GTBMC 2022

Global Technology and Business Management Conference

Global Technology and Business Management Conference
(GTBMC 2022)
The 11th International Conference by Faculty of Business
Administration, Chiang Mai University
2 – 4 November 2022
Venue: Le Méridien Chiang Mai
Chiang Mai, Thailand

Organized by Electrical Engineering Academic Association
(Thailand) and Faculty of Business Administration,
Chiang Mai University

Technical Co-Sponsors by IEEE Thailand Section and IEEE
TEMS Thailand Chapter

Message from EEAAT President

On behalf of the Electrical Engineering Academic Association (Thailand), EEAAT, we would like to truly express the deep appreciation to the Faculty of Business Administration Chiang Mai University to be the co-host of and to arrange the 2022 Global Technology and Business Management Conference (GTBMC2022). GTBMC is the first conference in Thailand that integrates the knowledge and research in the areas of business, engineering and technology together. We believe that the knowledge combination among these areas is very much essential in business and industry today and beyond when technology is playing important roles in many sectors all around the world.

We also thank IEEE Thailand Section and IEEE TEMS Thailand Chapter for the great support as the technical sponsorships.

Welcome all participants to GTBMC2022. We hope everyone receive the good opportunity to exchange knowledge and experiences with others as well as to strengthen the collaboration networks for the whole period of the conference.

(Associate Professor Dr. Athikom Roeksabutr)
President Electrical Engineering Academic Association (Thailand)
Bangkok, THAILAND

Message from Dean of
Faculty of Business Administration Chiang Mai University

In representative of the Faculty of Business Administration Chiang Mai University, Chiang Mai, THAILAND proudly welcomes all participants of the Global Technology and Business Management Conference: GTBMC2022.

In 2022, the Faculty of Business Administration Chiang Mai University and the Electrical Engineering Academic Association (Thailand) or EEAAT, agreed to expand the scope of the conference by integrating the areas of Business and Engineering and Technology (Eng & Tech) together. We believe that knowledge in business can be efficiently applied to any kind of business and industry, particularly in Engineering and Technology sectors. We are also confident that this trend is very much essential not only for academic but industry when the disruption keeps coming along with the time through the digital era. Then, the 11th International Conference by the Faculty of Business Administration Chiang Mai University becomes the Global Technology and Business Management Conference (GTBMC) for the debut in 2022.

Once again academic experts, business people, graduate students and representatives from government agencies and private organizations join us to enrich knowledge and understanding through research exchange as well as building up networks for further academic cooperation. In addition, the forum provides a venue to publish academic papers.

The conference encompasses papers including themes which are: 1) Innovative Business Management, Marketing, Finance and Accounting 2) Energy Business Management 3) Creative Business Management 4) Professional Service Business Management 5) Technology Business Management 6) Technology and Innovation Management 7) New Technology Directions and Challenges 8) Health Sustainability and Social Issues 9) Digital Transformation in Business and Industry 10) Entrepreneurship and Ecosystem 11) Disruptive Technology and Business Models 12) Zero-Waste Management and other related topics in Technology and Business Management

This year distinguished five guest speakers on the theme of "Beyond Frontier in Energy Business & Technology Management". 1) Professor Dr. Sameer Hosany, Professor of Marketing, the School of Business and Management, Royal Holloway, University of London, United Kingdom. 2) Associate Professor Dr. Gerard Tocquer, the School of Management, Asian Institute of technology. 3) Mr. Warit Rattanachuen, Assistant Governor, the Electricity Generating Authority of Thailand. 4) Mr. Pongsakorn Yuthagovit, Assistant Governor, the Provincial Electricity Authority. 5) Mr. Chukiat Yangyuenbangchan, Director, the Power System Planning and Smart Grid Department.

I would like to express my sincere gratitude to the distinguished keynote speaker, panelists, and presenters for their presence and contributions to the conference. I also thank all the program committee members for their efforts in ensuring a rigorous review process to select high-quality papers.

(Assistant Professor Dr. Khongphu Nimanandh)
Dean of Faculty of Business Administration
Chiang Mai University
Chiang Mai, THAILAND

Message from the GTBMC Program Chair

In order to disseminate knowledge and accelerate professional learning and collaboration at the 2022 Global Technology and Business Management Conference, GTBMC, in Chiang Mai, we had planned to brings together scholars' network with practitioners in the area of both technology and business management. GTMBC takes great pride in providing unparalleled and innovative interdisciplinary conference in this year. It gives me great pleasure to write this forward to congratulate the 2022 GTBMC. Especially, this is our 11th International Conference organized by Faculty of Business Administration Chiang Mai University. With very special occasion in this year, we work closely with our valued co-host, Electrical Engineering Academic Association (Thailand), EEAAT, in arranging the 2022 GTBMC on 2 – 4 November 2022 at Le Méridien Chiang Mai hotel, Thailand.

For this year, the conference brings together representors from various sectors, and encompasses manuscripts in various topics related to business, technology, and innovation management for today's context. I would like to thank the technical program chairs and committee for their dedication and cares about every step in the review process. The success of this conference falls on volunteers to leverage the talent we have. I would like to express my sincere thanks to all stakeholders especially contributing authors, GTMBC Committee, EEAAT, and Faculty of Business Administration Chiang Mai University for their passion and contribution.

(Associate Professor Dr. Narumon   Kimpakorn)
GTBMC Program Chair
Faculty of Business Administration, Chiang Mai University
Chiang Mai, THAILAND

Global Technology and Business Management Conference: GTBMC 2022
The 11th International Conference by Faculty of Business Administration Chiang Mai University

Principle & Rationale

The vision of the faculty of business administration at Chiang Mai University is to focus on enhancing the academic knowledge of business management. The faculty encourages the creation and development of ongoing research to academic scholars and students. This would lead to the expansion of new knowledge in managing a business which can provide a benefit to the profession itself, the local community, and industries nationwide. The business administration conference is one of the methods in disseminating knowledge by the Board of Administration.

Chiang Mai University has heeded to the importance of endorsing the development and propagation of knowledge. The effort is demonstrated in producing a channel to have participants from the private business sector, government institutions, and academic research centers to come together and exchange their experiences and ideas as well as collaborate on upholding the profession of business management. Under the provision of Chiang Mai University, the business management research conference has continued on from 2008. The conference has received accolades from the participants of the seminar.

Therefore, it is the aim of the institution to strengthen the academic administration line in providing leadership and knowledge in business management. Moreover, the purpose of creating this forum is to disseminate knowledge in the business management. This is to stimulate a continuation of ideas being exchanged between academics, researchers, and students who are extending their studies on the master's and doctorate in business management and other related fields.

In 2021, Faculty of Business Administration Chiang Mai University (CMU Business School (CMUBS)) and the Electrical Engineering Academic Association (Thailand), or EEAAT, agreed to expand the scope of the conference by integrating the areas of Business and Engineering and Technology (Eng & Tech) together. We believe that knowledge in business can be efficiently applied to any kind of business and industry particularly in Engineering and Technology sectors. We are also confident that this trend is very much essential not only for academic but industry when the disruption keeps coming along with the time through the digital era. Then, the 11th International Conference by Faculty of Business Administration Chiang Mai University becomes the Global Technology and Business Management Conference (GTBMC) for the debut in 2022.

Objectives
- To promote the academic center's view of business management in every possible area such as Engineering and Technology, and Business itself.
- To promote the development of research which will lead to create innovation and on the application of knowledge management as a benefit for technology and business management in the community up to the international level.
- Creating opportunity to exchange knowledge, vision and experience in developing research in technology and business management.

Research areas

- Innovative Business Management, Marketing, Finance and Accounting
- Energy Business Management
- Creative Business Management
- Professional Service Business Management
- Technology Business Management
- Technology and Innovation Management
- New Technology Directions and Challenges
- Health Sustainability and Social Issues
- Digital Transformation in Business and Industry
- Entrepreneurship and Ecosystem
- Disruptive Technology and Business Models
- Zero-Waste Management
- Other related topics in Technology and Business Management

The committees will be judging the "Best Paper Award" for the articles that are presented at the forum. The work must be in accordance with article quality criteria of the experts and the seen as unique, based on assessment ratings from the experts. Final decisions will be made by the Conference Committee.

Organizing Committee

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2. Kemakorn Chaiprasit — Chiang Mai University, Thailand
3. Koblarp Chandrasapth — Chiang Mai University, Thailand
4. Siripan Deesilatham — University of the Thai Chamber of Commerce, Thailand
5. Supattana Nirukkanaporn — EEAAT, Rangsit University, Thailand
6. Twoangtip Siriwan — Chiang Mai University, Thailand
7. Wanlanai Saiprasert — Chiang Mai University, Thailand

GTBMC 2022

Global Technology and Business Management Conference

Agenda
Global Technology and Business Management Conference: GTBMC 2022
2 – 4 November 2022
Venue: Le Meridien Chiang Mai, Thailand
Organized by the Electrical Engineering Academic Association (Thailand) (EEAAT) and
Faculty of Business Administration Chiang Mai University

Time (BKK) UTC+7

Nov 2, 2022	
13.00 - 14.00 hrs.	Registration
14.00 - 17.00 hrs.	**Site Visit:** Old-Town Chiang Mai City Tour to explore the rich history and culture by tram
17.00 – 18.30 hrs.	Welcome reception at Le Meridien Chiang Mai, Thailand
Nov 3, 2022	
08.30 – 09.00 hrs.	Registration (in front of the Grand Ballroom, 2nd floor)

09.00 – 09.20 hrs.	**Welcome Remarks & Group Photos** by
	1) Assistant Professor Dr. Khongphu Nimanandh
	   Dean of Faculty of Business Administration, Chiang Mai University
	2) Associate Professor Dr. Athikom Roeksabutr
	   President of the Electrical Engineering Academic Association (Thailand) (EEAAT)

09.20 – 09.50 hrs.	**Topic:** "Customer Experience and New Technologies"
	Keynote Speaker: Professor Dr. Sameer Hosany
	                    Professor of Marketing, The School of Business and Management,
	                    Royal Holloway, University of London, United Kingdom.

09.50 – 10.20 hrs.	**Topic:** "Climate change. Green washing and Brands"
	Keynote Speaker: Associate Professor Dr. Gerard Tocquer
	                    Distinguished Adjunct Professor School of Management
	                    Asian Institute of Technology, Thailand.

10.20 – 10.30 hrs.	Coffee Break (in front of the Grand Ballroom, 2nd floor)
10.30 – 12.30 hrs.	**Parallel Sessions** (presentation 10 min., Q&A 5 min./paper) **GTBMC 1** Expedition room, 3rd floor **GTBMC 2** Journey room, 3rd floor **GTBMC 3** Excursion room, 3rd floor **GTBMC 4** Passage room, 3rd floor

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Time (BKK) UTC+7

Nov 3, 2022	
12.30 - 13.30 hrs.	Lunch
13.30 - 15.00 hrs.	**Keynote Session** **Topic:** "The Role of EGAT on ASEAN Grid" **Keynote Speaker:** Mr. Warit Rattanachuen (Assistant Governor, EGAT) **Topic:** "Smart Grid and Grid Modernization impact on Thailand Industrial" **Keynote Speaker**: Mr. Pongsakorn Yuthagovit (Assistant Governor at The Provincial Electricity Authority, PEA) **Topic:** "Underground Electrical System Development in Bangkok" **Keynote Speaker**: Mr.Chukiat Yangyuenbangchan (Director of power System Planning and Smart Grid Department, MEA)
15.00 - 15.15 hrs.	Coffee Break (in front of breakout room, 3rd floor)
15.15 – 17.00 hrs.	**Speaker Session** **Topic:** How is "Technological Business Forum"? **Speaker:** 1) Mr. Vidsarut Chansukhon (Banpu NEXT EcoServe Co., Ltd.) 2) Dr. Suparat Yeamkuan (Thailand Printed Circuit Association (THPCA)) 3) Dr. Itsda Boonyaroonate (Power Quality Team Co., Ltd.) 4) Mr. Montri Sriskul (Partner of Holding Company, A ONE Mission Co.,Ltd.) 5) Mr. Surachate Chumpol (TOYOTA TSUSHO NEXTY ELECTRONICS (THAILAND) CO.,LTD.,) **Moderator:** Dr. Siripan Deesilatham (UTCC)
17.30 – 21.00 hrs.	**Banquet and Award Presentations**
Nov 4, 2022	
09.00-15.00 hrs.	Networking / Technical forum

GTBMC2022 Oral Presentation Schedule

Time(BKK) UTC+7	GTBMC 1 Expedition	GTBMC 2 Journey	GTBMC 3 Excursion room	GTBMC 4 Passage room
10.30 – 10.45 hrs.	Paper ID: A1 Quantum as a Service (QaaS) in Digital Disruption Era	Paper ID: B1 Determinants of Pricing of New Condominiums in Proximity to a Bangkok Transit System: A Case of the Sukhumvit Line Using Web-Based Data	Paper ID: C1 (ONLINE) Challenges Faced by 'Brick and Mortar Travel Agencies in Brunei Darusslam	Paper ID: D1 (ONLINE) Assessment of innovation capability of the higher education institutions in digital transformation: the cases of Croatia and Albania
10.45 – 11.00 hrs.	Paper ID: A2 Next Frontier of Malaysian Space Technology Development Based on Bibliometric Analysis and Patent Analysis	Paper ID: B2 Big Data Impact Analysis within Pythonic Accounting Framework on Financial Market: Foreign Digital Media Moderation Effect on Turkey's Unorthodox Monetary Policies Towards Inflation	Paper ID: C2 (ONLINE) A Comparative Study on CSR Disclosure Practices of Young North America and Asia Pacific Technology Companies	Paper ID: D2 A Key Model Enhancement for Personalized Marketing: Introducing Purchase Timing Predictions to Hierarchical Bayes Pareto/NBD model
11.00 – 11.15 hrs.	Paper ID: A3 IEC61850-Based Remote Control System of Pole-Mounted 69/115kV Switches on MEA's Distribution System	Paper ID: B3 Value-at-Risk Models and The Energy Sector: A Case of The Stock Exchange of Thailand	Paper ID: C3 (ONLINE) What are the Causes of Employee Turnover in Brunei Darussalam	Paper ID: D3 The Conceptual Model for the Measurement of Social Media Engagement Toward Brand Equity
11.15 – 11.30 hrs.	Paper ID: A4 Development of Mathematical Model for Radiotherapy Patient Scheduling	Paper ID: B4 Board Characteristics and Big Data Optimization: Prevailing Pythonic Accounting in Fraudulent Financial Reports in Indonesia	Paper ID: C4 Opportunity Seizure in the Disruptive Era: Case Study of an Ethnic Minority Entrepreneur in Thailand	Paper ID: D4 The Influencing Factors of Consumer Purchase Intention towards Innovative Herbal Topical Anesthetic Spray
11.30 – 11.45 hrs.	Paper ID: A5 (ONLINE) Information Engineering Innovation Management Process Leading the Student to Become Startup Entrepreneurship	Paper ID: B5 Different Trading Reactions of Retail Investors to Earnings Announcements of Energy Firms and Non-energy Firms	Paper ID: C5 The SWOT Analysis and Consumer Analysis of Pook Pak Kin Eng Shop on the Shopee Platform	Paper ID: D5 Exploring Elements of Content Marketing Using A Natural Language Processing: The Case of Native Woven Clothing
11.45 – 12.00 hrs.	Paper ID: A6 Intellegent Military Bases (IMB): Proposed Framework and Implementation	Paper ID: B6 Do Investment Subsidy and Analyst Following Improve Underinvestment Problems?: Evidence from Thailand	Paper ID: C6 Happiness at Work of Generation X and Generation Y Operating Employees in Private Service Businesses in Chiang Mai Province	Paper ID: D6 The Impact of Perceived Long Term Established New Brands Versus Newly Established Brands on Purchasing Channel Preference: A Conceptual Model Development
12.00 – 12.15 hrs.	Paper ID: A7 Competitive Potential in Business of the Optical Fiber Cable Production in Thailand – Conceptual Framework	Paper ID: B7 (ONLINE) Assessing the Needs of Private Equity in Brunei	Paper ID: C7 Operations Improvement in Human Resource Management using Lean Concept	Paper ID: D7 Perceived Value of Generation Y Identify as LGBTQ Customer's Towards OTOP Products in Northern Thailand
12.15 – 12.30 hrs.	Paper ID: A8 (ONLINE) Data Analytics on Automation of Test Case Infrastructure with Jira and ZephyrScale		Paper ID: C8 What are the driving forces of raw fish consumption? A preliminary survey in Cambodia	Paper ID: D8 Creating Shared Value Enhacing the Sustainable Business Model: Case Study – Safety to Society
17.30 – 21.00 hrs.	Banquet and Award Presentations			

Global Technology and Business Management Conference: GTBMC 2022
GTBMC 1 Expedition room, 3rd floor

Global Technology and Business Management Conference: GTBMC 2022
GTBMC 2 Journey room, 3rd floor

Global Technology and Business Management Conference: GTBMC 2022
GTBMC 3 Excursion room, 3rd floor

Global Technology and Business Management Conference: GTBMC 2022
GTBMC 4 Passage room, 3ʳᵈ floor

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Global Technology and Business Management Conference

Quantum as a Service (QaaS) in Digital Disruption Era

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Abstract

Applications of the advanced computer technologies are becoming more realistic. Two challenges are taken into consideration when applying such technologies to the businesses including more complicated user requirements and exponential growth of data. Better and faster understanding of the user requirements are key to achieve competitive advantages. Structured and unstructured data processing are currently more demanding. Quantum technology which is instantiated in physics have been utilized in various fields including computer science. Even the real quantum computer is still in its early development but other concepts such as quantum information and quantum computing are making progresses. Furthermore, some quantum-based algorithms are analytically proven to have higher performance. According to such important milestones, quantum computing has been regarded to one of the key infrastructures of the future computing. However, development of quantum system requires very high investment. Only some companies are developing their quantum computers together with several development environments and access to the quantum computing services. This paper aims to focus on the main aspects of the quantum computing including its backgrounds and recent advancements in order to see the clearer picture. Its recent applications, challenges and opportunities are addressed. Several services offered by the quantum computing leading companies are also outlined.

Keywords— quantum technology, quantum computing, quantum application, quantum as a service

Next Frontier of Malaysian Space Technology Development Based on Bibliometric Analysis and Patent Analysis

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3rd Yoshiyuki Matsuura
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Abstract

Malaysia's space industry has gotten off to a solid start and the government has worked hard to nurture the space industry. Malaysian Government attempted to gain competitive advantage in remote sensing technology against other ASEAN countries. However, there has been no extensive research which investigating the current landscape regarding remote sensing technology among ASEAN countries. Therefore, we conducted both bibliometric analysis and patent analysis to identify differences among the technology development. As a result, we will determine Malaysia's potential uniqueness or strength in terms of remote sensing technology. Thus, remote sensing technology in Malaysia was chosen as the case study for this research. This research will inspire the private companies, start-ups and Malaysian researchers to find promising technology development by focusing on remote sensing, specifically in image and satellite areas, to assist and address the environmental issues such as flood, landslides and deforestation.

Keywords—space technology development, database, patent analysis, bibliometric analysis, space industry

IEC61850-Based Remote Control System of Pole-Mounted 69/115kV Switches on MEA's Distribution System

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Abstract

Metropolitan Electricity Authority (MEA) is a power distribution utility in Thailand distributed at the following voltage levels: 230kV; 115kV; 69kV; 24kV; 12kV, and 380/220 Volts. Almost 21,115 km together with 159 substations deliver 53,282 gigawatt-hours of electricity annually from the Electricity Generation Authority of Thailand (EGAT). In the distribution system, the transmission line is one of the critical parts. The transmission line has to have good maintenance and switching plan for reaching the highest reliability. Nowadays, the environment of MEA's distribution area has changed, such as severe traffic jam, a high number of high constructions, and a high number of high advertising boards resulting in a higher chance of overhead-transmission-line faults than before. In the metropolitan area of Thailand, there is a significant problem with switching operations on transmission line due to severe traffic jam cause prolonged outage duration in wide-area especially industrial area, making higher cost. This paper presents an efficient method for improving the electrical distribution system's reliability by implementing a remote-control system using IEC61850 standard (MMS and GOOSE messaging) to operate pole-mounted 69/115kV switches in transmission lines from SCADA instead of a local control operation and proprietary remote-control system. The paper presents several practical techniques to implement the IEC61850-based remote control system to support both old RTUs (by GOOSE method) and modern RTUs (by MMS method) for utilizing data and reducing procurement cost. Finally, the IEC61850-based remote control system can reduce an outage duration from 30-60 minutes to 3-5 minutes if switchable loads make satisfactory.

Keywords— remote control system, load break switch, remote I/O device, power distribution

Development of Mathematical Model for Radiotherapy Patient Scheduling

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Abstract

This research aims to develop a mathematical model for scheduling radiotherapy patients and reduce the time for finding solutions. Firstly, the procedure of the cancer treatment and the previous mathematical models were studied. Then, the previous mathematical model was improved to reduce the time for finding the solution. All constraints were checked and some redundant constraints were eliminated. After the mathematical model was improved, five small cases were generated to validate and verify the improved mathematical model. Based on the solution of the experiment, the results found that the improved mathematical model can reduce the time for finding a solution significantly. To enhance the mathematical model for use in a real-world case, this research developed the mathematical model based on adding the constraints such as surgical constraints and radiotherapy processing time constraints. Finally, the completed mathematical model was applied to the real case. The results found that the proposed mathematical model can identify a list of the number of fractions for radiotherapy in each period, assign each patient to the selected room and selected technology, and identify the period of simulation and radiotherapy perfectly under the proposed constraints. The proposed model will be of great significance in helping decision-makers consider radiotherapy patient scheduling efficiently in terms of reducing time for treatment planning and reducing the error from the staff during radiotherapy patient scheduling as well.

Keywords— mixed-integer programming model, radiotherapy patient scheduling

Information Engineering Innovation Management Process Leading the Student to Become Startup Entrepreneurship

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Abstract

This article describes how to manage innovation in information engineering leading students to start their own businesses The article started by explaining Thailand's 4.0 concept, which is a technology trend. Then, discuss the relationship between innovation and startup theories. Following that, we demonstrated a successful student management approach and journey. Finally, we offer suggestions for encouraging students to start their own businesses.

Keywords—startup, entrepreneur, management, student

Intellegent Military Bases (IMB): Proposed Framework and Implementation

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Abstract

This paper presents an Intelligence Military Base (IMB) prototype which utilizes multi-sensors for detecting abnormalities. This proposed prototype is based on COTS (Commercial off-the-shelf) IoT (Internet of Things) technology which is applied for military. It is defined as IoBT (Internet of Battlefield Things). This proposed prototype provides an assistance and surveillance in military bases. The proposed system consists of a server and IoT-based sensors. The sensors are classified in two categories: long-range sensors and short-range sensors. LoRaWAN is used for communicating between the server and long-range sensors while WiFi is used for communicating between the sever and short-range sensors. Simple data fusion algorithms are used to fuse data from multi sensors and machine learning events. To monitor the system, an android application and a web-based application were developed. Three prototypes of the proposed frameworks were delivered to use for the South Thailand insurgency.

Keywords—IoT, IoBT, military base, surveillance, security, home security

Competitive Potential in Business of the Optical Fiber Cable Production in Thailand – Conceptual Framework

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Abstract

This paper presents the conceptual framework of the qualitative research to find out the innovations to enhance the competitive advantage in business of Thai optical fiber cable manufacturers. In-depth interview, group conversation, and brain storming among the stake holders in the supply chain of fiber cable business are focused, analyzed and finally evaluated.

Keywords— optical fiber business, fiber cable market, competitive advantage

Data Analytics on Automation of Test Case Infrastructure with Jira and ZephyrScale

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Abstract

As competitive advantages drive revenues and market share, the predictability and velocity of product delivery have become key metrics of today's software industry and business management practices. To achieve velocity of production, companies have adopted product management methodologies such as Agile to deliver frequent and smaller minimum viable products than in past markets. Traditionally, this type of methodology for the software product life cycle has two major components: development and testing. While software development is inherently creative and is thus not well suited for automation, software testing can be highly automated and accelerates product time-to-market. Current manual testing of specific cases in company infrastructure is cost-ineffective and time consuming. Automation enables tests to be run repeatedly at no additional cost, decreasing the time to run repetitive tests and improving efficiency in the workplace. However, the process of automation requires a shift in the basic infrastructure of companies. Should the shift become incomplete or mishandled, automating could foment a much larger problem in business management. Thus, to avoid the loss of data or other drastic consequences, reports on data analytics should be made directly available to management personnel. This study provides a novel system for collecting data analytics on the status of automation in test case infrastructure for corporations. A combination of Atlassian Jira™, SmartBear Zephyr Scale, and Rest APIs are used to authenticate and pull test case data from the cloud servers of a corporation, which are then parsed to provide critical insights into automation and test case components.

Keywords— automation, data analytics, corporate software development

Determinants of Pricing of New Condominiums in Proximity to a Bangkok Transit System: A Case of the Sukhumvit Line Using Web-Based Data

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Abstract

A condominium's structural characteristics and its proximity to certain locations play a role in its pricing. Yet, no study has examined how the selected variables from the two groups could determine the pricing of new condominiums along the BTS Sukhumvit track. The study was thus an attempt to serve this purpose. Using the data from one real estate website, the regression analysis confirmed the significant effects of the structural attributes and the distances to the nearest BTS stations on the pricing. In addition to extending insights into the determinants of the pricing, real estate developers may apply the findings to alter their pricing operation.

Keywords—pricing, new condominiums, sukhumvit, bangkok transit system, proximity

Big Data Impact Analysis within Pythonic Accounting Framework on Financial Market: Foreign Digital Media Moderation Effect on Turkey's Unorthodox Monetary Policies Towards Inflation

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Abstract

This research examines the influence of interest rate on inflation and the mainstream media moderation effect on the relationship between interest rate and inflation in Turkey during the Central Bank of the Republic of Turkey's decision on interest rate cut from the end-2021 to early 2022. The weekly data are analyzed through interactive linear regression using the annual data of the World Bank and sentiment analysis by using Big Data-driven Python software on the top five global mainstream media news articles. Surprisingly, the mainstream media moderation effect is significantly affecting inflation in Turkey by up to 68 percent. The model can explain 71 percent of the variation in inflation with the model proven to be fit. Breusch-Godfrey Serial Correlation Lagrange Multiplier test proves that the residuals are free from serial correlation. Breusch-Pagan Godfrey depicts that the residuals are free from heteroskedasticity. In conclusion, the research found that the mainstream media is responsible for provoking overreaction in the financial market causing severe inflation. On the other hand, the interest rate cut does not cause inflation in Turkey.

Keywords— big data, python, sentiment analysis

Value-at-Risk Models and The Energy Sector: A Case of The Stock Exchange of Thailand

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Abstract

Energy companies play a crucial role in serving economic welfare throughout the supply chain. However, energy companies are more exposed to energy commodities' risk than other sectors. This can potentially cause them to possess more market risk. Therefore, if a Value-at-Risk (VaR) model is applied to this sector, it might lose its accuracy due to its volatility. This paper examines the appropriation of three VaR models including Historical Simulation VaR, Delta-Normal VaR, and Monte Carlo simulation VaR when they are applied to energy stocks in the Stock Exchange of Thailand (SET). The backtesting methodology includes Kupiec's POF test, Independence Test, and Christoffersen's Interval Forecast test. The results indicate that the Historical Simulation VaR is the most fitted model when compared to the other two models.

Keywords— energy companies, stock market, market risk, value-at-risk, backtesting, monte carlo simulation

Board Characteristics and Big Data Optimization: Prevailing Pythonic Accounting in Fraudulent Financial Reports in Indonesia

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Abstract

There are two-fold purposes of this study. First, we explore the relationship between board characteristics proxied by CEO duality, board independence, and board remuneration and fraudulent financial reporting measured by F_Score. Second, we examine fraudulent financial reporting by using Python Sentiment Analysis. Our findings show that CEO duality and board remuneration significantly lead to fraudulent financial reporting. In contrast, board independence is not able to affect fraudulent financial reporting. By utilizing Pythonic Sentiment Analysis, we find that all observed samples have -1 (negative 1), noting that the article contains many negative meaning vocabularies (negative sentiment). This result confirms the significant measurement of F_Score in examining fraudulent financial reporting. This study provides insights for regulators in developing a strong ground of corporate governance structure to prevent fraudulent financial reporting and sustain confidence in the Indonesian stock market and economy.

Keywords— board characteristics, fraudulent financial reporting, pythonic accounting, big data optimization

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Different Trading Reactions of Retail Investors to Earnings Announcements of Energy Firms and Non-energy Firms

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Abstract

This study investigates the trading behavior of retail investors around quarterly earnings announcements of firms in the energy sector compared to the other firms in the Stock Exchange of Thailand. Trading behavior of retail investors is observed via their abnormal trading volume. Event study with a total of 344 firm-event samples shows that no abnormal trading volume occurs after earnings announcements of stocks in the energy sector. Contrastingly with the non-energy firms, which have significant abnormal trading volume in their post-announcement period. This implies different reactions of retail investors to earnings announcements due to the firm's business. Our result is consistent with Chae's [1] explanation and empirical test about the impact of companies' sectors on investors trading around their earnings announcements, especially petroleum companies.

Keywords— energy firm, industry effect, trading volume, trading behavior, earnings announcement

Do Investment Subsidy and Analyst Following Improve Underinvestment Problems?: Evidence from Thailand

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Abstract

This study aims to investigate the association between investment subsidies, analysts' following, and investment levels for underinvested firms in the Thai capital market during 2000–2019. Longitudinal data about the investment grants was hand-collected from the annual reports of each firm. Unbalanced panel data and the fixed effect regression were analyzed. The findings show that the investment benefits and privileges from the government agency fail to increase capital spending for the underinvestment firms. However, market forces thought analysts to follow were found to enhance insufficient investment levels.

Keywords—investment subsidy, analyst following, underinvestment

Assessing the Needs of Private Equity in Brunei

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Abstract

This paper assesses the needs of private equity by conducting a survey among 30 businesses in Brunei. We examine whether there is a need for private equity as a form of investment capital for companies in Brunei, what may be the motivations that drive these businesses to seek private equity, and what may be the existing barriers that hinder these businesses from seeking private equity financing. We also further explore to what extent the private equity industry has its place in Brunei Darussalam. We ascertain that Brunei is still in its early development in the private equity industry, based on the proposition that businesses are yet to grasp the knowledge of private equity fully, and the business ecosystem is yet mature to support the private equity industry.

Challenges Faced By 'Brick and Mortar Travel Agencies in Brunei Darussalam

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Abstract

This paper aims to identify the factors contributing to the major challenges of travel agency and examines the possible elimination of brick and mortar travel agencies in Brunei Darussalam as a result of online booking travels destination. Surveys and questionnaires have been conducted to analyze which major factors have most affected travel agencies. It also suggests areas and gives recommendations on how to face the challenges and which factors to improve for the survival of the travel agencies shortly. At the same time, we want to highlight the essential features of brick-and-mortar travel agencies combined with the help of technology.

Keywords— tourism, travel agency, technology, brunei, internet, management

A Comparative Study on CSR Disclosure Practices of Young North America and Asia Pacific Technology Companies

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Abstract

Social responsibility is when it generates services and products that maximize wealth or profit, and it is considered socially accountable. This study compares the disclosure practices of the Top 500 young tech companies, each in North America and the Asia Pacific region, using 20 factors in the Ethical, Environmental, and Human Resources categories employing cluster analysis. This study finds regional differences in the different types of disclosures.

Keywords— CSR disclosures, north america, asia pacific, technology companies

What are the Causes of Employee Turnover in Brunei Darussalam

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Abstract

For an organization to succeed in this modern world, it is significant to retain its key employees, as they are the organization's assets. Numerous researchers have carried out these studies as they hope to understand the factors affecting employee retention and turnover. One employer in Brunei Darussalam seeks to retain its best and most innovative employees. This study focuses on the employment strategies that the particular employer employs and understands the employee's perception of the process in-depth. The researcher produced and tested the hypothesis that the employment strategies will prevent turnover and enhance employee retention at an organization. The population of the study was 150 respondents from the organization. Statistical and non-statistical data methods were utilized to analyze the data.

Opportunity Seizure in the Disruptive Era: Case Study of an Ethnic Minority Entrepreneur in Thailand

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Abstract

The case study was conducted to gain understanding regarding an ethic minority entrepreneur and how he seized the opportunity during the disruptive era to start his own business as well as how his ethnic minority status played a role in this situation. This study applies qualitative research method. The informant is an ethnic minority who became a successful online entrepreneur during the disruptive era. Data was collected by face-to-face semi-structure interviews as well as reviewing the informant's online marketing social media. To analyze and present the result, the researcher applied content analysis method that are presented in a narrative pattern. The research results include an illustrated summary of the background of the informant, how he seized the opportunity in the disruptive era, how his ethnic minority status effected his business performances, and his plans for the future. This research is beneficial to people who are interested in becoming an entrepreneur as it gives lessons on important aspects of entrepreneurship.

Keywords— technology disruption, minority, entrepreneur, Thailand

The SWOT Analysis and Consumer Analysis of Pook Pak Kin Eng Shop on the Shopee Platform

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Abstract

Pook Pak Kin Eng Shop is a store on the Shopee platform. Its products include vegetable seeds, other plant seeds, and fertilizer. As the store wants to increase the number of consumers and sales, it aims to review its business operation and decides what to do next in terms of marketing. Drawing from the framework of strength, weakness, opportunity, and threat (SWOT) and 6W1H analysis of consumer behavior, several findings from the analysis are uncovered. Directions for future marketing decisions are offered based on the research results.

Keywords—digital marketing, SWOT, consumer, business

Happiness at Work of Generation X and Generation Y Operating Employees in Private Service Businesses in Chiang Mai Province

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Abstract

This study aimed to analyze the level of happiness at work and factors affecting happiness at work of generation X and generation Y operating employees in private service businesses in Chiang Mai province. Questionnaires were distributed to gather data from 200 respondents who work as operating employees in private service businesses, 100 respondents were generation X who were born between 1965 – 1977 and 100 respondents were generation Y who were born between 1978 – 1998. Descriptive statistics by frequency, percentage and mean and inferential statistics by independent sample t-Test and regression analysis were used to analyze the data.

The findings showed that the overall happiness levels of generation X and generation Y operating employees were at a high level. For the opinion of generation X towards the 11 factors of happiness at work, 9 factors were ranked at the agree level, namely achievement, the work itself, responsibility, salary, recognition, job security, company policy and administration, working conditions, and interpersonal relationship with superiors while 2 factors were ranked at the neutral level, namely interpersonal relationship with subordinates and possibility for growth. For the opinion of generation Y towards the 11 factors of happiness at work, 9 factors were ranked at the agree level, namely recognition, working conditions, responsibility, interpersonal relationship with superiors, job security, achievement, interpersonal relationship with subordinates, the work itself and company policy and administration while 2 factors were ranked at the neutral level, namely salary and possibility for growth.

The results showed that there was no significant difference between the overall happiness of generation X and generation Y. The results from regression analysis found that for generation X, job security explained 18.9% of total variance of happiness at work. As for generation Y, responsibility, job security, company policy and administration, the work itself, working conditions and interpersonal relationship with superiors all together explained 76.3% of total variance of happiness at work.

Keywords—happiness at work, generation X, generation Y, service business

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Operations Improvement in Human Resource Management using Lean Concept

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Abstract

Monitoring critical issues and recording personal achievements are important tasks in human resource management, especially in a large company with a high number of employees. In general, the staff in the human resource division of a case study company record the detail and achievement of tasks assigned to each employee for personnel evaluation and job tracking. However, the current operations are still inefficient due to several redundant tasks. In addition, the company prefers to provide real-time interconnection of information for easy searching and tracking. This study aims to improve the operations of human resource management by adopting the Lean concept together with the IT solution. This research starts with the study of the current operations and then, ECRS is conducted for improving the operations. The improved operations are next implemented via solution development using Microsoft Planner and Microsoft Power Apps. The results report that, after implementation, the operation time for tracking critical issues decreases from five to two days per week. Moreover, the proposed application provides real-time information updating and allows employees to search for their personal achievements recordings by themselves. With the application of the Lean concept, unnecessary tasks are eliminated, thus reducing the workload of the coordinators.

Keywords—human resource management, ECRS, information technology

What are the driving forces of raw fish consumption? A preliminary survey in Cambodia

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Abstract

This study aims to examine the socioeconomic characteristics of people who eat raw fish dishes. Previous research has warned about the consumption of raw fish often resulting in fatal illnesses. However, some people continue to consume such. Using the questionnaire method, we investigated residents living near the lower basin of the Mekong River, Cambodia. Our survey results demonstrate that approximately 50% of the residents eat chopped small fish, and 13.5% consume sliced raw fish dish. Depending on the revenue status and fluctuation, dietary customs regarding raw fish vary. The results suggest that challenging economic situations might affect dietary customs regarding raw fish dishes. Small business to stabilize their economic life might help cease their raw fish eat.

Keywords—raw fish, Mekong River, revenue status, revenue fluctuation, Cambodia

Assessment of innovation capability of the higher education institutions in digital transformation: the cases of Croatia and Albania

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Abstract

Digital transformation is a very complex process based on the application of digital technologies in order to define new business strategies, new business models and new ways of management. There are various models in the literature to assess the maturity of digital business transformation management. Digital capability maturity model, used in the paper, offers six areas of digital capabilities that can be individually evaluated in order to assess the overall maturity of digital business transformation within the institution. Those *6* areas include innovation capability, transformation capability, IT excellence, customer focus, effective knowledge worker and operational excellence. For the purposes of this research, only one area of digital capabilities was selected, namely innovation capability. Accordingly, the purpose of the paper is to assess the innovation capabilities of higher education institutions from Croatia and Albania in the implementation of the e-learning system using the digital capability maturity model, its corresponding business transformation management methodology and maturity levels from *1* to *5*. The business transformation management methodology includes nine aspects of management (strategy management, value management, risk management, business process management, IT management, change management, training management, project management and meta management). The goal of the research is to assess the maturity of e-learning implementation management through various aspects within higher education institutions, analyze the results and define improvements. For each management discipline and for each of its key areas, research questions as well as possible answers according to maturity levels from *1* to *5* are defined in the paper. The summary results of the research show that the innovation capability of institutions in the implementation of e-learning is based on the estimated maturity levels for all *9* aspects of management and ranges from level *2 (*reactive) to level *4 (*managed). The obtained results can help managers to implement the necessary improvements in certain aspects of innovation management in education and raise the maturity level of innovation capabilities.

Keywords—digital transformation, innovation capability, e-learning system

A Key Model Enhancement for Personalized Marketing: Introducing Purchase Timing Predictions to Hierarchical Bayes Pareto/NBD model

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Abstract

Personalized marketing is a key business strategy that uses customer data to offer an optimized marketing experience. Leveraging the extensive customer data, businesses can identify behavioral patterns to more effectively design targeted marketing tactics. Buy-till-you-defect [BTYD] models are one of the key enablers in this endeavor as they specify customers' transaction and defection processes for businesses operating under a non-contractual setting. These models have been typically used to identify active customers in a company's customer-base as well as to predict purchase frequency and amount. Given the rise of personalized marketing, companies continuously need to improve their understanding of customers to stay ahead of competition. In this study, we show that two well established BTYD models, Pareto/NBD model and its Hierarchical Bayes extension, can also be used to predict the timing of next purchases. Such timing predictions are managerially relevant as they enable marketing executives to choose appropriate targeting and promotion strategies to improve revenues. For both BTYD models, we derive closed-form expressions for the purchase timing. Next, we validate these timing predictions on real datasets. We believe extending the use of BTYD models with this additional model output will lead to higher business adoption.

Keywords—Buy–till–you–defect models, purchase timing, Bayesian estimation, customer base analysis, personalization

The Conceptual Model for the Measurement of Social Media Engagement Toward Brand Equity

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Abstract

The purpose of this paper is to propose a study of the conceptual model for measuring social media engagement toward brand equity. Factors for measuring brand equity were identified in the literature review. A conceptual model that describes the relationship between social media engagement and each element of brand equity. The proposed conceptual model aims to provide guidelines for measuring brand equity caused by social media engagement to improve the effectiveness of the digital marketing communication plan and activities in achieving business objectives.

Keywords—social media engagement, brand equity, brand relationship connection, self-presentation, and purchase intention

The Influencing Factors of Consumer Purchase Intention towards Innovative Herbal Topical Anesthetic Spray

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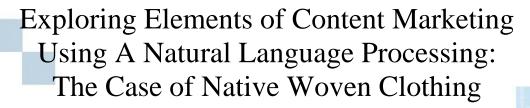Bangkok, Thailand
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Abstract

The purpose of this study is to evaluate the effect of the factors influencing consumer purchase intention toward the innovative product of herbal topical anesthetic spray. A total of 150 questionnaires were collected from participants who were in the presence of oral ulcers with or without receiving the topical anesthetic in their medical history using an online self-administered questionnaire. The factors influencing consumer purchase intention on the innovative herbal topical anesthetic spray are evaluated into 7 factors: attitude, product attribute, price, place, promotion, social influence, and source of information. The questionnaire was divided into three parts including characteristics and past medical history data, factors of consumer purchase intention toward the product, and characteristics of participants. The collected data were analyzed by SPSS version 22.0. The characteristics of respondents and their past medical history were summarized as frequencies and percentages. Each factor was present in the descriptive data as an average score with standard deviation and level of influence. The Multiple regression analysis was used to identify the influence between consumer purchasing intention and related factors. The result showed the most important level of product and place factor. Moreover, a positive significant influence was indicated between attitude, price, place, and consumer purchase intention. Creating a positive attitude, presenting the product differentiation to increase the price, and choosing a convenient place with medical personnel to sell the product is essential to increase consumer purchase intention. This finding can help this herbal product to improve its product attribute to meet consumer preference and develop a suitable strategy to increase consumer purchase intention.

Keywords—purchase intention, innovative product, herbal medicine, topical anesthetic spray

Exploring Elements of Content Marketing Using A Natural Language Processing: The Case of Native Woven Clothing

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Abstract

The extensive implementation of online social media among Thai small and medium-sized enterprises (SMEs) underlines a significance of effective use of content marketing strategies. However, most Thai SMEs still suffer from applying content marketing without a clear expertise. This study adopts Ashley and Tuten's (2015) [1] message strategies to investigate elements of text messages necessary for content marketing among SMEs in a native woven clothing market by categorizing them into three message appeals (i.e., functional, emotional, and experiential appeals). The study used a natural language processing to adopt a pre-train model, fine-tune the model, and subsequently proceed to a deployment. The findings offer Thai native woven clothing SME managers, and managers of small and medium enterprises in general, guidelines for creating content marketing economically and effectively. We also extend the application of previous literature's [1] message strategies into an SME context in a growing economy country.

Keywords— content marketing, natural language processing, native woven clothing, SMEs

The Impact of Perceived Long Term Established New Brands Versus Newly Established Brands on Purchasing Channel Preference: A Conceptual Model Development

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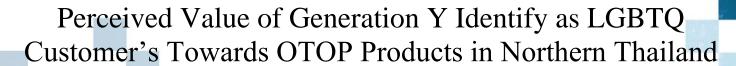Chiang Mai, Thailand
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Abstract

This study aims to investigate the impacts of perceived long-term established brands (LEB) and newly established brands (NEB) on consumers' purchasing channel preferences (online vs traditional channels) in the context of emerging markets. It also proposes moderating the effects of brand country of origin and millennial generation on the associations between the new brand concepts and channel preferences. A conceptual model and propositions are offered, along with a data collection plan involving manipulation cues development and experiments. The study provides firms planning to introduce their brands into emerging markets a framework suitable for consumers' perceptions of the brand and channel preference.

Keywords— long-term established new brands, newly established brands, purchasing channel preference, country of origin

Perceived Value of Generation Y Identify as LGBTQ Customer's Towards OTOP Products in Northern Thailand

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Abstract

This study aimed at highlighting the product value perception of Thai Generation Y who identify themselves as LGBTQ and have experience in buying Chiang Mai and Lamphun OTOP branded products. The research methodology was exploratory research used to investigate the dimensions of consumer's perceived value, customer repurchase intention, and customer willingness to recommend friends. A self-administration questionnaire survey was used to collect data from generation Y identify as LGBTQ. The 400 surveyed population had answered both nominal scale question type and 5 level rating scales question type. The samples were conveniently selected from the customers of Chiang Mai and Lamphun OTOP products for personal consumption. There are four types of products in this study including textiles, processed foods, agricultural products and handicraft products, such as Lamphun Yok Dok woven textile, Thai style sausages, honey, and silverware. The data were analyzed by using descriptive statistics. inferential statistical analysis including t-test, F-test, as well as multiple regression analysis.

The results reveal that the purchasing decisions is mostly influenced by own self-determination, friends, and acquaintances recommendation. The customers usually bought the products in weekdays. The purchasing was averagely done once a year and mostly during or nearing an annual festival. The results identified four different perceived values which significantly influence the repurchase intention, namely perceived value in emotional response to consumption, perceived value in monetary price, perceived value in behavioral price, and perceived value in recognition of reputation. The perceived values significantly affected consumer willingness to recommend friends, to purchase the OTOP products, including perceived value in product and service quality, perceived value in behavioral price, perceived value in monetary price, and perceived value in recognition of reputation. In the meantime, the repurchase intention and willingness to recommend friends to purchase the OTOP products were both in high level.

Those findings highlighted the importance of the multidimensional approach to perceived value. Both emotion and product quality were possibly the most powerful forces for promote the OTOP. Local entrepreneurs should focus on the quality of their products in order to gain good customer experience. Furthermore, emotional marketing can be a enormous way to increase customers willing to pay and realize that it is worth the money. The pleasure atmosphere of the shop should be focused to impress the customers, as a result, it will increase the repurchase intention. In addition, the well design of selling process should be focused on customer convenience. A good quality of customer interaction was also a key factor to increase customer repurchase.

Keywords— perceived value, purchase intention, LGBTQ, local community product

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Creating Shared Value Enhacing the Sustainable Business Model: Case Study – Safety to Society

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Abstract

A new business model with creating shared value (CSV) principle is proposed. Main business of products and services associated with delivering safety to society is introduced. The vision, mission and target initiate the key strategic to create the CSV framework with the conceptual work of safety to society. Not only safety traditional and innovation products are focused, but also the company academy corporate with council of engineers Thailand provides and shares our knowledges to engineers and our societies. Five projects of sharing our products and services to society with pleasant living have been implemented to confirm the sustainability of this business model.

Keywords—creating shared value (CSV), safety to society, sustainable business model

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