?

Ravi Kathuria, Chapman University Lorenzo Lucianetti, Università degli Studi "G. D'Annunzio" di Chieti e Pescara This study establishes that a certain type of performance metrics (operational/financial or strategic/relational) is more suitable for pursuing a particular business strategy—prospector/reactor. Using data from 372 organizations, we test hypotheses about the relationships between types of performance metrics emphasized and 1) structural variables, such as organization size and nature of the organization—manufacturing/service and multinational/domestic) and 2) the type of business strategy pursued. We also investigate the overall organizational performance impact of the fit between the types of performance metrics utilized and the business strategy pursued.

#### ■B9 Session (Classroom 105): Logistics and Inventory Management

Chair: Ching-Chung Kuo (University of North Texas)

B9-1 AN INVENTORY MODEL FOR NON-INSTANTANEOUS DETERIORATING ITEMS WITH PRICE-AND STOCK-DEPENDENT SELLING RATE UNDER PARTIAL BACKLOGGING AND **INFLATION** 

**Kuo-Lung Hou, Overseas Chinese University** Yung-Fu Huang, Chaoyang University of Technology Li-Chiao Lin, National Chinyi University of Technology

This paper presents an inventory model for non-instantaneous deteriorating items with price- and stock-dependent selling rate under inflation and time value of money over a finite planning horizon. In the model, shortages are allowed and the unsatisfied demand is partially backlogged at the exponential rate with respect to the waiting time. We establish the theoretical results and provide an efficient solution procedure to find the optimal number of replenishment, the cycle time and selling price. Then the optimal order quantity and the total present value of profits are obtained. A numerical example and sensitivity analysis will be presented to illustrate the proposed model and particular cases of the model are also discussed.

B9-2 Can customers' active searches for unavailable products replace a supply chain contract?—A numerical approach Hisashi Kurata, University of Tsukuba

In daily shopping, customers who have strong loyalty to a certain product commonly will search for the product even if it is out of stock on the store shelf. Customers who do not have high brand loyalty will occasionally choose a product similar to the preferred product. We extend a traditional newsvendor model in which unmet demand is always lost to a proposed inventory model that, in addition to lost sales, includes the effect of customers' active responses to stockout, such as backlogging, brand switching, and store switching. This study numerically analyzes whether customers' active responses to product stockout can replace a supply chain contract in order to coordinate a two-stage supply chain in which the manufacturer adopts a make-to-order system and only the retailer bears the risk of mismatch between supply and uncertain demand. This study found that a high level of consumer preference for backlogging, brand switching, and store switching can automatically improve the performance of the entire supply chain to the global maximum without a supply chain contract. Based on the numerical examples, we put forth several implications for brand and store management; for example, manufacturers should adjust brand strategy according to the stage of the product life cycle.

#### B9-3 A STUDY OF PLANE BOARDING STRATEGIES IN THE U.S. AIRLINE INDUSTRY Ching-Chung Kuo, University of North Texas Jun Ma, University of International Business and Economics

The purpose of this paper is to provide a comprehensive review of the plane boarding strategies currently adopted by major airlines in the United States. Each of them is defined and graphically illustrated. In addition, a number of new enplaning procedures as well as some realities in plane boarding are discussed. We conclude by highlighting the main contribution of the present study and pointing out several directions for future research.

#### ■C9 Session (Classroom 207): Marketing and Distribution

Chair: Daisuke Amano (Tokyo Metropolitan University)

C9-1 THE INFLUENCE OF PRODUCT LIFECYCLE ON THE DEMAND MANAGEMENT PROCESS IN SUPPLY CHAINS

Natalia Szozda, University of Economics in Wrocław Artur Świerczek, University of Economics in Katowice

The aim of the paper is to examine the influence of the length of product lifecycle on the demand management process in supply chains. In order to meet this aim, empirical research was conducted among 270 supply chain leaders, representing manufacturing and trading companies. Principal Component Analysis (PCA) with Varimax rotation was performed in order to identify the components of the demand management process. The results were described in the context of three groups which were distinguished with regard to the length of lifecycle of the offered products.

C9-2 The formation of Demand Chains driven by Internet of Things and Cloud Computing
Yu Cui, GIFU KEIZAI University
Masaharu Ota, Osaka City University

Today, the overall situation and customer demand that enterprises are facing to have become more and more complicated and diversified. From the mass data that engender everyday and the complication of enterprise information collection channels, we can apprehend at first glance. To obtain information of more amount and better accuracy, most enterprises adopt existing modes and fully launch the marketing engine, contriving to analyze the relationship of acquired information and utilize it to open up their new products or business with the most appropriate way. Nevertheless, after we know the supplier long-term relationship of enterprises developed with customers or users through method or platform of experience, it is not difficult to see that current business mode has undergone far-reaching changes.

Current business or market model require interaction with customers all the time. Therefore, acquired information has to be dynamic; in the meantime, the response of enterprise also has to be real time. And this has changed the existing supply chain operation mode. While the Demand Chain operation mode, which commences from ever changing, individualized and diversified demands of customers and realizes immediate response, update and transformation all the time is developed gradually.

In this study, through literature review and case illustration, we narrate that current market is already mature for the construction of Demand Chain. With the proposal of Matrix which is composed by the degree of Demand Chain Intellectualization and the promotion degree of application of Internet of Things, Cloud computing and other technologies, we make explicit judgment on the application field of 2010s' Demand Chains and the capacity it is supposed to possess.

### C9-3 DEVELOPMENT OF CUSTOMER SATISFACTION FUNCTION BASED ON KANO'S QUALITY MODEL

Daisuke Amano, Tokyo Metropolitan University Yasutaka Kainuma, Tokyo Metropolitan University

To classify quality elements, we can use Kano's models of attractive quality, one-dimensional and must-be quality elements. The models representing the level of sufficiency and the corresponding level of satisfaction show some conceptual correspondence, however, no functional relation has been provided yet. In our study, we suggest the determination method of quality element improvement from the view point of customer satisfaction improvement by identifying the importance level of an

each quality element of a product development and providing the functional relation of quality model. First, we calculate the weight of each quality element in order to capture the degree of importance of the quality elements that will be the product evaluation standard. Then, we apply a method using utility functions as a functional expression of quality model in order to derive the must-be quality, the attractive quality and the one-dimensional quality corresponding to the risk-averse, risk-prone and risk-neutral types. By combining the weight of importance and these utility functions, it is possible to identify the degree of importance and the quality model, based on which, we can derive a customer satisfaction function that represents the level of customer satisfaction. To verify the effectiveness of the proposed method, we conducted a case study regarding the choice of smartphones and confirmed the effectiveness of the proposed method.

#### ■D9 Session (Classroom 206): Strategic Management

Chair: Daniel Prajogo (Monash University)

-1 Functional Integration in recently amalgamated/ de-amalgamated councils
Oscar Imaz-Mairal, University of the Sunshine Coast
Bishnu Sharma, University of the Sunshine Coast
Don Kerr, University of the Sunshine Coast

Local Government Amalgamations and de-amalgamations in Queensland, Australia, have been the cause of public debate at the state, federal and local government level for well over a century, but since the Local Government Reform Commission 2007 and its subsequent implementation on the 15th of March 2008, what was termed "forced amalgamations", the Queensland council/shire landscape dramatically changed from 156 councils to a mere 73. The Liberal-National party electoral promise during the 2012 state government campaign materialised on the 9th of November 2013. The promise was to allow local residents to decide whether to remain amalgamated or return to the structure and identity of what the councils were before. After the public consultation Noosa Shire de-amalgamated from the Sunshine Coast Regional Council, Livingstone Shire Council de-amalgamated from the Rockhampton Regional Council, Mareeba Shire Council de amalgamated from the Tablelands Regional Council and finally Douglas Shire de amalgamated from the Cairns Regional Council. Council structural changes have a profound impact on functional integration, defined here as the level of coordination required to achieve value creation. Value creation in this context, we argue, translates into public value. Experienced local government employees have a clear understanding of the impact that their work has on the communities they serve hence they become the population of this study. A case study exploratory approach aims to discover the factors facilitating and hindering functional integration after a process of amalgamation and de-amalgamation by interviewing employees from one of the above mentioned councils and then from the themes that emerge from the results of the structured interviews develop a survey to obtain confirmation of a generalizable model for functional integration in complex public sector environments.

D9-2 How country of origin affects purchasing intention: the case of mobile phone in Taiwan Qi-Run Qin, National Dong Hwa University Chun-Hsun Chen, National Dong Hwa University Yuh-Yuan Tsai, National Dong Hwa University

Due to the development of information technology, the penetration rate of mobile phone is rapid increasing recently. The consumer behavior and using habit is also changing a lot. The mobile phone is no longer a symbol of social status. It becomes indispensable necessity goods. People may have more than one set of mobile phone.

If you look at different brands in the market, the mobile phones of Galaxy S5, Xperia, Galaxy Note 3, Galaxy S4, iPhone 5s, HTC One, are most likely the similar features in processor, water proof, dust proof and display quality. If this is the case, the consumers will likely include country of origin to consider beside product characteristics of price, appearance and functions. The image of country will accordingly influence buying behavior. For instance, when consumers make purchase for the

electronic products, "made in Japan" will be more welcome than "made in Columbia". Consumers are more sensitive in country of origin in the globalization world. Therefore, country image has been a critical factor when consumers make their purchase decisions.

In order to expedite purchase behavior for mobile phones among diversified brand and different types. Brand image provides an important role for customer to make buying decision. Manufacturers try to relate brand with high quality, reasonable price, and better after service. This would differentiate from other products in market. In consumer point of view, country of origin is also a key consideration during purchase process. In mobile phone case, Samsung and LG represent Korea, Sony represents Japan, and acer and HTC represent Taiwan. However, country of origin has many different interpretations such as "made in", "assembled in", "designed in"...etc. This study will take two dimensions of "country of manufacture" and "country of brand" for research purpose.

### D9-3 Contrasting the strategic drivers of responsive versus efficient supply chain management Daniel Prajogo, Monash University

Many studies have examined the relationship between supplier management and firms' (buyer) performance; however, the question remained is what motivates firms in engaging various supplier management practices? In other words, what are the antecedents or drivers of supplier management practices? Using strategic choice theory as a theoretical lens, this paper examines the two-staged antecedents of supplier management practices beginning with managerial perceptions on business environments (in terms of dynamism and competitiveness) where the firms operate which determine the competitive strategies pursued in the firms' operations (in terms of flexibility and low cost). These two strategies reflect the contrasts between responsive versus efficient supply chain proposed by Fisher's (1997)\*. These competitive strategies are deployed into different of supply chain practices, and this study is focused on three supplier management practice, namely supplier assessment, strategic long-term relationship, and logistic integration. We collected the empirical data for this study from 232 managers of Australian manufacturing firms. The findings demonstrate that dynamism and competitiveness show an exclusive relationship with flexibility and low cost strategies respectively. Furthermore, flexibility drives firms to develop strategic long term relationship as well as building logistics with their suppliers. On the other hand, low cost strategy leads to supplier assessment and monitoring as well as logistics integration. Overall, this study provides an insight for building the alignment between business environment and competitive strategies and deploy the strategy into specific configurations of supply chain management practices.

#### ■Monday, June 21, 2014, 15:00 pm - 16:30 pm

#### ■A10 Session (Classroom 106): Crisis Management and BCP

Chair: Hirotomo Soeta (Tokyo Metropolitan University)

### A10-1 Supply chain resilience to natural disasters Yoshiki Matsui, Yokohama National University

Most companies and organizations have incorporated the impact of various disasters and crises on their supply chain design in the name of risk management, business continuity planning, crisis management, and disaster recovery planning. Since the Great East Japan Earthquake on March 11, 2011, Most Japanese companies and organizations have been struggling with the recovery of their businesses and reconsidering their supply chains. This study intends to show some ideas on how to develop resilient supply chains that are good at coping with disasters and crises, focusing on the location of production and inventory. This study starts with reviewing the frameworks of supply chain management and the new concept of the resiliency of supply chain, and identifies the key elements for resilient supply chain. The rationale for the elements is found from the various sources such as journal articles, press information, and the interviews with managers responsible for restructuring their supply chains. Facing with high uncertain in supply, companies should diversify the risk of

supply chain disruption and design agile supply chains. They need to build risk and crisis management capabilities under the leadership of top management to formulate their business continuity planning. Key elements for resilient supply chains are redundancy and flexibility as well as the change of organizational culture. The redundancy orients toward risk diversification by carrying excess inventory at different locations, securing second sources, and diversifying supply sources. Companies and organization can enhance their flexibility by adopting standardized processes, changing sequential processes into parallel processes, and adjusting their procurement strategy with the relationship to suppliers, which contribute to increasing their agility.

## A10-2 Development of Logistics Model for Disaster Relief Operations Hirotomo Soeta, Tokyo Metropolitan University Yasutaka Kainuma, Tokyo Metropolitan University

On March 11, 2011, the Great East Japan Earthquake hit Japan. Through the earthquake, awareness of disaster prevention has been increasing in Japan. Also, in logistics field, a lot of studies in transportation and delivery in disaster are conducted and it is subject for measures in instance where relief goods do not reach. In addition, it can be said in addition to the earthquake level of unexpected, there is no organization that management of the earthquake at the time, much confusion has occurred in the recent disaster. In this study, we focus on the relationship between the shelter and municipal level collect point. The purpose of this study is to propose a logistics model that minimizes unsatisfied demand from the victims in the chaos of disaster. In particular, since there is variety of goods in the shelter, meeting its demand is required, we propose a model using an idea of multi-commodity network flow problem. In addition, to meet the demand of victims equally, we incorporated a constraint on equality. In order to confirm the proposed logistics model, a case study is carried out by simulations.

In particular, through this disaster, we came to be cast again the importance of management organization at the time of the earthquake. However, there is no such an organization in Japan, it can be said that it was one of the causes of the turmoil of the recent earthquake. In the United States Federal Emergency Management Agency (FEMA) is installed, management organization at the time of the disaster has been established. So, on the assumption that there is a management organization like this in the present, we have built a disaster relief model. Then, we focus on the number of evacuees in Soma City, Fukushima Prefecture, which was suffered by the Great East Japan Earthquake. Finally, carried out numerical experiments and the effectiveness of the proposed model was confirmed.

#### ■B10 Session (Classroom 105): Decision Analytics

Chair: Watchareephorn Chaimongkol (National Institute of Development Administration)

### Applied Analytics in Manufacturing: a Case Study in the Automotive Industry Jongsawas Chongwatpol, National Institute of Development Administration

The automobile industry has become more and more complex, involving a variety of sub-sectors across the supply chain. The pressure on the production business is continually increasing. Many manufacturing enterprises are facing challenges to generating good demand forecast, effectively managing inventory, and diagnosing the root causes of defects. In this study, a case is conducted for how analytics can help automotive industry leaders tackle those challenges and pressures and make better strategic decision. By validating this framework with several scenarios in an automobile manufacturing company in Thailand, the results demonstrate the practical validity of our approach.

## B10-2 EVALUATING THE CRITERIA OF SOCIAL MEDIA NETWORK USERS- STUDY BASED ON FACEBOOK, TWITTER AND PINTEREST Enmi Yau, Feng Chia University Chen Yu, LinFeng Chia University

Purpose- For the past several years SMN has become a prevalent business tool and a global phenomenon. Since 2010 SMN has doubled in used totaling 1.82 billion users. It is of increasing importance for SMN providers to identify their customer's major criteria and sub-criteria of usage and to continuously improve overall performance. This paper will discuss the findings of the AHP method applied; qualitative research is conducted in order to states the factors applied in AHP method

Design/methodology/approach- The research model is validated empirically using data from twenty valid questionnaires. This research interviews SMN users who have experienced in using three SMN websites (i.e. Facebook, Twitter and Pinterest). AHP is applied to assess the relationship between relevant criteria that these websites have provided.

Findings- Twenty valid questionnaires have been received from users of these three SMN websites. The first data was run as the overall opinion from these three websites and the following three where run individually. Consequently, the result showed that social-integration plays an important role for Facebook users, whereas self-integration plays a critical role for Twitter and Pinterest users.

Practical implication This research offer a pattern for future researchers who are interested in gaining a competitive advantage in understanding the core value that each websites provides to its users. This methodology can be applied in the evaluation of future SMN websites to deliver new market analysis. However, it is essential that practitioners spend time understanding which services match their personal and professional needs.

Originality/Value- By identifying the most essential criteria and sub-criteria, this paper delineates the social and personal aspects that are relatively important to SNM providers.

### B10-3 Composite Forecasts Accuracy for Automobile Sales in Thailand Watchareephorn Chaimongkol, National Institute of Development Administration

In this paper we compare the statistical measures accuracy of composite forecasting model to estimate automobile customer demand in Thailand. A modified simple exponential smoothing and autoregressive integrate moving average (ARIMA) forecasting model is built to estimate customer demand of passenger cars, instead of using information of historical sales data. We evaluate our forecasting model by comparing forecasts with actual data using six accuracy measurements, mean absolute percentage error (MAPE), geometric mean absolute error (GMAE), symmetric mean absolute percentage error (sMAPE), Mean absolute scaled error (MASE), median relative absolute error (MdRAE), and geometric mean relative absolute error (GMRAE).

#### ■C10 Session (Classroom 207): Logistics and Inventory Management

Chair: Prabir Bagchi (George Washington University)

C10-1 Effect of Purchasing Size Variability on Inventory Performance: Do More Customers Buy Less or Do Fewer Customers Buy More?
Hisashi Kurata, University of Tsukuba

Retail sales are affected by two factors: the arrival rate of shoppers and the purchase size of each shopper. By providing an inventory model that can distinguish the effect of the variability of customers' arrivals on inventory cost from that of the purchase size per customer, we propose how management can adequately deal with purchasing size variability and thereby improve retail efficiency according to the firm's managerial goal, with a focus on either average total sales or average sales per customer. When a business focuses on average total sales, we show that a homogeneous purchasing size is preferable; in other words, the purchase size per shopping occasion should be controlled to be as close to the average level as possible. However, when a business focuses on maintaining average total sales at a certain level, we show that large or small shopping size per customer may be preferable for retailers. This study also addresses the relationship between the retail decision to sell either more to fewer customers or less to more customers and customers' shopping

behavior. Based on the analytical results, we present managerial implications regarding marketing, such as package designs and volume discounts.

#### C10-2 PRICE-SETTING NEWSVENDOR MODELS FOR INNOVATIVE PRODUCTS AND ITS **EXTENSION TO THE TWO-ECHELON SUPPLY CHAIN** Xiuyan Ma, Yokohama National University

In this paper, price-setting newsvendor problems for innovative products are analyzed. Because the product is new, no relevant historical data is available for statistical demand analysis. Instead of using the probability distribution, the possibility distribution is utilized to characterize the uncertainty of the demand. We consider innovative products whose life cycles are expected to be shorter than the procurement lead times. Determining optimal order quantities and optimal retail prices of such products is a typical one-shot decision problem for a retailer. Therefore, a price-setting newsvendor model for innovative products is proposed based on the one-shot decision theory (OSDT). With the OSDT, optimal order quantity and selling price are obtained simultaneously. As an extension, a two-echelon supply chain with one manufacturer and one retailer is studied. The proposed models are scenario-based decision models which provided a fundamental alternative to analyze issues of supply chain management for innovative products.

C10-3 Role of Logistics Integration for Supply Chain Excellence Prabir Bagchi, George Washington University Arshad Alam, Prairie View A&M University

Academics and practitioners have extolled the virtues of implementing supply chain management concepts for over 50 years. Practitioners in turn have also realized that supply chain performance is critical to enhanced organizational competitiveness and success. What is not so clear is how to implement the SCM concepts for maximum benefit. This paper analyzes the impact of individual supply chain related factors on a firm's supply chain performance. Using data collected on various supply chain variables and performance measures from 187 organizations in Brazil, Korea and India, we establish links between supply chain factors and firm performance. We also develop a composite variable, supply chain competency, as an overall measure of the quality of a firm's supply chain and demonstrate its effect on firm supply chain performance. We further show that among the various supply chain factors logistics integration has the greatest bearing on performance and acts as a mediating variable between individual supply chain variables and performance.

#### ■D10 Session (Classroom 206): Marketing

Chair: Hideaki Kitanaka (Takushoku University)

D10-1 Alliance Outcomes: What Really Matters? Li-Wei Wu, Tunghai University Chung-Yu Wang, National Kaohsiung University of Applied Sciences Ya-Ting Wu, Tainan University of Technology

A central concern of the current study is how to manage co-production to enhance alliance outcomes. Meanwhile, the current study underscores the critical role of partner similarity in co-production, absorptive capacity, and groupthink, and highlights the positive and negative ways in which partner similarity influences these variables. Thus, it is hypothesized that:

H1: Co-production will have a positive effect on alliance outcomes.

H2: Partner similarity will have a positive effect on co-production.

H3: Partner similarity will have a positive effect on absorptive capacity.

H4: Absorptive capacity will have a positive effect on alliance outcomes.

H5: Co-production will have a stronger positive effect on alliance outcomes when absorptive capacity is high than when absorptive capacity is low.

H6: Partner similarity will have a positive effect on groupthink.

H7: Groupthink will have a negative effect on alliance outcomes.

H8: Co-production will have a stronger positive effect on alliance outcomes when groupthink is low than when groupthink is high.

The proposed model was tested through a structural equation model by using LISREL 8.52. The reported findings support our argument that (1) alliance outcomes can be improved through coproduction, (2) partner similarity simultaneously affects co-production, absorptive capacity, and groupthink, and (3) absorptive capacity positively affects alliance outcomes and significantly increases the effect of co-production on alliance outcomes. By contrast, groupthink negatively affects alliance outcomes and significantly reduces the effect of co-production on alliance outcomes.

Understanding the Pricing Decisions in Taiwanese Metropolitan Business Hotels
Wei-Ting Hung, Vanung University
Jui-Kuo Shang, Jinwen University of Science and Technology
Fei-Ching Wang, Jinwen University of Science and Technology

This study applies quantile regression approach to analyze the pricing decisions in Taiwanese metropolitan business hotel industry and provide a more complete characterization of the determinants of the business hotel prices at different quantiles. Empirical data are drawn from the Internet survey of 199 Taiwanese metropolitan business hotels. The results indicate that room size, swimming pool and fitness center are the main attributes of room rates. However, the closeness to highway, SPA and meeting facilities are not crucial from the price perspective. Moreover, restaurant is the main determinant of hotel price for mid-price business hotels. Budget hotels enjoy the benefit of easy public transportation accessibility in determining hotel price. The empirical results are expected to provide hoteliers with useful information in developing pricing strategies.

D10-3 A Study of relationship among Customer Evaluation for Employees, Customer Satisfaction, and Customer Behavioral Intentions in Service Encounter Hideaki Kitanaka, Takushoku University Yoshiki Matsui, Yokohama National University Osam Sato, Tokyo Keizai University

The purpose of this study is to examine empirically the relationship among customer evaluation of employees, customer satisfaction, and customer behavioral intentions in service encounter. Service encounter is a dyadic interactive process between a company as a service provider and a customer as a consumer. Managing service encounter is considered as one of the most important managerial tasks for a company because the degree of managerial capabilities of service encounter affects company's overall performances, such as revenue growth or profitability.

In service encounters, employees are on the front line of services against customers. During and after service encounters, customers will develop evaluations for contacted employees. Such evaluations will affect customer satisfaction. Customer satisfaction, in turn, will affect customer behavioral intentions toward the services in the future. It would be beneficial for a company to understand the relationship among these three elements in order to manage service encounters effectively and favorably.

A web-based survey on banking services was conducted, and using empirical data obtained from the survey, we have conducted a series of data analyses. A preceding factor analysis of customer evaluation for employees has identified four factors: professional, operational, emotional, and interpersonal. A subsequent factor analysis for customers' behavioral intentions has identified three factors: maintain, claim, and deepen. Using these identified factors and several hypotheses we posed regarding the three elements, we have developed a structural equation model to fit the survey data. The analysis revealed that emotional and interpersonal factors affect customer satisfaction and customer satisfaction leads to maintain as customer behavioral intention.



### オペレーションズ・マネジメント&ストラテジー学会

#### Background

Operations Management is to contribute to the firm, environment, and society through the efficient and effective management of operations in product development, procurement, production, distribution, and sales. The Japanese production management concepts such as JIT and TQM have been widely applied throughout the world, and its fundamental ideas are now incorporated into a research and teaching discipline of Operations Management.

#### Mission and Purpose

The mission of JOMSA is to play a central role in the research and education of operations management in Japan, and is to promote both interdisciplinary research of various engineering fields related to production and managerial research for decision makings in operations with global perspectives. JOMSA also promotes diverse fields related to operations such as supply chain management and service sciences. The purpose of JOMSA is to further the understanding of manufacturing management principles and to establish an academic discipline of operations management that will lead to the development of a new made-in-Japan theory of manufacturing.

#### Networking

OMSA is a place in Japan to exchange information on research, teaching, and practices of operations management including operations strategy. JOMSA also commits to promoting an alliance with Production and Operations Management Society (POMS), European Operations Management Association (EurOMA), and operations management related academic societies in Asia, and aims for contributing globally to the advancement of the academic discipline and the industry.

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