2017 IPN CONFERENCES
OSAKA, JAPAN

OSAKA, JAPAN
17-18 NOVEMBER 2017

Welcome to IPN Conferences 2017

Dear Professor, Dr and distinguished delegates,

Welcome to the IPN Conferences 2017 in Osaka, Japan. On behalf of *IPN Education Group*, I would like to thank all the Conference Chair, Program Chairs and the Technical Committees. Their high competence and professional advice enable us to prepare the high-quality program. For the participants, we hope all of you have a wonderful time at the conference and also in Osaka, Japan.

We believe that by this excellent conference, you can get more opportunity for further communication with researchers and practitioners. For the conferences **ICAAA 2017, ICEBS 2017, ICBER 2017, ICHLST 2017, ICHSS 2017 AND AICITSE 2017** more than 96 submitted papers have been received and 75 papers have been accepted and published finally.

In order to hold more professional and significant international conferences, your suggestions are warmly welcomed. And we are looking forward to meet you again next time.

Best Regards,
Thank you.

Yours Sincerely,

Datin MZ Zainab
Director – Conference Management IPN Education Group
Chairman, IPN Conferences 2017 Osaka, Japan

Message from IPN Honorary Advisor

On behalf the IPN Education Group, it is my privilege to welcome you to the IPN Conferences Osaka, Japan 2017. IPN is an independent, non-political, non-governmental organization of distinguished scientists dedicated to advancing science around the world. We aim to help scientists and researchers to publish their findings in scientific journals and to promote and help to organize worldwide conferences. We believe that has no boundaries, regardless of the great distances between countries and continents. Thus IPN welcomes contributions from researchers from all concern irrespective to the race, colour, religion and nationality.

Best Regards

Prof. Dr. Abdel Rahman Mohammad Said Al Tawaha
Honorary Advisor IPN Education Group
IPN Conferences 2017 Osaka, Japan

About IPN Education Group

The IPN Education Group is a non-profit international association dedicated to the promotion of international education and university cooperation in the field of Business, Art, Social Science, Management, Education, Science, Technology, Engineering and any other related field.

Through the organization of different international events, it brings together institutions, bodies and organizations from different countries of the world for discussion and cooperation   IPN Mission is to promote and enhance the dialogue in education among the institutions devoted to field mentioned above through:

- Promotion of best practice standards in the service of international education.
- The facilitation of relevant forums, training and information exchange.
- Creation and dissemination of knowledge; exert an influence in public policy.
- Production of publications used as a database document for research works, projects and innovation activities held on the international education field.

IPN believes that this is best achieved through international cooperation and promotes the development of closer links among relevant institutions and individuals around the world. IPN supports that such international cooperation can help countries learn from each other and promotes the dissemination of scientific and engineering activities. IPN intends to achieve the mentioned objectives and get an international visibility by the organization of international conferences and by interacting with public and private organisms from all parts of the world.

www.ipneducationgroup.org
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ANNOUNCEMENT

All accepted papers will be published in:

- World Applied Sciences Journal (WASJ) (online issue ISSN: 1818-4952) (ERA JOURNAL)
- World Journal of Medical Sciences (WJMS) (ISSN: 1817-3055) (ERA Journal
- Advances in Natural and Applied Sciences (ANAS) (ISSN:1995-0772) (H Index 16)(Scimago Journal)
- International Journal of Administration and Governance (IJAG) (ISSN 2077-4486)(Peer Review Journal)
- Research Journal of Social Sciences (RJSS) (ISSN:1815-9125) (Peer Review Journal)
- Journal of Industrial Engineering Research (JIER) (ISSN:2077-4559)(Peer Review Journal)
- Journal of Applied Science Research (JASR) (ISSN: 1819-544X)(Scimago Journal)
- Science International Journal (SI) (ISSN: 1013-5316)(ISI Journal Web of Science)
- International Journal of Applied Engineering Research (IJAER) ISSN of 0973-4562(Scopus Journal)
- International Journal of Advanced and Applied Sciences (IJAAS) (ISI/Thomson Reuters Web of Science Core Collection) (online issue) (ISSN:2313-626X)
- Journal of Engineering and Applied Sciences (JEAS) ISSN: 1816949X (Scopus Journal)
- ADVANCED SCIENCE LETTERS ISSN: 1936-6612: EISSN: 1936-7317(Scopus Journal)

One Best Presenter Award will be selected from each oral session. The Certificate for Best Presenter award will be awarded after presentation session.

KEYNOTE SPEAKER:

Dr. Muhammad Khalil Omar
Universiti Teknologi MARA

Dr. Muhamad Khalil Omar is a Senior Lecturer of Human Resource Management (HRM) at the Faculty Business & Management, Universiti Teknologi MARA (UiTM), Puncak Alam since 2011. Dr. Muhamad Khalil has been teaching and tutoring undergraduate and postgraduate students, as well as assessing and examining final examination for Strategic Human Resource Management, Customer Relations Management, Research Methods, Human Resource Development, Recruitment & Selection, Performance Management, Human Resource Management and Technology, Introduction to Human Resource Management, Management of Change, Organizational Development, Organizational Behaviour, Principles and Practice of Management, Principles and Practice of Marketing. He is also Resource Person for Strategic Human Resource Management & Customer Relations Management. He has been involved in new program development and curriculum review for Master in HRM, Master in Business Management and Bachelor of HRM as committee member. He is also supervising, co-supervising and examining thesis for Bachelor Degree, Master Degree and PhD students. Dr. Muhamad Khalil is also active in various associations. He is Senior Member of International Economics Development Research Center (IEDRC) and Member of Malaysian Institute of Management (MIM). In addition, he is also Certified Assessor Recognition of Prior Learning, Human Resource Development Fund (HRDF) and the Great Britain College Consortium. He is also an active member in Editorial Board Member of American Journal of Applied Psychology and Asian Social Science (SCOPUS – Q2). Lastly, he is a Paper Reviewer Committee for IPN Education Group. Besides his duties in UiTM, Dr. Muhamad Khalil is Curriculum Advisor for Diploma in Business and Management and Academic Advisor for Human Resource Management for Intec Education College (INTEC). He is also an External Examiner of Open University Malaysia (OUM). Dr. Muhamad Khalil is also active in activities outside the realm of academic. He is a Fellow of CEO@Faculty Programme 2.0 organised by Ministry of Higher Education, Malaysia. He is also Advisor for Human Resource Management Students Society (2014 & 2015), Trainer/Facilitator/Speaker for Modul Kemahiran Insaniah Kementerian Pendidikan Malaysia, Career Grooming, Personality Enhancement Module and Community Empowerment Module for Health Education Department of Ministry of Health. In addition, he is a certified trainer for SPSS Analysis Module for Institut Pendidikan Neo UiTM. He is also active in student activities. He is the trainer for Participants Development Program and Hasta La Vista Modules for Human Resource Students Society (HURES) UiTM, Advisor for MAB (Malaysian Association for the Blind) as Adopted NGO by HURES as well as Advisor for UiTM Entrepreneur-Charity Fest 2015. Dr. Muhamad Khalil received Bachelor's degree from Universiti

Kebangsaan Malaysia (UKM) in Accountancy, an MBA from Universiti Putra Malaysia (UPM) and his Ph.D. from the Universiti Malaya (UM) in Human Resource Management. His thesis is titled 'Work Status Congruence, Work-Related Attitudes, and Satisfaction with Work-Life Balance of Services Employees in Malaysia'. Dr. Muhamad Khalil has written and co-written in total 53 articles in various journals and conference proceedings, including International Journal of Economics and Financial Issues, Advanced Science Letters, International Review of Management and Marketing, Global Review of Accounting and Finance and others. On top of that, he has been involved in 10 research grants, nationally and internally. In terms of achievement, he has won the Best Paper Award at International Conference on Business and Social Sciences 2017, Seoul, Korea, Journal Best Paper from Global Review of Accounting and Finance, World Business Institute, Australia and Best Presenter Award at 2nd International Conference Statistic, Accounting and Management 2016 Kuala Lumpur. At UiTM level, he was awarded Excellence Service Award (Anugerah Perkhidmatan Cemerlang - APC) in 2015, won Silver Medal at UiTM Research, Invention, Innovation and Designs (RIID2013), won Bronze Medal at UiTM Research Innovation Symposium Exposition (RISE 2015), and won 3 Bronze Medals at UiTM International Business Innovation, Invention and Design (IBIID 2015).

Abstract

Turnover Intention among Factory Workers in Malaysia: Factors That Matter

Work-life balance, job stress, reward system and turnover intention are some essential elements in a working environment. To a certain extent, some of these elements are prerequisites to job performance. Talent retention is of particular concern to any organization due to globalization, the skills shortage and rapidly advancing technology. Work-life balance represents the dynamic between working life and personal life. Meanwhile job stress requires the employees to resolve job conflict, as unresolved job stress might lead to unproductive results. Reward system is positive outcomes that are earned as a result of an employee's performance. Lastly, turnover intention can be defined as employee's thoughts of quitting their job and an intention to seek out another job outside of the organization. Employee turnover has significant costs and negative consequences for organizations. Far from being a liability, the greatest asset any business has is its employees. And like any asset, employees and talents need to be invested in. However, current statistics show voluntary turnover was the highest among manufacturing workers in Malaysia as compared to other industry. Therefore, the main objective of this study was to investigate the effects of work-life balance, job stress, and reward system towards employees' turnover intention. This study involved 100 respondents from two different factories of a manufacturing company located in Klang Valley, Malaysia. The respondents were randomly selected from various departments. Results indicated that job stress was the most significant factor of employees' intention to quit, followed by the reward system. The implication of this study is that organization should take appropriate action in managing their employees' stress as well as offering an attractive rewards in order to retain their talented staffs hence maintaining the company's stability and competitiveness. Future research should include other factors like organizational politics and downsizing that might influence the turnover intention.

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INSTRUCTION FOR ORAL PRESENTATION

Devices Provided by the Conference Organizer:

- Laptop (with MS-Office & Adobe Reader)
- Projector & Screen
- Laser Sticks

Materials Provided by the Presenters:

- PowerPoint or PDF files

Duration of each Presentation (Tentatively):

- Regular oral presentation: about 15 minutes (including Q&A)
- Keynote speech: about 40 minutes (including Q&A)

Notice: Please keep your belongings (laptop and camera etc) with you!

During registration:

Original Receipt
Representative / Pass Card with lanyard
Printed Program
Lunch Coupon
Participation Certificate (collected from Session Chair after the session)
Conference Bag

**IPN Conferences 2017 Osaka, Japan
Conference Program**

November 17, 2017	Venue: **Lobby Hotel**	0900 - 1100	Registration	
November 18, 2017	Venue: **Opera**	0845 - 0930	Opening Remarks & Plenary Speech	**Opening Remarks & Keynote Speaker**
		0930 - 1000	Group Photo and Coffee Break	
	Venue: **Opera**	1000 – 1300	Session 1	
	Venue: **Seine**	1000 – 1300	Session 2	
	Venue: **Osaka Kitchen**	1300 – 1400	Lunch	
	Venue: **Opera**	1400 – 1600	Session 3	
	Venue: **Seine**	1400 – 1600	Session 4	
	Venue:	1600 – 1630	Coffee Break	
	Venue: **Opera**	1630 - 1830	Session 5	
	Venue: **Seine**	1630 - 1830	Session 6	

Session 1
Time: 1000 - 1300
Venue: **Opera Room**
Session Chair: **Dr. Muhamad Khalil Omar & Dr. Panlayamon Sinnang**

No	Paper ID	Presenter
1	026-jpn	**The study of production and sales of Lao-Khrung woven cloth products: the case of Punumron community, Dan Chang district, Supanburi province.** **Rachadaporn Boonruang** *Phranakhon Rajabhat University, Bangkok, Thailand.*
2	004-jpn	**School Based Assessment: Teachers and Students' Views on the Application of Promoting Higher Order Thinking Skill** **Nurulwahida Hj Azid @ Aziz,** Mardzelah Makhsin & Rozalina Khalid *Universiti Utara Malaysia, Malaysia*
3	028-jpn	**Creating Political Strengthening of Dr. Mahathir Mohammad** **Rawikarn Amnuay** *Phranakhon Rajabhat University, Bangkok, Thailand.*
4	052-jpn	**Microcomputer-Based Laboratory (MBL) System with Automated Measuring Approach for Basic Electronics** **Abdullah N.S.Y.,** M.Saufi N.S, Yaacob M.I.H *University Pendidikan Sultan Idris, Malaysia*
5	036-jpn	**On the Dichotomy Between Natural and Artificial Languages** **Alan Reed Libert** *University of Newacastle, Australia*
6	006-jpn	**Are Male or Female Learning Agents Preferred by Students?** Choo-Kim Tan, **Choo-Peng Tan ,** Wern-Lin Yeo *Multimedia University, Malaysia*
7	039-jpn	**Relationship between Emotional Intelligence and parenting style on Student Academic Achievement at Hulu Terengganu District** **Nor Aizal Akmal Binti Rohaizad,** Norly Binti Jamil and Azlina Binti Mohd Kosnin *University of Malaysia Terengganu, Malaysia*
8	002-jpn	**Taking Care of Myself: Role of Self-Care in Management of Hypertension among Thai Older Adults with Hypertension** **Seesawang J.,** Thongtang P. *Prachomklao College of Nursing, Phetchburi Province, Thailand*
9	032-jpn	**Application of Rasch Model Measurement in the Content Validation of the Intention to Stay Scale (ITSS) among Medical Academics at Public Universities** **Wan Ismahanini Ismail,** Roziah Mohd. Rasdi, Rahinah Ibrahim, Bahaman Abu Samah *Universiti Putra Malaysia, Malaysia*

10	045-jpn	**A Study on the Supporting Activities of Short Track Speed Skaters' Parents from the Perspective of Educational Enthusiasm** **Park, kwang-ho,** Won, young-shin, Kim, ji-hwan *Yonsei University, Korea*
11	016-jpn	**Participatory Knowledge Management in History: Case study in Float Selling Culture of Mon Community in Bansaladeang Nuea, Samkhok, Pathumthani Province** **Wanida Siriworasakul**, Supinthakan Rawangwongsaa, Lerssuk Puttarasirimetagoon *Phranakhon Rajabhat University, Bangkok, Thailand.*
12	005-jpn	**Students' Perception towards Learning Agents' Behaviours** **Choo-Kim Tan,** Wern-Lin Yeo, Choo-Peng Tan, Sook-Ling Lew, Noraini Binti Idris *Multimedia University, Malaysia.*

Session 2
Time: 1000 - 1300
Venue: **Seine Room**
Session Chair: **Assoc. Prof. Dr. Jackie Urrutia & Prof. T. Yuri M Zagloel**

No	Paper ID	Presenter
1	042-jpn	**Improvement Priorities: Public Hospital Service Quality** M. Dachyar; Farizal; **Alicia Ti** *Universitas Indonesia, Indonesia*
2	035-jpn	**Analysis of Factors Affecting Shareholder Value Creation Case Study of SOE in Indonesia** **Farah Margaretha Leon** and Almira *Business Universitas Trisakti Jakarta, Indonesia*
3	002-aicitse	**Strategy Design of Motion Estimation for the Image Stabilizer** **Shyang-Jye Chang** & Ray-Hong Wang *National Yunlin University, Taiwan*
4	041-jpn	**Designing Price Stability Model of Red Cayenne Pepper Price in Wonogiri District, Centre Java, Using ARCH/GARCH Method)** Fauzia Dianawati, **Riska Widyawati Purnomo** *Universitas Indonesia Depok, Indonesia*
5	049-jpn	**Industrial Logistics Performance of Thai Industry** V.Jangkrajarng, A.Sopadang, K.Y.Tippayawong, W.Manopiniwes, S.Santiteerakul, **S.Ramingwong*** *Chiang Mai University, Thailand*
6	018-jpn	**Knowledge Management to Boost Productivity in Manufacturing** **M.A.Mansor,** A.R.Ismail, N. N. NorHamran, M. S. Sarifudin *University Malaysia Pahang, Malaysia*
7	046-jpn	**Building a Total Quality Management Model for Healthcare Industry** **Jonny**, T. Yuri M. Zagloel *University of Indonesia Jakarta, Indonesia*
8	051-jpn	**A Multi-Objective Optimization with Time Value of Money Consideration Using Genetic Algorithm in a Three-Echelon Supply Chain Model** **Putra Utama,** T. Yuri M Zagloel, Zulkarnain *Universitas Indonesia Jakarta, Indonesia*
9	003-aicitse	**Malware Classification by Ensemble Application of Convolutional and Recurrent Neural Networks** **Hae-Jung Kim** *Kyungil University, Korea*

10	043-jpn	**Evaluation of Four Wheeled Vehicle Student Driver Adaption's On Right & Left Steering Wheel Through The User Experience Approach** Inaki Maulida Hakim, **Ferdiansyah Pratama Putra** *Universitas Indonesia Depok, Indonesia*
11	033-jpn	**Estimation of PM_{10} from Exhaust and Non-exhaust Emission in Traffic Area, Klang Valley, Peninsular Malaysia using Air quality Dispersion Modeling** **Rasheida E. Elhadi,** Ahmad Makmom Abdullah[*], Abdul Halim Abdullah, Zulfa Hanan Ash'aari, Loi Kok Chng *Universiti Putra Malaysia, Malaysia*
12	054-jpn	**The Effect of Shell Local Deviation on Pressure Vessel Structure with Stress Analysis Finite Element Method** **Barkah Fitriyana,** Jos Istiyanto , Mustasyar Perkasa *Universitas Indonesia Depok, Jawa Barat, Indonesia*

Session 3
Time: 1400 - 1600
Venue: **Opera Room**
Session Chair: **Dr. Nurulwahida Hj Azid @ Aziz & Dr. Alan Libert**

No	Paper ID	Presenter
1	009-jpn	**Local Homestay Operator Dillema: Business Intention or Family Intention** **Merlyn Rita Buncha**, Sidah Idris, Rostika Petrus Boroh, Rozaidy Mahadi *Universiti Malaysia Sabah, Malaysia*
2	019-jpn	**Correlation between Sun Protection Factor and Acacia Catechu heartwood** Narongrit Lahpun, Rachadaporn Boonruang, Butsakhon Leungthongkul and **Oraphan Anurukvorakun** *Phranakhon Rajabhat University, Bangkok, Thailand.*
3	040-jpn	**Asserting Effects of Recognition and Rewards, Work Life Balance and Internal Communication towards Employee Engagement among Employees of a Malaysian Engineering Company** **Noor Azura Dahalan**, Muhamad Khalil Omar, Dayang Nailu Munna Abg Abdullah, Ridhawati Zakaria, Hairun Nafiza Abdullah *Universiti Teknologi MARA, Malaysia*
4	027-jpn	**Political Stability of Thai Leaders during World War I and World War II** **Shanasuek Wisetchai** *Phranakhon Rajabhat University, Bangkok, Thailand.*
5	012-jpn	**Personality traits, job satisfaction and intention to stay among spa therapists in Malaysia** **Nor Fairuz Syazana Nor Fauzi**, Raemah Abdullah Hashim *Open University Malaysia, Kuala Lumpur, Malaysia*
6	007-jpn	**Identifying the Level of School Financial Management among Primary School Headmaster: A Case Study in The State of Kelantan and Terengganu, Malaysia** **Siti Noor Ismail**, Fauzi Hussin, Yahya Don, M.S. Omar-fauzee, Abdull Sukor Shaari *Universiti Utara Malaysia, Malaysia*
7	037-jpn	**The Role of Green Intellectual Capital on Business Sustainability** **Muhamad Khalil Omar,** Yusmazida Mohd Yusoff, Maliza Delima Kamarul Zaman *Universiti Teknologi MARA, Malaysia*
8	017-jpn	**Model and Structure of Government in Comparison between Government of Thailand and Myanmar** **Assistant Professor WatcharinIntaprom** *Phranakhon Rajabhat University, Bangkok, Thailand.*

Session 4
Time: 1400 - 1600
Venue: **Seine Room**
Session Chair: **Assoc. Prof. Dr. Flora Elvistia Firdaus & Dr. Muhamad Arifpin Mansor**

No	Paper ID	Presenter
1	004-aictse	**Design of DWT Based Image Compression Technique for Wireless Sensor Network Applications** **Prayoth Kumsawat** and Tanasan Srikotr *Suranaree University of Technology, Thailand*
2	038-jpn	**Analysis of Outpatient Service Queue of Public Hospital in Jakarta** **M. Dachyar,** Farizal, and M. Mansur Yafi *Universitas Indonesia, Indonesia.*
3	048-jpn	**Study of Driving Torque through Dynamic analysis of robot** **Yeon Taek OH** *Tongmyong University, Korea*
4	024-jpn	**Rice Profit Maximization in Mabitac Laguna Farms in the Philippines** **Rolan J. Malvar**, Jackie D. Urrutia, Jhonele L. Canabal, Mari Julius John Lapuz, and Regine Z. Criseno *Polytechnic University of the Philippines – Sta. Mesa, Philippines*
5	029-jpn	**Patients' Loyalty Improvement in Public Hospital** M. Dachyar; Farizal**; Ika Prisila Minar** *Universitas Indonesia, Indonesia*
6	053-jpn	**Development an Expert System in Quality Services for Bus Performance** **Shuhairy Norhisham,** Amiruddin Ismail, Nor Azwadi Che Sidik, Herda Yati Katman, Muhamad Nazri Borhan *Universiti Tenaga Nasional, Malaysia*
7	066-jpn	**Influences of LED Light Quality to Rice Seedlings Green Tea Grown in a Semi-Closed System** **Thitiwat Rattanamanee,** Chalinda Ariyadet, Siriwat Sakhonwasee Wichittra Daengprok *Maejo University, Chiangmai, Thailand*
8	055-jpn	**Development of Ti-6Al-4V Miniplate Implant Manufactured by Electric Discharge Machinin** **Nanang Qosim,** Sugeng Supriadi, Yudan Whulanza, Agung Shamsuddin Saragih *Universitas Indonesia Depok, Jawa Barat, Indonesia*

Session 5
Time: 1630 - 1830
Venue: **Opera Room**
Session Chair: **Dr. Siti Noor Ismail & Dr. Nor Aizal Akmal Rohaizad**

No	Paper ID	Presenter
1	025-jpn	**Understanding the indigenous mindsets in Malaysia: A future research agenda** **Ding Hooi Ting,** Maran Marimuthu, Chin Chuan Gan, Azizah Md. Yusof and Noor Al-Huda Abdul Karim *Universiti Teknologi PETRONAS, Malaysia*
2	015-jpn	**A Comparative tudy of the political stability in Thailand and Malaysia** **Panlayamon Sinnang** *Phranakhon Rajabhat University, Bangkok, Thailand.*
3	050-jpn	**Transformation of Emotional Intelligence to Generate the Positive of Mind and Behaviour among Youth** **Siti Sarawati Johar*,** Fauziah Ani, Harliana Halim, Shahidah Hamzah, Nur Zainatul Nadra Zainol, Intan Farhana Saparudin, Raja Zirwatul Aida Raja Ibrahim, Ishak Mad Shah *Universiti Tun Hussein Onn Malaysia, Malaysia*
4	059-jpn	**Knowledge Sharing Behavior among Employees** **Dayang Nailul Munna Abg Abdullah∗,** Noor Azura Dahalan∗, Ridhawati Zakaria∗, and Nurhazira Abd Razak *Universiti Teknologi MARA, Malaysia*
5	067-jpn	**Meeting the Educational Needs of the Students with Cancer in the United States. Policy and Practice in the Schools.** **Taku Murayama*** *Tokyo Gakugei University School of Education, Koganei, Japan*
6	064-jpn	**A Study on Effects of Organization Conflict on Team Performance** **Ridhawati Zakaria**, Dayang Nailul Munna Abg Abdullah, Noor Azura Dahalan, Frisella Albert *Universiti Teknologi MARA, Malaysia*
7	061-jpn	**Sense of belonging: Enhancing youth participation in a club through co-creation activities.** **Chew Ping Kwong,** Md Akhir M Sharif *University Teknologi Petronas. Malaysia*

Session 6
Time: 1630 - 1830
Venue: **Seine Room**
Session Chair: **Prof. Shyang-Jye Chang & Shuhairy Norhisham**

No	Paper ID	Presenter
1	031-jpn	**Fiber Surface Modification; Characterization of Rattan Fiber Reinforced Composite** **Flora Elvistia Firdaus** *Jayabaya University Jakarta, Indonesia*
2	020-jpn	**A Logistic Regression Analysis on the Influence of Accident Factors on the Fatalities of Road Accidents in Metro Manila** **Jackie D. Urrutia,** Sheena D. Bobihis, Camille Joy D. Serrano, Joseph Mercado, and Francis Leo T. Mingo *Polytechnic University of the Philippines – Sta. Mesa, Manila; Philippines*
3	044-jpn	**Forecasting Service Parts Demand on Automotive Industry Using Artificial Neural Network (ANN)** Inaki Maulida Hakim, **Hutama Dwantara** *Universitas Indonesia Depok, Indonesia*
4	060-jpn	**Influence of LED Red-light intensity on Phycocyanin accumulation in the cyanobacterium *Nostoc commune* Vaucher** **Jittanan Kaewmaneesuk,** Chalinda Ariyadet, Mongkol Thirabunyanon, Somkiat Jaturonglumlert, Wichittra Daengprok *Maejo University, Chiangmai, Thailand*
5	056-jpn	**Calculation of the CNC EDM Complexity Process for Biomedical Implants** **Marthan Lassandy,** Hendri D.S. Budiono, Sugeng Supriadi, Yudan Whulanza *Universitas Indonesia, Indonesia*
6	006-aictse	**RCS analysis of target and clutter in FMCW Radar** **Jongun Ho,** Daehyun Kim, Wonjong Choi, Younglok Kim *Sogang University, Korea*
7	047-jpn	**Measuring Industrial Resiliency by Using Data Envelopment Analysis Approach** **Ida Bagus Made Putra Jandhana**, Teuku Yuri M. Zagloel, Rahmat Nurcahyo *Universitas Indonesia, Indonesia*

Conference Venue

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Address: 2 13 Soemoncho, Osaka, 542-0084, Japan
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IPN Education Group
37B Jalan Pelabur 23/B, Seksyen 23
40300 Shah Alam
Selangor Darul Ehsan
Malaysia
Phone No. : +6018-2189487 (call/sms/whatsapp)
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Note

List of Abstract

No	Paper	Abstract
1	002-jpn	**TAKING CARE OF MYSELF: ROLE OF SELF-CARE IN MANAGEMENT OF HYPERTENSION AMONG THAI OLDER ADULTS WITH HYPERTENSION** **Seesawang J.**[1], Thongtang P.[2] *[1]Prachomklao College of Nursing, Phetchburi Province, Thailand* *[2]Boromarajonani College of Nursing, Chiangmai, Thailand* **Abstract:** Hypertension is the most common chronic illness for adults 60 years and older in Thailand. One strategy to prevent frequent hospitalizations and promote positive health outcomes among patients with hypertension is to ensure that self-care behavior is appropriate to the patients' situations. The purpose of this qualitative study was to explore self-care behavior of hypertension among Thai older adults. Thirty Thai older adults with hypertension were recruited with purposive sampling from primary health care center in Thailand. In-depth interviews were conducted to discover self-care behaviors that supported in managing their hypertension. Demographic data were collected, focused on the participants' personal, social and medical history related to hypertension. The results revealed that self-care behavior among Thai older adults with hypertension included eating behavior, compliance and alternative medicine, physical activities, and spiritual and feel good activities. Knowledge about hypertension self-care behavior can help nurses and other health care professionals tailor interventions to the patients' situations.
2	004-jpn	**School Based Assessment: Teachers and Students' Views on the Application of Promoting Higher Order Thinking Skill** **Nurulwahida Hj Azid @ Aziz,** Mardzelah Makhsin & Rozalina Khalid *School of Education and Modern Languages, Universiti Utara Malaysia* **Abstract:** The aim of this study was to review the students' and teachers' views related to application of Higher Order Thinking Skills (HOTS) in School Based Assessment (SBA). A questionnaire has been adapted and modified in line with the objectives of the study. A total of 206 teachers who are pursuing a master degree have been randomly

		selected for this study. The study finding shows that there is similarity between students' and teachers' views on the application of HOTS in SBA. Both groups welcomed the government's intention to acculturate HOTS through SBA. However, some improvements need to be done. Among the views from the teachers were improvement in the curriculum and funds allocation, continuous training, more resources on HOTS assessment items; and more resources and materials for authentic learning activities. Most of the teachers interviewed claimed that HOTS application is the best way to produce students who can think wisely in line with the 21st century education aspirations. According to the students, teachers have not yet achieved the high level in the implementation of HOTS. In summary, change in curriculum in terms of the application of HOTS in SBA is very crucial because it can help increase the level of academic achievement and performance in Malaysia. This in the long run will help produce quality and outstanding human capital for the future.
3	005-jpn	**Students' Perception towards Learning Agents' Behaviours** **Choo-Kim Tan,**[1] Wern-Lin Yeo,[2] Choo-Peng Tan,[3] Sook-Ling Lew,[4] Noraini Binti Idris,[5] [1]*Multimedia University, Malaysia.* *cktan@mmu.edu.my* [2]*Multimedia University, Malaysia.* *wernlin1228.wl@gmail.com* [3]*Multimedia University, Malaysia.* *cptan@mmu.edu.my* [4]*Multimedia University,Malaysia.* *sllew@mmu.edu.my* [5]*University Pendidikan Sultan Idris, Malaysia.* *noraini@upsi.edu.my* **Abstract:** This study aimed to examine students' perceptions towards the behaviours (i.e. facial expressions and gestures) of learning agents (LAs) in mathematics learning. In this study, students were exposed to LAs in the learning of mathematics. At the end of the study, questionnaires were distributed to collect their perceptions towards LAs' behaviours in learning. Most of the students in this study did not prefer having both the facial expressions and gestures in their learning. They preferred facial expressions more as compared to gestures.
4	006-jpn	**Are Male or Female Learning Agents Preferred by Students?** Choo-Kim Tan[1], **Choo-Peng Tan[2]** , Wern-Lin Yeo[3] [1]*Multimedia University, Malaysia.* *cktan@mmu.edu.my* [2]*Multimedia University, Malaysia.* *cptan@mmu.edu.my* [3]*Multimedia University, Malaysia.* *wernlin1228.wl@gmail.com* **Abstract:** Studies found that gender of teachers or leaning agents was

		one of the factors influences students' learning. This study aimed to examine learning agents' gender preferences by students in mathematics learning. During the mathematics learning with learning agents', students were exposed to male and female learning agents. The learning agents provided teaching materials and encouragements as real teachers. Questionnaire was distributed at the end of the study for collecting students' opinions on male and female learning agents in their learning process. Findings showed that preferences on both male and female learning agents' by students were almost equal.
5	007-jpn	**IDENTIFYING THE LEVEL OF SCHOOL FINANCIAL MANAGEMENT AMONG PRIMARY SCHOOL HEADMASTER: A CASE STUDY IN THE STATE OF KELANTAN AND TERENGGANU, MALAYSIA** **Siti Noor Ismail[1]**, Fauzi Hussin[2], Yahya Don[3], M.S. Omar-fauzee[4], Abdull Sukor Shaari[5] *[1, 2,3,4,5] School of Education, Universiti Utara Malaysia* **Abstract:** The level of understanding of Malaysian primary school headmasters in the accounting and financial management of the schools can be judged through how they handle the finance and accountancy issues of their schools. The focus of the discussion is to compare the level of understanding among twenty primary school headmasters based on gender, experience, attitude toward financial management practise and courses attended in accounting and financial management of the school. A qualitative study was conducted in the state of Kelantan and Terengganu, Malaysia. The main source of data was achieved through interviews and underpinned by observation and document analysis. Qualitative data was analyzed manually based on in-depth interviews, supported by evidence recorded from the interview. The results showed that the experience of being a headmaster, attitude toward financial management practise, and financial courses attended are important factors in determining the level of knowledge headmaster in accounting and financial management of the school. However, gender, experience as a teacher and experience as a senior assistant teacher do not contribute to the level of knowledge in accounting and financial management of the school. Most teachers and senior assistant teachers were not directly involved in accounting and financial management of the school. All financial matters related to the school normally are viewed as the responsibility of the headmaster and the financial clerk. The main problem is the attitude of the headmaster who are not concerned with matters of financial accounting school. Instead, finance-related tasks handed over entirely to school finance clerk.
6	009-jpn	**Local Homestay Operator Dillema: Business Intention or Family Intention** **Merlyn Rita Buncha**, Sidah Idris**,** Rostika Petrus Boroh, Rozaidy Mahadi *[1] Universiti Malaysia Sabah, Faculty of Business, Economics & Accounting, 88400 Kota Kinabalu, SABAH, MALAYSIA* *[2] Universiti Malaysia Sabah, Faculty of Business, Economics & Accounting, 88400*

Kota Kinabalu, SABAH, MALAYSIA
[3] Universiti Malaysia Sabah, Faculty of Business, Economics & Accounting, 88400 Kota Kinabalu, SABAH, MALAYSIA
[4] Universiti Malaysia Sabah, Faculty of Business, Economics & Accounting, 88400 Kota Kinabalu, SABAH, MALAYSIA

Abstract: Entrepreneurship is a behavioural trait produced by an individual that motivates by future benefits generated by producing products or services. Most of homestay located at Ranau, Sabah have possesses entrepreneurial traits in manoeuvring his business through various difficulties and challenging times. After running the business for three years, the homestay operator has decided to rejuvenate his business to ensure the business continue to survive which it change his orginal motive to develop the homestay from family reasoning. Despite that effort, unprecedented natural calamity, the earthquake struck at Ranau Sabah in early June 2015 and putting most of Sabah's tourism activities on risk. The disaster has not only brings destruction upon the land but it also pushed away tourists from coming to the affected areas. This unprecedented disaster requires effective recovery plans to cope with after effects occurrence. However, post-disaster recovering not only requires times, cost and energy, but the most important is how to soften tourist's fear and retract them to visit Ranau again. Although this case is based on facts, some parts have been fictionalized in order to maintain the confidentiality and convey certain theoretical concepts.

7	012-jpn	**Personality traits, job satisfaction and intention to stay among spa therapists in Malaysia**

Nor Fairuz Syazana Nor Fauzi *[1], Raemah Abdullah Hashim [2]

[1] OUM Business School, Open University Malaysia, Kuala Lumpur, Malaysia
*Corresponding author: Nor Fairuz Syazana Nor Fauzi, OUM Business School, Bangi Learning Centre, Selangor, Malaysia. Tel: +60126195155, +603-89222294, E-mail: norfairuzsyazana@yahoo.com

Abstract: The rapid emergence of the global spa industry, has contributed to 7.7% revenue annually, increasing from $60 billion in 2007 to $94 billion in 2013. Furthermore, a total of $18.8 billion of this revenue came from the Asia-Pacific region, which was also determined by a 65% increment from 2007 to 2013. The number of spa workers needed is estimated at 2.7 million workers worldwide in 2018, due to consistent growth rates. In Malaysia, the spa industry has the potential to develop continuously as it has grown over 200% since 2002. As a result, the spa industry is categorized as one of the important sectors in the tourism industry since it showed great potential in terms of its contribution to the nation's economy. The greatest setback of the spa industry is the "lack of professional therapists" because of staff turnover problems or the unattractiveness of the industry. Thus, it is essential to encourage spa therapists to remain in their jobs due to the high cost of new recruitment and training. Personality is an important factor where dissatisfaction may occur when there is a mismatch with the job. Past studies from different industries also indicated that personality traits may influence staffs intention to stay. Other studies suggested that job

		satisfaction can be operational as a mediator role towards personality traits and staffs intention to stay.
8	015-jpn	**A Comparative tudy of the political stability in Thailand and Malaysia** **Panlayamon Sinnang** *Phranakhon Rajabhat University, E-mail: panlayamon@hotmail.com* **Abstract:** This research has the purpose to study 1) the structure of political and administrative in Thailand and Malaysia and 2) the comparison of the similarity and difference of the political stability in Thailand and Malaysia by using qualitative research of field research by interviewing key informants including executives of administrative organizations and people from both countries including non-participant observation, political activity, documentary research such as laws relating to the political characteristic and structure of both countries. The qualitative analysis is from collecting the information that is the secondary information from various related document and the primary information is the in-depth interview of key informants and non-participant observation that is analyzed by mean of inductive interpretation and logical analysis. The research result shows as follows. The comparison of the administrative characteristics between Thailand and Malaysia found that there is difference in the characteristic. Thailand has the characteristic of a single state of democracy in the parliament while Malaysia has the administration of federal state. For the factor of legislation, there are the same 2 groups of the upper chamber that are members of the house of representative and senators. The significant difference which affects the political stability is that the political party system in Thailand consists of many parties and Malaysia has a distinct party that is UMNO party. Apart from that the crucial factors which affect the political stability are social factor and leadership.
9	016-jpn	**Participatory Knowledge Management in History: Case study in Float Selling Culture of Mon Community in BansaladeangNuea, Samkhok, Pathumthani Province** **Wanida Siriworasakul** ,Supinthakan Rawangwongsaa , Lerssuk Puttarasirimetagoon *Phranakhon Rajabhat University, Bangkok, Thailand.* *E-mail: wanidap4@gmail.com, supinthakan@gmail.com, lerssuk@gmail.com* **Abstract:** Mon community of Ban Sala Dang Nuea, Sam Kok District, Patum Thani Province is a community of Mon people migrated to settle in Thailand and the main original occupation of this community is float selling which in the present this occupation is discontinued by the main cause of development and change in the society, economy, politics, culture, technology, education, and transportation. The knowledge of float selling of Mon people consists of type of boat used in trading, type of commodity, and method to maintain the boat of Mon

		people.
10	017-jpn	**Model and Structure of Government in Comparison between Government of Thailand and Myanmar** **Assistant Professor WatcharinIntaprom** *PhranakhonRajabhat University, E-mail Address: Pong9889@yahoo.com* **Abstract:** The purpose of this study is to be a comparative study of model and structure of government between government of Thailand and Myanmar. This research is qualitative research which collected data by field research method; in-depth interview of key informants such as local government administration and people in each country, non-participant observation of political activity of each country, and documentary research such as relevant law regarding governmental and political structure of the two countries. Qualitative data analysis is achieved by data collection of tertiary source from various relevant documents and primary sources which are in-depth interviews of key informants and non-participation observation; together they are analyzed via Inductive interpretation and logical analysis. The result shows that; Comparing government administration of Thailand and Myanmar, both are single state, governed under democratic rule with parliament system. In regard to legislative body, both have 2 levels of parliament which are House of Representatives and Senate. Both countries however different in the number of those seats and period of office and that Myanmar has local council while Thailand does not. The difference in administration structure of the two countries is that Myanmar has not decentralization to local government. The main reason this is so is due to country's stability as Myanmar is a land of multiple race and clan while some does not accept the rule of the Myanmese government and some even also retain their own armed military force. Therefore, if each area rules their own under the accord of local administration where they enjoy freedom and somewhat higher level of independence, this may lead to fracturing of the country into bits and pieces.
11	018-jpn	**Knowledge Management To Boost Productivity In Manufacturing** **M.A.Mansor[1],** A.R.Ismail[2], N. N. NorHamran[3], M. S. Sarifudin[4] *[1]Faculty of Engineering Technology, University Malaysia Pahang; ariffin@ump.edu.my* *[2]Faculty of Creative Technology & Heritage, University Malaysia Kelantan; rasdan@umk.edu.my* *[3]Faculty of Engineering Technology, University Malaysia Pahang: nnadiahamran@ump.edu.my* *[4]Faculty of Engineering Technology, University Malaysia Pahang; sazuansarifudin@yahoo.com* **Abstract:** Data are the crucial element for productivity improvement and the evaluation or measurement process in the manufacturing sector because the data can tell the real situation about the production

		site. The data are useful for productivity improvement by using certain lean manufacturing's tools such as Value Stream Mapping (VSM), Single Minutes of Exchange Die (SMED), Total Productive Maintenance (TPM), and others. The data are also necessary for performance measurement. In this paper, we discuss the necessary data that should be included in a knowledge repository for manufacturing where the data then will be used by an assessment tool. The assessment tool is an important factor because knowledge management has a deep relationship with performance evaluation and measurement. Data Management to boost productivity in manufacturing can be divided into five phase and consists of in fourteen steps.
12	019-jpn	**Correlation between Sun Protection Factor and Acacia Catechu heartwood** Narongrit Lahpun[a], Rachadaporn Boonruang[b], Butsakhon Leungthongkul[a] and **Oraphan Anurukvorakun[a]** *[a]Department of Cosmetic Science, Faculty of Science and Technology, Phranakorn Rajabhat University, Bangkok 10220, Thailand* *[b]Department of Business Administration, Faculty of Management Science, Phranakorn Rajabhat University, Bangkok 10220, Thailand* **abstract:** Sun exposure to human skin or solar ultraviolet (UV) radiation may cause several skin damages. These damages include sunburn, skin cancer, oxidative stress as well as photoaging depending on the amount and type of the UV rediation and the individual exposure. Natural substances have been recently considered as potential sunscreen resources due to their absorption in the UV region. *Acacia catechu* is one of a proper medicinal plant. It has several pharmacological properties such as being an antioxidant, and DNA protector. The purpose of this research was to study correlation between Sun Protection Factor (SPF) and *A.catechu* content. A novel sunscreen containing *A.catechu* was investigated its SPF. Five different concentrations of *A.catechu* were added to formulate the sunscreens and evaluated their SPF values. The highest Sun Protection Factor (SPF) of the sunscreen containing *A. catechu* and synthetic UV-filters was 30.344. While, the lowest SPF of the sunscreen with *Acacia catechu* (without synthetic UV-filters) was 24.143. Good correlation was found between SPF values and *A.catechu* contents (Pearson Correlation was 0.983) and the correlation coefficient was significant at the 0.01 level. In conclusion, this research presented great efficiency of the developed sunscreen containing *A.catechu*.
13	020-jpn	**A Logistic Regression Analysis on the Influence of Accident Factors on the Fatalities of Road Accidents in Metro Manila** **Jackie D. Urrutia[1],** Sheena D. Bobihis[2], Camille Joy D. Serrano[3], Joseph Mercado[4], and Francis Leo T. Mingo[5] *[1]Director, Intellectual Property and Management Office, Office of the Vice President for Research, Extension, Planning and Development,* *Associate Professor, Department of Mathematics and Statistics, College of*

Science, Polytechnic University of the Philippines – Sta. Mesa, Manila;
jackieurrutia20@gmail.com,   math_urrutia@yahoo.com.ph,
jdurrutia@pup.edu.ph
[2]Polytechnic University of the Philippines; sdeebobihis@yahoo.com
[3]Polytechnic University of the Philippines; camillejoyserrano@gmail.com
[4]Vice President for Research, Extension, Planning and Development, Polytechnic
University of the Philippines; jmercado@pup.edu.ph
[5]Faculty Member, Polytechnic University of the Philippines-Quezon City Branch;
franz_kyo@yahoo.com

Abstract: Using binary logistic regression, the data collected from Metropolitan Manila Development Authority (MMDA) were examined to determine if accident factors contribute to accident fatality. A total of 29,409 accidents were studied after tallying all the accidents with the complete information on all the considered factors. The classification (fatal or nonfatal) is the dependent variable while the other factors such as age, gender, junction-type, weather, location, time and vehicle-type are the independent variables. The model formulated in this study shows the relationship of the dependent variable and the significant factors in terms of odds ratio concept. The findings show that all the independent variables except for age are statistically significant in the accident fatality of road accidents in Metro Manila from 2006 to 2016.

14	024-jpn	**Rice Profit Maximization in Mabitac Laguna Farms in the Philippines**

Rolan J. Malvar[1], Jackie D. Urrutia[2], Jhonele L. Canabal[3], Mari Julius John Lapuz[4], and Regine Z. Criseno[5]

[1]Research Coordinator, Research Management Office, Office of the Vice President for Research, Extension, Planning and Development,
Assistant Professor, Department of Mathematics and Statistics, College of Science, Polytechnic University of the Philippines – Sta. Mesa, Manila; rjmalvar@pup.edu.ph
[2]Director, Intellectual Property and Management Office, Office of the Vice President for Research, Extension, Planning and Development,
Associate Professor, Department of Mathematics and Statistics, College of Science, Polytechnic University of the Philippines – Sta. Mesa, Manila;
jackieurrutia20@gmail.com,   math_urrutia@yahoo.com.ph,
jdurrutia@pup.edu.ph
[3]Polytechnic University of the Philippines – Sta. Mesa, Manila; jhonele19@gmail.com
[4]Polytechnic University of the Philippines – Sta. Mesa, Manila; marjonlapuz@gmail.com
[5]Faculty Member, Department of Mathematics and Statistics, College of Science, Polytechnic University of the Philippines; rzcriseno@pup.edu.ph

Abstract: The study developed a linear programming model that enables to maximize the profit of Rice Farms in Mabitac, Laguna in varieties of Rice. The three varieties of Rice were considered in this study such as dry, wet and average and three hectares of planting ground are assumed to be normal. In the development of the model, several constraints were considered such as cost of seeds per kilo, cost of pesticide, fertilizer, irrigation, fuel and oil, electricity, sacks and tying materials and

		transportation used per kilogram of seeds. The researchers were able to produce three linear programming models for each variety of rice. Using POM-QM, the solution for each model was obtained and the best combination for every variety of rice was identified. Profit analysis was also done by comparing the profit earned from the data given against the profit earned using linear programming.
15	025-jpn	**Understanding the indigenous mindsets in Malaysia: A future research agenda** **Ding Hooi Ting[1],** Maran Marimuthu[2], Chin Chuan Gan[3], Azizah Md. Yusof[4] and Noor Al-Huda Abdul Karim[5] [1]*Universiti Teknologi PETRONAS; ting.dinghooi@utp.edu.my* [2]*Universiti Teknologi PETRONAS, maran.marimuthu@utp.edu.my* [3]*Sunway University; chinchuang@sunway.edu.my* [4]*Universiti Utara Malaysia; azizah@uum.edu.my* [5]*Universiti Pendidikan Sultan Idris; nooralhuda@fpe.upsi.edu.my* **Abstract:** Many types of research were conducted in many parts of the world to help the indigenous community, either to increase their well-being, to maintain their cultural richness, to introduce entrepreneurial minds to the community, etc. Different approaches were used to understand the community. In some cases, the indigenous community received a continuous influx from groups of researchers into their community, with the aim to further upgrade their well-being, but the outcome of the research are minimal. The question that arises is what causes the inconsistencies between the efforts and the result; is there an unexplored and unearthed fissure that could be suggested and implemented? Should there be a more comprehensive sequential studies that could enlighten researchers about the community? A comprehensive and inclusive studies need to be carried out to scrutinize every possible angle to identify the underpinning reasons. This paper aims to provide a future research agenda to understand the indigenous in Malaysia further and to uphold their welfare through a 3-phase study: Phase 1- either a phenomenology or ethnography studies on the indigenous communities to understand the fundamental mindsets and what welfare means to them. Phase 2- to explore the reinforcements of the indigenous towards changes and Phase 3- to explore the underpinning mindsets of indigenous who has successfully adopted a new mindset to change. All these phases are hoped to provide a better idea to governmental bodies or agencies on how to support the indigenous leading them to accept the initiatives offered to them. With the proposed three study phases, this study would explore the patterns of voluntaristic change, as opposed to coerced change, which is hoped to provide some insight into the long-term possibilities of institutionalized change instead of short term change. Through the proposed 3-phase studies, there is a greater appreciation of what is fundamental to the indigenous community, which will map further strategies on how to enhance the indigenous community's welfare or wellbeing.

16	026-jpn	**The study of production and sales of Lao-Khrung woven cloth products: the case of Punumron community, Dan Chang district, Supanburi province.**
		Rachadaporn Boonruang
		DBA.PhranakhonRajabhat University, Bangkok, Thailand. *E-mail: rachada_u@hotmail.com*
		Abstract: Lao-Khrung woven cloth products are hand woven cloth that has been taught from generation to generation of the Lao-Khrung people those used to live in Laos, upper Mae Kong River. Today they migrated to build a community in Punumron, Dan Chang district, Supanburi province. The cloth is produced mainly for community usage and is unique in tradition. It is produced by cotton and silk.
17	027-jpn	**Political Stability of Thai Leaders during World War I and World War II**
		Shanasuek Wisetchai
		Phranakhon Rajabhat University, E-mail: shanasuek.wis@gmail.com
		Abstract: This article explains how Thai leaders had established their political stability during the crisis time, the World War I and the World War II. Comparatively, the research identifies the strategies of both leaders, with different regime, in stabilizing the country and their status. To conduct the research, the qualitative methods by analyzing documents and in-depth interviewing have been applied. According to the research, it was founded that; Thai leader during World War I, King Vajiravudh (King Rama IV), had established his political stability by promoting nationalism emphasizing on the royalty to the monarch, projecting himself as the professional military leader to gain trust and support from military groups, and eradicating the influences of senior loyal members. Analyzing the strategies in creating political stability of Thai leader during World War II, Field Marshall Plaek Pibunsongkram who was the 3rd prime-minister of Thailand under the Constitutional Monarchy regime, it illustrates that he also had utilized the benefit of nationalism focusing on public obedience on leader to strengthen his position. In addition, the illiberal democracy criticized as authoritarianism democracy to control the warfare situation had been practiced. In comparison, both leaders had promoted nationalism to establish political legitimacy, however; king Rama IV had highlighted on royalty to monarch while Field Marshall Plaek Pibunsongkram had promoted unquestionable trust on the leader. It shows that both leaders had utilized warfare to claim legitimacy and build up political stability. These strategies in creating political stability of both leaders lead to the conclusion of the Political Stability Establishment Model which is comprised of three components: Political Acceptance, Capability in Power Elimination, and Legality.
18	028-jpn	**CREATING POLITICAL STRENGTHENING OF DR. MAHATHIR MOHAMMAD**

		Rawikarn Amnuay*[1] [1]*Phranakhon Rajabhat University, Bangkok, Thailand* *E-mail : Rawikarn.3@gmail.com* **Abstract:** The purpose of this research is to study the process of creating political strengthening of Dr. Mahathir Mohammad, the former prime-minister of Malaysia. This research is a qualitative research by conducting document analysis, interview, and non-participatory observation. The essential data is gathered from both primary and secondary sources. The in-depth interview has been done on the key informants consisting of academics, Malaysian community leaders, and Malaysian citizens. According to the research, it was founded that; Dr. Mahathir Mohammad had been creating political stability by promoting nationalism by emphasizing the consolidation and the pride of Malay's race. This made him get supported by the people across the country through general election. Visibly, he had been elected and in the premier position consecutively for 22 years. In addition, being legislatively legitimated, the stability of his government had been created by imposing laws which was described as authoritarianism to effectively control and rule the country. It is also founded that his vision to make Malaysia to be a developed country by declaring the 2020 Vision had made him noted as the most high-vision leader, and he strongly got supported by the people in Malaysia. Dr. Mahathir Mohammad is one of the memorable and outstanding leaders of Malaysia and ASEAN. His political stability was not only created by implemented the authoritarian practice and making people support him via nationalism, but also his vision to make Malaysia become a great country.
19	029-jpn	**Patients' Loyalty Improvement in Public Hospital** M. Dachyar**;** Farizal; **Ika Prisila Minar** *Department of Industrial Engineering Faculty of Engineering, Universitas Indonesia, Indonesia* mdachyar@yahoo.com; farizal@ie.ui.ac.id; *ikaprisiliam@gmail.com* **Abstract:** The public hospitals should know how to maintain and retain patient to improve the competitiveness. The purpose of this research is to improve outpatient loyalty in using National Health Insurance in public hospital. Structural Equation Modeling (SEM) method is used to analyze factors that influence patient loyalty. The discriminant analysis method is used to know the priority for improvement. An assessment of 5 experts was performed to obtain latent variables and indicators. The questionnaire was given to 400 patients. The SEM model is concluded, variables directly and positively affect loyalty are patient satisfaction and trust.
20	031-jpn	**Fiber Surface Modification; Characterization of Rattan Fiber Reinforced Composite** **Flora Elvistia Firdaus**

		Dept. of Chemical Engineering Jayabaya University Jakarta -13201, Indonesia *flora_elvistia@yahoo.com* **Abstract:** Rattans are edible fibers were prepared to reinforce matrix yielding composite products within the aid of epoxy based resin binder. The fibers are conducted to be applied to alkali treatment before applied to matrix. This was considered to enhance the cohessiveness of fibers to matrix. The ultimate property of the composites are found also depends on fiber woven pattern, matrix, and the proper of adhesive booster.
21	**032-jpn**	**Application of Rasch Model Measurement in the Content Validation of the Intention to Stay Scale (ITSS) among Medical Academics at Public Universities** **Wan Ismahanini Ismail** *[1,2], Roziah Mohd. Rasdi [1], Rahinah Ibrahim [3], Bahaman Abu Samah [1] *[1] Faculty of Educational Studies, Universiti Putra Malaysia, 43400 Serdang, Malaysia* *[2] Registrar Office, Universiti Teknologi MARA, 40450 Shah Alam, Malaysia* *[3] Faculty of Design and Architecture, Universiti Putra Malaysia, 43400 Serdang, Malaysia* **Abstract:** The number of medical academics leaving public universities is increasing; thus, an investigation into their intention to stay in the academia is crucial. As such, development of the Intention to Stay Scale (ITSS) to measure the existing medical academics' intention to remain in service at public universities is timely. However, a sound scale should be guarded against threats of validity to ensure that the findings and generalizations would be valid. This study aimed to examine content validity, which is one aspect of validity in this study, comprising five principal dimensions with 52 proposed items to measure medical academics' intention to stay. The five dimensions of ITSS, namely, Feelings about Behaviour, Behavioural Beliefs, Normative Beliefs, Control Beliefs and Efficacy Beliefs, were generated as a result of the Integrated Behavioural Model which combined two major theories: Theory of Reasoned Action and Theory of Planned Behaviour. Review and feedback from nine experienced medical academics as panel of experts were assessed using Rasch measurement model. All 52 items under five principal dimensions have been found acceptable for next stage of analysis, that is, the pilot study. However, several items were suggested to be discarded to ensure better clarity in achieving the objective of the study. Furthermore, additional items would be required for Normative Beliefs which had fewer than five items to ensure that there would be sufficient items for testing should any item be discarded after the pilot test. It can be concluded that the panel of experts' decision and acceptability of the quality of each category that were able to explain intention to stay would be one of the critical steps in developing such a scale. The findings of this study would help researchers improve the current scale to ensure that it would measure what should be measured and achieve the intended objectives.

22	033-jpn	**Estimation of PM_{10} from Exhaust and Non-exhaust Emission in Traffic Area, Klang Valley, Peninsular Malaysia using Air quality Dispersion Modeling**

Rasheida E. Elhadi[1], Ahmad Makmom Abdullah[1*], Abdul Halim Abdullah[2], Zulfa Hanan Ash'aari[1], Loi Kok Chng[1, 3]

[1]*Environmental Pollution Control Technology, Department of Environmental Sciences, Faculty of Environmental Studies, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia.*
[2]*Department of Chemistry, Faculty of Sciences, Universiti Putra Malaysia, 43400 UPM Serdang, Malaysia.*
[3]*Faculty of Engineering and the Built Environment, SEGi University, No.9, Jalan Teknologi, Taman Sains Selangor, Kota Damansara, PJU 5, 47810 Petaling Jaya, Selangor, Malaysia.*
[1*]*Corresponding author: Ahmad Makmom Abdullah, Department of Environmental Sciences, Faculty of Environmental Studies, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor* Corresponding author. Office: +603-89466733. Mobile phone: +6011-26250360, Fax: +603-89438109, E-*mail address*: amakmom@upm.edu.my

Abstract: This paper reviews methods to estimate the concentration of PM_{10} from vehicular emission sources (exhaust and non-exhaust) by using AERMOD dispersion model in the Klang Valley region. The ground level concentration was obtained by processing various meteorological parameters, terrain features and source emission inventory data (emission rate) for 2014 were used in simulations within 50 km x 50 km model domain over 24 hours averaging periods. The results showed the maximum concentrations of PM_{10} were revealed in central, southeast and southwest of the model domain. The evaluation of performance of the model was done by comparing observed and simulated PM_{10} concentrations using statistical tools such as correlation coefficient, Normalized Mean Square Error, Factor of two and index of agreement. Therefore, the AERMOD model evaluation results revealed an acceptable model for conducting dispersion modeling from vehicular sources (exhaust and non-exhaust) in the Klang Valley with good model skill for the estimation of PM_{10} concentrations in Shah Alam station. This study considers the first for evaluation PM_{10} using AERMOD dispersion model in the Klang Valley region in Peninsular Malaysia.

23	035-jpn	**ANALYSIS OF FACTORS AFFECTING SHAREHOLDER VALUE CREATION CASE STUDY OF SOE IN INDONESIA**

[1]**Farah Margaretha Leon** and [2]Almira

Correspondent Author: [1]Farah Margaretha Leon Faculty of Economics and Business Universitas Trisakti Jakarta, Indonesia Jl. Kyai Tapa Grogol Jakarta 1140 Indonesia
Telp +62 021 5663232 Email: farahmargaretha@trisakti.ac.id

Abstract: The problem in this research is the effect of debt to equity ratio, dividend payout ratio and return on equity to the creation of shareholder value. This research purposes was to determine the factors

		that affect the creation of shareholder value of SOE (State-Owned Companies) / BUMN go public. The methodology used in this study is a panel regression with classical assumptions. The samples used were 12 state-owned companies go public during the period 2010-2016. This study result is the debt to equity, the dividend payout ratio and return on equity affect to the creation of shareholder value. The implication of this research is the management company should make efforts in the company's policy is capable of leading to an increase in EVA (Economic Value Added) as well as considering the calculation of debt to equity ratio, dividend payout ratio and return on equity is owned company in order to improve the performance of the company itself and for investors should use the EVA value and see the benchmark of debt to equity ratio at a low value, and the value of dividend payout ratio and a high return on equity in a company as a reference in the selection of the company's shares.
24	036-jpn	**On the Dichotomy Between Natural and Artificial Languages** **Alan Reed Libert** *University of Newacastle, Australia* **Abstract:** In linguistics and related fields a distinction is drawn between natural languages, such as English, and Chinese, and artificial languages, such as Esperanto. In this paper I will question this distinction, arguing that even the most artificial of languages are not in fact that different than natural languages. In fact, artificial languages are often classified in terms of how much they draw on natural languages: *a posteriori* artificial languages, e.g. Esperanto and Basic English, are (almost) entirely based on one or more natural languages, while *a priori* artificial languages, which are generally less known and less successful than *a posteriori* languages. However, as I will show, even *a priori* languages resemble natural languages when one looks at their underlying properties. This is indeed what we would expect, given that artificial languages are created by humans. We can speak of a spectrum of artificiality, with languages being more or less based on natural languages, but we cannot draw a strict dichotomy.
25	037-jpn	**THE ROLE OF GREEN INTELLECTUAL CAPITAL ON BUSINESS SUSTAINABILITY** **Muhamad Khalil Omar,** Yusmazida Mohd Yusoff, Maliza Delima Kamarul Zaman *Faculty of Business and Management, Universiti Teknologi MARA, 42300 Bandar Puncak Alam, Selangor, Malaysia* **Abstract:** Recently, Green Intellectual Capital (GIC) and Business Sustainability (BS) have been growing attention among academic researchers and practitioners and become an emerging topic in emerging economic. In Malaysian organizations, interest in these new concepts is low. Thus, in this study, we develop a model to examine the relationship between GIC (green human capital, green structural capital

		and green relational capital and BS (economic, social, and environmental). SMEs manufacturing organizations in Malaysia is chosen as our target respondents.
26	038-jpn	**Analysis of Outpatient Service Queue of Public Hospital in Jakarta** **M. Dachyar,** Farizal, and M. Mansur Yafi *Department of Industrial Engineering, Universitas Indonesia, Depok -16424, Indonesia.* *Email: mdachyar@yahoo.com, farizal@eng.ui.ac.id, yafimansur@gmail.com* **Abstract:** In recent years Public hospital services are becoming burden in many large cities. Many patients are needed to be served, but it was constrained by the number of doctors. Eventhough the resources are limited, the efficiency of public hospital services are important. The patient's queues can be shortened by service quality enhancement of outpatient. This study has applied *Business Process Reengineering* (BPR) method to improve the efficiency of public hospital services. Igrafx software is used to visualize the improvement design. The result has suggested solution to accelerate the outpatient health services of a public hospital in Jakarta. In recent years Public hospital services are becoming burden in many large cities. Many patients are needed to be served, but it was constrained by the number of doctors. Eventhough the resources are limited, the efficiency of public hospital services are important. The patient's queues can be shortened by service quality enhancement of outpatient. This study has applied *Business Process Reengineering* (BPR) method to improve the efficiency of public hospital services. Igrafx software is used to visualize the improvement design. The result has suggested solution to accelerate the outpatient health services of a public hospital in Jakarta.
27	039-jpn	**Relationship between Emotional Intelligence and parenting style on Student Academic Achievement at Hulu Terengganu District** **Nor Aizal Akmal Binti Rohaizad [1],** Norly Binti Jamil[2] and Azlina Binti Mohd Kosnin [3] *[1]Center of Social Development Study and Economic, University of Malaysia Terengganu (UMT); aizal@umt.edu.my* *[2]Faculty of Human Development and Education, University of Sultan Idris Education (UPSI); norly@fppm.upsi.edu.my* *[3]Faculty of Education, University of Technology Malaysia (UTM); p-azlina@utm.my* **Abstract:** This study is to identify the level of emotional intelligence and parenting styles among form one students in secondary schools in Hulu Terengganu. Schools in the state chosen for this study because the students have had the best record of ten consecutive years in the Primary School Achievement Test (UPSR). Therefore, researchers want to identify significant relationships that may exist between the two independent variables with students' academic achievement. The instrument used was a questionnaire distributed to 364 students from Form One in four secondary schools in the area. The data obtained were

		analyzed using computer software Statistical Package for Social Science (SPSS) version 16.0. Diskiriptif and inferential analysis used to answer all of the study. The findings showed that domain of interpersonal skills is the most dominat domain in students emotional intelligence skill. However, over all the level of emotional intelligence among students was moderate level. As for the type of parenting style most dominant among parents is the kind of authoritative parenting style. The findings also indicate that there is a significant relationship between emotional intelligence and academic achievement. However, it was found that there was no significant relationship between parenting styles and academic achievement. On completion, close cooperation among parents and teachers need to further enhance the level of students emotional intelligence for the excellence of academic achievement.
28	040-jpn	**Asserting Effects of Recognition and Rewards, Work Life Balance and Internal Communication towards Employee Engagement among Employees of a Malaysian Engineering Company** **Noor Azura Dahalan**, Muhamad Khalil Omar, Dayang Nailu Munna Abg Abdullah, Ridhawati Zakaria, Hairun Nafiza Abdullah *Universiti Teknologi MARA, Centre for Management and Administrative Studies, Faculty of Business and Management, 42300. Puncak Alam. Malaysia* azuradahalan@salam.uitm.edu.my **Abstract:** This paper describes whether recognition and rewards, work-life balance, and internal communication contribute towards employee engagement among engineering employees in Malaysia. According to Employee Engagement Report [1], only 31 percent of employees are engaged in their jobs at global level. This statement supported by Shuck and Rose [2] who discovered that less than 30 percent of global employees are engaged. In Malaysian context, according to Kelly Global Workforce Index [3], the latest survey finds that Malaysia has come in below the global average of 31 per cent out of 31 countries for employee engagement, with only 28 per cent of Malaysian workers surveyed saying they are "totally committed" to their current employer. Using purposive samples of 113 employees of an engineering company in Malaysia, this study established that, all the three factors have the relationship with employee engagement. Therefore, the significance of this study is that it can help many organisations and corporate in forming their business strategy especially in rapidly changed engineering industry in Malaysia. This study can also provide the human resources management an understanding on which factors that could influence the employee engagement in which will improve their performance and make the organisation a profitable entity.
29	041-jpn	**Designing Price Stability Model of Red Cayenne Pepper Price in Wonogiri District, Centre Java, Using ARCH/GARCH Method)** Fauzia Dianawati[1], **Riska Widyawati Purnomo[2]** [1]*Department of Industrial Engineering, Universitas Indonesia Depok, Indonesia* fauzia@ie.ui.ac.id

[2]Department of Industrial Engineering, Universitas Indonesia Depok, Indonesia
riska.widyawati@ui.ac.id

Abstract: Food and agricultural sector become the biggest sector contributing to inflation in Indonesia. Especially in Wonogiri district, red cayenne pepper was the biggest sector contributing to inflation on 2016. A national statistic proved that in recent five years red cayenne pepper has the highest average level of fluctuation among all commodities. Some factors, like supply chain, price disparity, production quantity, crop failure, and oil price become the possible factor causes high volatility level in red cayenne pepper price. Therefore, this research tries to find the key factor causing fluctuation on red cayenne pepper by using ARCH/GARCH method. The method could accommodate the present of heteroscedasticity in time series data. In the end of the research, it is statistically found that the second level of supply chain becomes the biggest part contributing to inflation with 3,35 of coefficient in fluctuation forecasting model of red cayenne pepper price. This model could become a reference to the government to determine the appropriate policy in maintaining the price stability of red cayenne pepper.

30	042-jpn	**Improvement Priorities: Public Hospital Service Quality**
		M. Dachyar; Farizal; **Alicia Ti**
		Industrial Engineering Department Universitas Indonesia Depok, Indonesia
		Abstract: Patients' satisfaction in public hospitals in Jakarta is decreased due to the increase participant of outpatients using national health insurance. One of the principle influenced satisfaction is services. The purpose of this research is to get priority improvement of service quality dimension. ServQual method is used to obtain the patient's perception and expectation gap on hospital services. Analytical Hierarchy Process (AHP) is used to obtain the dimension importance weight. Five experts were involved on choosing the appropriate service dimension. Questionnaires were given to 400 patients. Results showed that the largest gap on overall services dimension and sub-dimension are cleanliness, comfort of check room and bathroom. The weight of importance is included, results show the priority improvement of trust dimension and sub-dimension doctor is checking the patient's condition correctly.
31	043-jpn	**Evaluation of Four Wheeled Vehicle Student Driver Adaption's On Right & Left Steering Wheel Through The User Experience Approach**
		Inaki Maulida Hakim[1], **Ferdiansyah Pratama Putra[2]**
		[1]Department of Industrial Engineering, Faculty of Engineering Universitas Indonesia Depok, Indonesia inakimaulida.hakim@yahoo.co.id

[2]Department of Industrial Engineering, Faculty of Engineering Universitas Indonesia Depok, Indonesia
anchapratama21@gmail.com

abstract: The high level of activity that people carry out daily encourage the need for high mobility in the fulfillment of these activities. Vehicles can help to ease people in doing activities so that one's activities can run effectively and efficiently. Every vehicle produced by a vehicle company has a difference in terms of features and systems that are in it, so it causes the vehicle users to have to adapt. In addition, there are other differences in driving position. So this study aims to evaluate the adaptation of four-wheeled vehicle drivers in Indonesia on the right-steering and left-steering vehicle through the user experience approach. This study focus on what factors can influence the adaptation of driver to vehicle differences and differences in driving position. Evaluation is done by giving task to the respondent at the beginning of the drive, during drive and at the end of the drive by looking at the safety factor on activity being done. The methods used are performance metrics, Single Ease Question (SEQ) questionnaire and Questionnaire for User Interface Satisfaction (QUIS). Based on results of the research, there are some errors and time used for respondents in adapting. So, in an effort to correct from the error, additional information is given where the information can be useful in adapting.

32	044-jpn	**Forecasting Service Parts Demand on Automotive Industry Using Artificial Neural Network (ANN)**

Inaki Maulida Hakim[1] , **Hutama Dwantara[2]**

[1]Department of Industrial Engineering, Faculty of Engineering Universitas Indonesia Depok, Indonesia
Inakimaulida.hakim@yahoo.co.id
[2]Department of Industrial Engineering, Faculty of Engineering Universitas Indonesia Depok, Indonesia
hdwantara@gmail.com

Abstract: Production planning in an industry, required precise decisions to made in order to determine the exact amount of product that will be produced to fulfill the customers demand. Demand forecasting is one of the most important factor in production planning process that able to generate precise production decision. The automotive industry like car manufacturer, always need an accurate demand forecast serve the uncertain demand of their products, especially the service parts product, that in fact always has uncertainty in it's demand and frequently causing the manufacturer company lose their profit due to the backorder and overstock occurrence. Several quantitative forecasting method is used to overcome this problem, one of them is devoted for fluctuate or uncertain demand which is single exponential smoothing. The modification of this method generate croston's method with better performance in forecasting intermittent demand. There is also artificial neural network, a machine learning computation method that could work similarly like human brain that also can forecast a non-linear data. This research is aim to compare the performance of the three

		forecasting method on an object with fluctuate demand. The data was gained from the demand of seven car's service parts in an automobile manufacturer and processed using the three methods to produce forecasting with the most accurate result. The result of the calculation in this research shows that forecasting with artificial neural networks produce the most accurate forecast for the car's service parts demand, outperform the other two methods.
33	045-jpn	**A Study on the Supporting Activities of Short Track Speed Skaters' Parents from the Perspective of Educational Enthusiasm** **Park, kwang-ho,** Won, young-shin, Kim, ji-hwan *Yonsei University* **Abstract:** The purpose of this study is to consider the supporting activities of short track speed skaters' parents, their motive and conflicts, and to examine the phenomenon of the phenomenon of the phenomenon. This study was conducted by applying the qualitative research. The participants were parents of those who is currently active as a short-track speed skater, and were selected a total of 12 participants through the purposeful sampling method. Data collection was conducted through preliminary interviews, in-depth interviews, onsite observations, and literature surveys, and the obtained data was analyzed and categorized in accordance with the four-stage strategy of qualitative data analysis. The results are as follows: First, through the categorized data as skater supporting activities, it is found that the short track speed skating is difficult sport to support without money, (Economic burden) it is necessary to take the excessive amount of time as a driver, and even large number of parents had to endure the hardships of residential move and living as a weekend couples to support their children's activities. Secondly, through the data categorized as the 'Short Mom's World', it was found that the parents act as informants on each other, and the movement of ice rink (coach) take place through that information, and there were invisible conflicts arising from the placement of their children during their exercise race, stress on the relationship between the players and the parents who spend all day together, and the cooperative role. Third, it has been observed that although the parents serve as a career guide and supporter, guides to short-track speed skating, and the supporter of children's decision, they come together with a learning deficit which slowly occurs. Based on the results of this study, it was found that the supporting activities of short track speed skaters' parents should be studied on another level, differently from the studies on average students' sport supporting activities.
34	046-jpn	**Building a Total Quality Management Model for Healthcare Industry** **Jonny**[1], T. Yuri M. Zagloel[2] *[1]Industrial Engineering Department, Faculty of Engineering University of Indonesia Jakarta, Indonesia*

jonny@ui.ac.id
[2]Industrial Engineering Department, Faculty of Engineering University of Indonesia Jakarta, Indonesia
yuri@ie.ui.ac.id

Abstract: This paper is made to present a Total Quality Management (TQM) Model for Healthcare Industry for Indonesia. From previous study, there are nine Total Quality Management (TQM) practices in healthcare industry such as Top Management Commitment (TMC), Teamwork and Participation (TWP), Process Management (PM), Customer Focus and Satisfaction (CFS), Resource Management (RM), Organizational Behavior and Culture (OBC), Continuous Improvement (CI), Training and Education (TE) and Information Management (IM) . However, these practices are not integrated yet. Therefore, this paper aims to integrate these practices by applying Structural Equation Modeling (SEM). After administering about 200 questionnaires using Linear Structural Relations (LISREL) program, the p-value is at 0.45 above required 0.05 giving the meaning that the model is good fit. This signifies that these nine TQM practices are required to achieve goals of the industry.

35	047-jpn	**Measuring Industrial Resiliency by Using Data Envelopment Analysis Approach**

Ida Bagus Made Putra Jandhana[1], Teuku Yuri M. Zagloel[2], Rahmat Nurcahyo[3]

[1]The Department of Industrial Engineering Faculty of Engineering, Universitas Indonesia
putrajandhana@yahoo.co.id
[2]The Department of Industrial Engineering Faculty of Engineering, Universitas Indonesia
yuri@ie.ui.ac.id
[3]The Department of Industrial Engineering Faculty of Engineering, Universitas Indonesia
rahmat@ie.ui.ac.id

Abstract: Having several crisis that affect industrial sector performance in the past decades, decision makers should utilize measurement application that enable them to measure industrial resiliency more precisely. It provides not only a framework for the development of resilience measurement application, but also several theories for the concept building blocks, such as performance measurement and management, and resilience engineering in real world environment. This research is a continuation of previous paper on performance measurement in industrial sector. Finally, this paper contributes an alternative performance measurement method in industrial sector based on resilience concept. Moreover,this research demonstrates how applicable the concept of Resilience Engineering and its method of measurement.

36	048-jpn	**Study of Driving Torque through Dynamic analysis of robot**

Yeon Taek OH

School of Mechanical Engineering, Tongmyong University 428 Sinseon-ro, Nam-gu, Busan, Korea
yeonoh@tu.ac.kr

Abstract: These days, the interests on the low-cost handling robots are increasing because it is important to get down the unit cost of production to get the price competitiveness. The robot joint with simple mechanism is more suitable to implement the low-cost robot system as well known. The moving parts of robot have to be designed for simple and robust. But the dynamic characteristics analysis is induced by the robot links because they drive in high acceleration and deceleration. In this reason, the dynamic characteristics analysis of the high-speed robot is very important in the design process. In this paper, the study on robot driving torque analysis of a articulated robot has been done and the research results will be introduced.

37	049-jpn	**Industrial Logistics Performance of Thai Industry**

[1]V.Jangkrajarng, [2]A.Sopadang, [2]K.Y.Tippayawong, [3]W.Manopiniwes, [2]S.Santiteerakul, **[2]S.Ramingwong***

[1]Faculty of Business Administration, Chiang Mai University, THAILAND
[2]Center of Excellence in Logistics and Supply Chain Management,
Chiang Mai University, THAILAND
[3]College of Arts, Media and Technology, Chiang Mai University, THAILAND

Abstract: Industrial Logistics Performance Indicators (ILPI) is used as an assessing tools for 27 logistics performance, developed for Thai industry. From 1,644 companies in the database collection, the study aims at providing individuality view of logistics performance of 5 industries, i.e., food, chemicals, rubber and plastic, machinery and equipment and electrical industries. As the industry and products vary, the paper is to explore key logistics characteristics as the over- and under- performance, outstanding from others. The findings are indicatives that each industry focus and pay attentions on which performances. The finding is also suggestive if ones must understand the industry or wish to support the industry in any measures.

38	050-jpn	**Transformation of Emotional Intelligence to Generate the Positive of Mind and Behaviour among Youth**

Siti Sarawati Johar*, Fauziah Ani, Harliana Halim, Shahidah Hamzah, Nur Zainatul Nadra Zainol, Intan Farhana Saparudin, Raja Zirwatul Aida Raja Ibrahim, Ishak Mad Shah

Pusat Pengajian Umum & Kokurikulum, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, Malaysia,
Fakulti Pengurusan, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia,
Pusat Pengajian Pembangunan Sosial & Ekonomi, Universiti Malaysia Terengganu, Malaysia

Abstract: This paper focuses on discussing the importance of strengthening emotional intelligence among youths to achieve more integrated human domains. The discussion is in terms of impact, challenges and needs of the transformation of emotional intelligence to the positive mind and behaviour. Human capital resources among

		youths are the main thrusts of national development especially from political, economic, social and educational aspects. However, the role of youth as agents of change in society would be meaningless if it is a transformation from darkness to brightness, from positive to negative and from peace to chaos. Important elements that need to be as knowledgeable youth are not merely intellectual intelligence, but also the need for strong emotional and spiritual intelligence to achieve positive emotional, positive thinking and behaviour. Emotional intelligence can be a determining factor in behaviour and ideology that is more mature and prosperous among the youth of the country. Therefore, the need to have emotional intelligence is as important as the intellectual intelligence to achieve a real balance in life. Positive youth can stand up as a citizen who is full of identity and dare to cope with the competitive world, but also wisely handle whatever challenges. A strong emotional intelligence in the youth can also help transform the country's expectation into reality in the quest for the creation of a first-class human capital.
39	051-jpn	**A Multi-Objective Optimization with Time Value of Money Consideration Using Genetic Algorithm in a Three-Echelon Supply Chain Model** **Putra Utama[1],** T. Yuri M Zagloel[2], Zulkarnain[3], [1]*Industrial Engineering Department, Faculty of Engineering Universitas Indonesia Jakarta, Indonesia* putrautama04@gmail.com [2]*Industrial Engineering Department, Faculty of Engineering Universitas Indonesia Jakarta, Indonesia* yuri@ie.ui.ac.id [3]*Industrial Engineering Department, Faculty of Engineering Universitas Indonesia Jakarta, Indonesia* zulkarnain@ie.ui.ac.id **Abstract:** The main objective of this research is to develop and solve a three- echelon supply chain model, with considering time value of money element as a part of the objective model function. The decision variables for this model consist of quantity of product distributed from producer to distributor (symbolized by "y") and quantity of product delivered from distributor to retailer (symbolized by "u"). There are two objective functions presented from this model, i.e. minimization of total cost in supply chain system and minimization of delivery tardiness/delivery surplus of product in supply chain system. Two different genetic algorithm (GA) approaches are applied to solve the equation model, namely (Multi Objective Genetic Algorithm Genetic Algorithm) MOGA and (Non Dominated Sorting Genetic Algorithm II) NSGA II. The performance of both algorithm to solve the problem are examined in this research. The result shows the best configuration of product quantity delivered (y & u) for each period that has minimum total cost and delivery tardiness/surplus product delivery. The impact of time value of money has also been evaluated.

40	052-jpn	**Microcomputer-Based Laboratory (MBL) System with Automated Measuring Approach for Basic Electronics**
		Abdullah N.S.Y.[1], M.Saufi N.S[2], Yaacob M.I.H[3] [1]*Physics Department, Faculty of Science and Mathematics, University Pendidikan Sultan Idris, Malaysia;* *syafiqah@fsmt.upsi.edu.my* [2]*Physics Department, Faculty of Science and Mathematics, University Pendidikan Sultan Idris, Malaysia; norshaidasaufi@gmail.com* [3]*Physics Department, Faculty of Science and Mathematics, University Pendidikan Sultan Idris, Malaysia;* *ikhwan.hadi@fsmt.upsi.edu.my*
		Abstract: Basic electronics experiments are essential in providing fundamental foundation in electronics. Hence, this work proposes an automated measuring microcomputer-based laboratory (MBL) system specifically for basic electronics and instrumentations experiments in pre-university level. Development process including hardware and software (module) will be discussed in details. Developed gadget utilizes Phidget Interface Kit and sensors for real-time data acquisition of voltage and current and sending it through USB (Universal Serial Bus) to personal computer (PC). LabVIEW used as the graphical interface to control data acquisition and analization. MBL module has been designed to represent the data interactively on the computer screen as well as an interactive laboratory teaching kit. Furthermore, voltage and current measurement were successfully merged with on-board electronics components for simplified experimental setup. This system was designed to be compatible with two types of sensors. It provides two input channel and also can be utilized as an oscilloscope on the computer screen. At low development cost, this sleek and compact system is expected to enhance student's performances and attitudes towards the laboratory work in basic electronics. This claim will be validated later and it will be included as a future work
41	053-jpn	**Development an Expert System in Quality Services for Bus Performance**
		Shuhairy Norhisham[1], Amiruddin Ismail[2], Nor Azwadi Che Sidik[3], Herda Yati Katman[1] Muhamad Nazri Borhan[2n] [1]*Department of Civil Engineering, College of Engineering, Universiti Tenaga Nasional, Malaysia.* [2]*Department of Civil and Structural Engineering, Faculty Engineering and Built Enviroment, Universiti Kebangsaan Malaysia, Malaysia* [3]*Department of Thermofluids, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia* *1shuhairy@uniten.edu.my*
		Abstract: In this paper an expert system for checking bus performance using quality sercives bus rating was developed. Five main process was conducted as methodology to develop an expert system. Starting with task analysis,knowledge acquisisiton , prototype development, refining and validation and verify process. However, the main focus in this paper is an analysis and identified the best practice attributes to use in the

		expert system. As the main outcomes, six attiributes has been highlighted as the best practice for accessing quality services for bus and to be use in development expert system.
42	054-jpn	**The Effect of Shell Local Deviation on Pressure Vessel Structure with Stress Analysis Finite Element Method**
		[1]Barkah Fitriyana, [1]Jos Istiyanto , [2]Mustasyar Perkasa *[1]Department of Mechanical Engineering Faculty of Engineerin, Universitas Indonesia Depok, Jawa Barat, Indonesia* barkah.fitriyana@ui.ac.id; *josist@eng.ui.ac.id* *[2]Technology Center for Strength of Structure (B2TKS) Agency for the Assessment and Application of Technology Puspitek, Tangerang Selatan, Indonesia* *Mustasyar.perkasa@bppt.go.id* **Abstract:** In the design and manufacture of pressure vessel (PV) at the industrial field, it need a stress analysis that can be done by analytical or numerical calculations. Besides for new PV design, stress analysis with numerical method is also performed for defective PV in accordance with CODE API 579-1 / ASME FFS-1 Fitness for Service. Mechanical defect/damage for PV consists of 5 categories. Geometry defects such as shell local deviation are classified into weld misalignment and shell distortions. This paper aims to determine the effect of shell local deviation on PV structure with SA 537 class 2 as PV material using the stress analysis of finite element method. The research was conducted by modeling and simulating PV models. The defective PV geometry data is obtained through direct measurement results. While the material data is obtained from PV design data and validated by hardness test on PV material. As the result of simulation is shell local deviation affect PV structure with increasing the value of maximum stress and maximum deformation depend on loading combination.
43	055-jpn	**Development of Ti-6Al-4V Miniplate Implant Manufactured by Electric Discharge Machining**
		Nanang Qosim, Sugeng Supriadi, Yudan Whulanza, Agung Shamsuddin Saragih *Department of Mechanical Engineering Faculty of Engineering, Universitas Indonesia Depok, Jawa Barat, Indonesia* nanang.qosim@ui.ac.id ; sugeng@eng.ui.ac.id ; *marthan.lassandy@ui.ac.id* **Abstract:** Fracture in maxillofacial region is the most commonly encountered case of trauma in oral and maxillofacial surgical field. The handling, in this case, is by fixation method using miniplate which is locked by some screws. The aim of this research is to fabricate the Ti-6Al-4V based-miniplate prototype as maxillofacial implant product. Electric discharge machining (EDM) was employed as method to manufacture the prototype. In this research, ultrasonic cleaning, rotary tumbler polishing, and brushing were employed as techniques to improve the roughness of prototype manufactured by EDM. The results showed that the prototype has been successfully produced within

		acceptable geometric tolerance. Ultrasonic cleaning and rotary tumbler polishing provided the significant increase of the surface roughness of prototype for each 90% and 67%. On the other hand, the single cycle bend test took the better results of mechanical performances. Both K and EI_e have the excellence for each 64% and 26% compared to the imported product.
44	056-jpn	**Calculation of the CNC EDM Complexity Process for Biomedical Implants** **Marthan Lassandy,** Hendri D.S. Budiono, Sugeng Supriadi, Yudan Whulanza *Department of Mechanical Engineering, Faculty of Engineering, Universitas Indonesia, Depok, Jawa Barat, Indonesia* marthan.lassandy@ui.ac.id ; hendri@eng.ui.ac.id ; sugeng@eng.ui.ac.id ; yudan@eng.ui.ac.id **Abstract:** A product is produced to meet the needs or support humans in work. The required product is the appropriate product and have good quality. A key element of the manufacturing process must be identified to produce the complexity of the index process, since each element is a factor of process complexity Each has its own level of complexity and is influenced by many factors. Electrical Discharge Machining (EDM) is the process of machining implant miniplate product. The parameters that affect the complexity of the process on the production of miniplate implants using CNC EDM machines are shape, geometry, and tolerance. Shape most affect the index of machining process complexity that is equal to 0,5 on miniplate A and 1 on miniplate B. The process complexity index of the miniplate implant production process using CNC EDM machine is for miniplate A has a compression index of 4,16276 and for miniplate B has a compassity index of 4,70344.
45	059-jpn	**Knowledge Sharing Behavior among Employees** **Dayang Nailul Munna Abg Abdullah∗,** Noor Azura Dahalan∗, Ridhawati Zakaria∗, and Nurhazira Abd Razak *Faculty of Business and Management, Universiti Teknologi MARA (UiTM), Puncak Alam Campus, 42300 Kuala Selangor, Selangor* **Abstract:** The purpose of conducting this study was to determine the relationship between trust, enjoyment in helping others, organizational communication, self-efficacy and knowledge sharing behavior among employees in Technip Geoproduction (M) Sdn Bhd. 150 respondents were selected as participants in this study using convenience sampling technique. A survey questionnaire was used as a main instrument for data collection. Form the Pearson correlation analysis, the findings revealed that there were significant relationships between the studied variables namely trust, enjoyment in helping others, organizational communication, self-efficacy and knowledge sharing behavior. In addition, it was also showed that enjoyment in helping others was found

		to be the dominant variable of this study. As a conclusion, knowledge sharing behavior is important to determine organizational success and as a competitive strategy in this knowledge era.
46	060-jpn	**Influence of LED Red-light intensity on Phycocyanin accumulation in the cyanobacterium *Nostoc commune* Vaucher** **Jittanan Kaewmaneesuk[1]**, Chalinda Ariyadet [2], Mongkol Thirabunyanon [3], Somkiat Jaturonglumlert[4], Wichittra Daengprok[5] *[1,2,3]Program in Agricultural Interdisciplinary, Maejo University, Chiangmai, Thailand. chalinda.bio@gmail.com* *[4]Faculty Engineering and Agro-Industry, Maejo University, Chiangmai, Thailand. yaidragon@hotmail.com* *[5]Div. of Food Technology, Fac.of Engineering and Agro-Industry, Maejo University, Chiang Mai 50290, Thailand. wichittra@gmail.com* **Abstract:** To assess the effects of light intensity on the phycocyanin of Nitrogen-fixing cyanobacteria *Nostoc commune* Vaucher, which was isolated from Maetang District, Chiangmai Province, Thailand. The algae was cultivated in laboratory under different red light LED (LD) intensity of, 10, 20, 30, 100 and 120 µmol m^{-2} s^{-1}. The medium using BG 11 modified without N source. Results Biomass as fresh weight and dry weight, %Dry weights, protein, and Phycocyanin contents were fluctuation in difference light intensity. The highest biomass as fresh weight have shown in LD 30 with the value of 9.24 g.L^{-1} and the lowest was at LD10 with the value of 2.56 g.L^{-1} and as dry weight was maximum at LD120 with 0.21 g.L^{-1} and minimum was 0.07 g.L^{-1} at LD10. %Dry weights was found the maximum value at LD120 with 3.51% and lowest at LD 30 with the value of 1.8%. Protein content have shown the highest value at LD30 with 1.8%. Protein was high present at LD10 with the value of 1.00 ± 0.12 mg.L^{-1} and low value at LD100 with 0.79 ± 0.09 mg.L^{-1}. The Red light intensity of 30 µmol m^{-2} s^{-1} was resulted in phycocyanin higher values than other intensities with the value of 0.32 ± 0.09 mg.L^{-1} and lowest concentration at LD120 with the value of 0.17 ± 0.01 mg.L^{-1}. Conclusion LED Red light at 30 µmol m^{-2} s^{-1} were optimal for phycocyanin accumulation in *Nostoc commune* Vaucher.
47	061-jpn	**Sense of belonging: Enhancing youth participation in a club through co-creation activities.** **Chew Ping Kwong[1],** Md Akhir M Sharif[2] *[1]Management and Humanity Department, University Teknologi Petronas Malaysia; elsoncpk@gmail.com* *[2] Management and Humanity Department, University Teknologi Petronas Malaysia; mdakhir_sharif@utp.edu.my* **Abstract:** Despite increasing awareness of the importance of youth development process, therefore participating in club played an important role. This study examines the co-creation behaviour is the strategies that can be used to enhance the sense of belonging among club members (youth) toward the club so that they will participate in club consistently. Besides that, the present research makes several

		contributions. First, the scale is not only applicable to academic research but also in practice. Second, the club committee can use the scale to detect the weaknesses and the strengths of youth value co-creation behaviour.
48	064-jpn	**A STUDY ON EFFECTS OF ORGANIZATION CONFLICT ON TEAM PERFORMANCE** **Ridhawati Zakaria[1]**, Dayang Nailul Munna Abg Abdullah, Noor Azura Dahalan, Frisella Albert *Universiti Teknologi MARA, Centre for Management and Administrative Studies, Faculty of Business and Management, 42300 Puncak Alam, Malaysia* **Abstract:** Organizational conflict is an important topic for both managers and for scientists interested in understanding the nature of organizational behavior and organizational processes [1]. For any organization to be effective there must be an efficient means of conflict in organization. Teams must encounter conflicts as they are working in one command to achieve common goal because conflicts come in many forms in an organization. Conflict within certain limits is essential to productivity. Conflict can be functional to the extent to which it results in the creative solution to problems or the effective attainment of subsystem or organizational objectives that otherwise would not have been possible. Little or no conflict in organizations may lead to stagnation, poor decisions, and ineffectiveness. On the other hand, organizational conflict left uncontrolled may have dysfunctional outcomes [2]. Traditionally, conflict was viewed as something harmful but now it has changed to a view that realizes conflict as a reality of organizational life. The purpose of this study was to determine various types of organizational conflicts that influence team performance in organization and to identify the relationship between organizational conflicts and team performance.
49	066-jpn	**Influences of LED Light Quality to Rice Seedlings Green Tea Grown in a Semi-Closed System** **Thitiwat Rattanamanee [1]**, Chalinda Ariyadet [2], Siriwat Sakhonwasee [3] Wichittra Daengprok [4] *[1,2] Program in Agricultural Interdisciplinary, Maejo University, Chiangmai, Thailand. chalinda.bio@gmail.com* *[3] Program in Horticulture, Faculty of Agricultural Production, Maejo University, Chiang Mai 50290, Thailand.tongscpl@yahoo.com* *[4]Div. of Food Technology, Fac.of Engineering and Agro-Industry, Maejo University, Chiang Mai 50290, Thailand.* wichittra@gmail.com **Abstract:** To assess the effects of light quality on 6 variety rice seedlings of *Oryza sativa* Linn. for develop the green tea product. Investigate the %germination for consistency of rice seedling per area. Using 14 days after germination of 3 white seed cultivars RD10, Thai Pathumthani fragrant, Khao Dawk Mali 105 and 3 red seed cultivars, RD69, Black Jasmin rice and Black Gluten Rice. The methods of green tea processing

		were studied in order to find out the most suitable way to produce green tea product under light quality control. The results showed that green tea products from all 6 rice cultivars were almost similar in term of color and size. Khao Dawk Mali 105 was greater aroma than others. The seedling height yield and %dry weight were varies in stain and have a little effect from light quality. Chlorophyll a and chlorophyll b content were show higher in red seedling green tea under white light condition with the highest value of 1.75 ± 0.03 mg.g^{-1} in Black Gluten Rice and 0.99 ± 0.2 mg.g^{-1} in Thai Pathumthani fragrant rice for chlorophyll b. Protein analysis of those of 6 rice cultivars showed that the highest value in white rice seed under red light condition with the value of 110.08 ± 14.6 mg.L^{-1}. Red light was shown more effect to red seedling cultivars than white seedling cultivars. In conclusion the influences of LED light quality to rice seedlings green tea grown in a semi-closed system have seem to be clear in chlorophyll a and chlorophyll b content in red rice seedling under white light condition.
50	067-jpn	**Meeting the Educational Needs of the Students with Cancer in the United States. Policy and Practice in the Schools.** **Taku Murayama*** *[1]Department of Special Needs Education, Tokyo Gakugei University School of Education, Koganei, Japan* **Abstract:** This paper focused on the meeting the needs of students with cancer in the schools in the context of the United States. The social environment surrounding the child cancer has changed. The remission rate for children with cancer is relatively high, so we must consider whether the students is anticipating treatment, actively in treatment, or post-treatment when one thinks about the potential mental stressors and cognitive impacts of cancer on the child's education. In this paper, the articles and guidelines related to the care and accommodation in schools are reviewed on the viewpoints of the general framework, policy, students' psychological and physiological needs, and the roles and professional development for the teachers and practitioners working for schools. In the section of the general framework, the guideline by American Academy of Pediatrics, which suggests the Multidisciplinary team members should have pediatric expertise within their specialty area. As for the policies, the sun-protection policy are highly noticed. In the United States, skin cancer has the largest population of the patients, and WHO and other countries has implementing the policy. In the section of students' difficulties, the psychological needs such as trauma, depression, and anxiety disorders. With respect to the teachers and staffs' professional development, three cases are showed. The first is about teaching strategy, the second is the medical staffs' activities for the improvement of patients' education, the third is the collaborative strategy for making the multidisciplinary team and meeting needs of students in the daily lives in the schools. Two recent policies and act has grown around 2010, but there are fewer attention to the child cancer than adults. Much attention has been paid to the improvement in the quality of care and teaching for the students with cancer during the

		past two decades. It includes the new ways to define and measure quality, recognition that doing so can identify strategies to enhance care, and systematic efforts by both government and private insurers to apply these principles. Further research are required along with the curriculum development and systematical educational plans, and teachers professional development in the viewpoint of treatment and caring for the students' invisible illness and disabilities.
51	**002-aicitse**	**Strategy Design of Motion Estimation for the Image Stabilizer** **Shyang-Jye Chang** & Ray-Hong Wang *Department of Mechanical Engineering, National Yunlin University of Science and Technology* *Email:* changjye@yuntech.edu.tw **Abstract:** The motion vectors estimation algorithm is very widely used in many image process applications, such as the image stabilization and object tracking algorithms. The conventional searching algorithm, based on the block matching manipulation, is used to estimate the motion vectors in conventional image processing algorithms. During the block matching manipulation, the violent motion will result in the greater amount of computation. However, too large amount of calculation will reduce the effectiveness of motion vectors estimation algorithm. This paper presents a novel searching method to estimate the motion vectors for high-resolution image sequence. The searching strategy of this algorithm includes three step: the lager area searching, the adaptive directional searching, and the small area searching. The achievement of this paper is to develop a motion vectors searching strategy to improve the computation efficiency. Compared with the conventional motion vectors searching algorithms, the novel motion vectors searching algorithm can reduce the motion matching manipulation effectively by 50%.
52	**003-aicitse**	**Malware Classification by Ensemble Application of Convolutional and Recurrent Neural Networks** **Hae-Jung Kim** *Department of Cyber Security, Kyungil University* *Email:* hjkim325@kiu.kr **Abstract:** Malicious software written for malevolent purposes poses a serious threat to information security. With respect to information security for malware treatment, malicious codes must be correctly classified. In this paper, we propose an ensemble classification scheme for the convolutional neural network and recurrent neural network models. We then analyze the classification results of malicious software. These results are presented as a confusion matrix and cosine similarity. The performances of the classifiers are compared and visualized by using graphical representations. The performance of the proposed ensemble model was the highest at 96.50%, indicating its viability as an accurate classification model.

53	004-aicitse	**Design of DWT Based Image Compression Technique for Wireless Sensor Network Applications** **Prayoth Kumsawat** and Tanasan Srikotr *School of Telecommunications Engineering, Institute of Engineering, Suranaree University of Technology, 30000, Thailand* *Email: prayoth@sut.ac.th* **Abstract:** In this paper, we propose an efficient image compression strategy exploiting the multi-resolution characteristic of the wavelet transform. We use MATLAB simulation to evaluate the image compression technique called "Discrete Wavelet Transform Skipped High Pass Sub-band (DWT-SHPS). Furthermore, we have implemented an image compression using DWT-SHPS technique on a low-cost single board computer. The evaluation is performed under the wavelet compression framework from the view point of quality of image and data compression ratio. Different combinations of parameters and transformation levels have been compared against the JPEG compression standard. The experimental results indicate that the SHPS technique is close to the performance of JPEG standard. It efficient and has low complexity with less memory requirements in the hardware implementation.
54	006-aictse	**RCS analysis of target and clutter in FMCW Radar** **Jongun Ho,** Daehyun Kim, Wonjong Choi, Younglok Kim *Sogang University, Korea* *Email: sylviaho@sogang.ac.kr, sinzuggo@sogang.ac.kr, cpswod01@sogang.ac.kr, ylkim@sogang.ac.kr* **Abstract:** The radar cross section (RCS) of a target is used to identify it and to glean its characteristics, by measuring the size of reflected radar signal. In this study, we used a 77 GHz triangular frequency modulated continuous wave (FMCW) array radar to detect pedestrians, automobiles, and clutter. It is possible to classify target and clutter by analyzing the characteristic of the measured RCS. In this study, suitable target RCS characteristics (mean, variance and probability distribution) were analyzed based on measured data.