

## 2nd International Conference on Applied Sciences, Data Mining, Engineering, Design & Smart Material (ADEDAS)

### Conference organized by:





This conference is dedicated to educators all over the world and to the members of the Research Forum for Applied Sciences Engineering and Technology (RFAET) whose passion for teaching, learning, research, and service are helping to transform the academy in many positive ways.

### Mission, Vision, and Core Values

Exploration of new research bits of knowledge and an intuitive stage for improving innovation and advancement

Lead the researchers through global communication and collaboration.

Scholastic Innovation, Excellence and Integrity, Insightful Research, Networking, Professional Leadership, Assorted Variety and Equity, Collegiality and Collaboration, Corporate Social Responsibility

### Membership, Conference, Publishing, and Research Information

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## Welcome Message

The Research Forum for Applied Sciences Engineering and Technology (RFAET) welcomes you to the 2nd International Conference on Applied Sciences, Data Mining, Engineering, Design & Smart Material (ADEDAS)

We are happy you decided to join your colleagues from around the world to explore innovative technologies, pioneering pedagogical strategies, and a sampling of international collaborations that are being used to engage and retain students, researchers and Scholars in the new millennium.



### Scientific Committee

Jan Fook, International Centre for Higher Education Educational Research, Leeds Trinity University, UK

Jennifer Bowerman, MacEwan University, Canada

Jo Ann Rolle, Medgar Evers College, The City University of New York, USA

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Mudrajad Kuncoro, Gadjah Mada University, Yogyakarta, Indonesia Justin Henley Beneke, University of Winchester, UK

### **Acknowledgements**

The organizing committee would like to thank all those people who were involved in making the conference a success. A great amount of planning and organizing is required to hold a successful conference, so we are indebted to those who volunteered their time and energy.

We want to thank all the members of the Research Forum for Applied Sciences Engineering and Technology (RFAET) who volunteered their time to help organize the conference.



### **Conference Description**

Research Forum for Applied Sciences Engineering and Technology (RFAET) provides an excellent venue for generating ideas. Conference participants will explore the latest trends, practices, and research in engineering technology and Applied Sciences tracks. The program will emphasize experimentation and pushing the boundaries of higher education.

### **ENGINEERING TECHNOLOGY**

Acoustical Engineering Aerospace Engineering, Agricultural Engineering Biological Engineering and Sciences, Biological Systems Engineering Biomedical Engineering, Bioprocess Engineering Biotechnology, Building Services Engineering Chemical Engineering, Industrial Engineering Information Engineering, Informational Technology Manufacturing Engineering and Technology, Materials Engineering Mechanical Engineering, Mechatronics Nanotechnology and Nanoengineering, Naval Engineering Nuclear Engineering, Technology for Cloud Computing Technology for Community, Technology for Digital Age Technology for Human Use, Technology for Learning Civil Engineering, Computer Engineering Current issues and challenges in Engineering, Electrical Engineering Electronic Engineering, Energy Engineering Environmental Engineering, Food Engineering Genetic Engineering, Geotechnical Engineering Ocean Engineering and Technology, Optical Engineering Petroleum Engineering, Power Engineering Process Engineering, Resource Engineering Sensing Technology, Structural Engineering Systems and Software Engineering, Technology for Big Data Textile Engineering, Thermal Engineering Transport Engineering, Web Engineering Vehicle Engineering

### APPLIED SCIENCES

Artificial Intelligence, Architecture, Astronomy, Biological Sciences, Botany, Chemistry, Design, Earth Science, Ecology, Marine Science, Physics, Space Sciences, Life sciences, Computer Sciences, Logic, Mathematics, Statistics, Systems Science, Electrical Engineering, Information, Technology, Industrial Engineering, Mechanical Engineering, Applied Physics, Health Sciences and Medicine, Ceramic Engineering, Computing Technology, Electronics, Energy, Environmental Engineering Sciences, Engineering physics, Environmental Technology, Fisheries Science, Forestry Science, Materials Engineering Micro technology, Nanotechnology, Nuclear, Technology, Optics, Zoology Transportation

### **Conference Awards**

#### **Best Paper Awards**

The Organizing Committee will select the best paper considering the recommendations of the Scientific Review Committee based on the relevance to the theme, academic contribution, accuracy of the methodology, clarity of contents.

### **Best Presentation Awards Sessions**

The best presenter in each session will be selected considering the scientific quality, contents, time management, presentation style and level of interaction with the audience. The best presenter in each session will get a certificate.

#### **Best Presentation Awards Students**

These awards will be awarded the best presenters selected from the PhD or Master level students' presenters. The selection criteria will be scientific quality, contents, time management and presentation style.



## **Conference Schedule**

## 2nd International Conference on Applied Sciences, Data Mining, Engineering, Design & Smart Material (ADEDAS)

## Hotel Grand Pacific Singapore February 03-04, 2020

09: 00 am - 09: 20 am
09: 20 am - 09: 30 am
09: 30 am - 09: 40 am
Registration and Reception
Introduction of Participants
Inauguration and Opening address

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09: 40 am - 09: 50 am Grand Networking Session

09: 50 am - 10: 00 am Tea Break



# 2nd International Conference on Applied Sciences, Data Mining, Engineering, Design & Smart Material (ADEDAS)

Day 01: Monday February 03, 2020



Session 01: (10: 00 am 01: 00 pm)

Track A: Engineering, Technology, Computer and Applied Sciences

Session Chair: Dr. Chitpong

Presenter Name: Gui-Bing Hong

Reference ID: IMNEA-FEB20 CEAS101

Paper Title: Simultaneous Removal Dyes with a Novel Composite Adsorbent

Presenter Name: Chien-Hsing Chen Reference ID:IMNEA-FEB20 CEAS102

Paper Title: A Distance-based Term Weighting Method Applied for Document Retrieval

Presenter Name: ADEDAS-FEB20-003 Reference ID: ADEDAS-FEB20-003

Paper Title: Implementation of Air Quality Monitoring and Forecasting System Based on IoT Sensor Net-

work

### Track B:Business Economics, Management, Social Sciences and Humanities

Presenter Name: Zih-you Liao Reference ID: SM-FEB2020-104

Paper Title: To Improve Employees Well-Being by Implement the Talent Development Program

Presenter Name: Yu-chin Lin Reference ID: FBMSH-FEB20-03

Paper Title: Understanding Medical University Entrepreneurship: Optimize the Processes to Create Medical

Device and New Medicine Spin-offs

Presenter Name: Yu-chin Lin

Reference ID: BEASM-FEB20-ANI101

Paper Title: The Study Satisfaction to Increase Service Quality of the Public Van Transportation Route

Bangkok to Pattaya

Presenter Name: Chaniporn Charnchaisilp Reference ID:BEASM-FEB20-ANI102

Paper Title: Logistics Management Guidelines Tourism, Amphawa Floating Market

Presenter Name: Chayapat Dumkhum Reference ID: BEASM-FEB20-ANI104

Paper Title: Direction Development of Warehouse Management

Presenter Name: Chirawan Buasuwan Reference ID: BEASM-FEB20-ANI105

Paper Title: Service Quality Enhancement of Land Freight Forwarders

Presenter Name: Jirawat Chucharoe Reference ID: BEASM-FEB20-ANI106

Paper Title: The Application of 7R Management Principles to Increase the Efficiency of Plastic Waste Sep-

aration

Presenter Name: Orawan Choosoongsong Reference ID: BEASM-FEB20-ANI107

Paper Title: Increasing The Guidelines Laid Down For The Stock Counting Plan. Within Warehouse:

Sangchai Group Company

Presenter Name: Phongsakorn Sritas Reference ID: BEASM-FEB20-ANI108

Paper Title: Fleet Welfare Vehicle Satisfaction: A Case Study of the Tha Ratchaworadit - Sattahip Naval

(Chonburi) Line

Lunch Break: 01: 00 pm 02: 00 pm



## 2nd International Conference on Applied Sciences, Data Mining, Engineering, Design & Smart Material (ADEDAS)

Day 01: Monday February 03, 2020

Session 02: (02: 00 am 04: 00 pm)
Presenter Name: Rattiya Phosrithong
Reference ID: BEASM-FEB20-ANI109

Paper Title: The ABC Analysis for Apply Accounting Product Sorting in Warehouses

Presenter Name: Warunya Pookavanach Reference ID: BEASM-FEB20-ANI110

Paper Title: Consumer Behavior, Service Quality Amenities. The Decision to use Passenger Ships Floating

Market Khlong Lat Mayom

Presenter Name: Suchada Khongmuang Reference ID: BEASM-FEB20-ANI111

Paper Title: Measurement of Service Quality Fast Food Restaurant in Thailand

Presenter Name: Sripai Sripanomwan Reference ID: BEASM-FEB20-ANI112

Paper Title:Tourism Management in Kanchanaburi

Presenter Name: Chatchai Pathumarak Reference ID: BEASM-FEB20-ANI113

Paper Title: The Factors and Preparation WMS for Medium Business

Presenter Name: Waroot Pliansamai Reference ID: BEASM-FEB20-ANI114

Paper Title: Increasing the Efficiency of Freight Transportation: A Case Study of Blue House Company

Limited

Presenter Name: Kunlasatri Pangderm Reference ID: BEASM-FEB20-ANI115

Paper Title: The Critical Success Factors of Logistics Process Which Affected to Economic Value Added in

The Business of Importing Products: A Case Study of ABC Co., Ltd.

Presenter Name: Wachiraporn Kongthanasarasith

Reference ID: BEASM-FEB20-ANI116

Paper Title: Awareness Practice for Dangerous Goods Air Transportation

Presenter Name: Vichavatee Chumthong Reference ID: BEASM-FEB20-ANI117

Paper Title: The Benefit of Cross Border and Transit Cargo Realted to Act of Customs BE 2560

Presenter Name: Rocel A. Apolonio Reference ID: BEASM-FEB20-ANI118

Paper Title: Behavioral Antecedents and the Moderating Role of Demographics to Household Food Waste

Presenter Name: Hilman Palaon Reference ID: FBMSH-FEB20-05

Paper Title: Accelerating Financial Inclusion through Government to Person (G2P) Programs: Social As-

sistance Disbursement Journey from Cash to Savings Account



# 2nd International Conference on Applied Sciences, Data Mining, Engineering, Design & Smart Material (ADEDAS)

Day 02: Tuesday February 04, 2020

Conference second day is reserved for participants own tourism activities.



Track A: Engineering, Technology, Computer and Applied Sciences



## Simultaneous Removal Dyes with a Novel Composite Adsorbent

Gui-Bing Hong\* National Taipei University of Technology, Taiwan

Dyes are widely used in many industries and be harmful to aquatic life, food web as well as humans. The removal dyes effectively from wastewater is one of the major challenges of environmental tasks on water management. Rice bran, also known as miller's bran, is a common agricultural byproduct in Taiwan and can be obtained during the milling of rice. The novel composite adsorbent based on rice bran was synthesized and characterized by FTIR, SEM, and BET techniques. The dose of the adsorbent and the concentration of the surfactant were studied to discuss the effect on the mixed dyes adsorption process. The adsorption behavior of reactive blue 4 (RB4) and crystal violet (CV) dyes will be simultaneously analyzed in the mixture using the derivative spectrophotometric (DS) method. The adsorption kinetics data followed the pseudo-second-order kinetic model, and the isotherm data fit the Temkin isotherm model well. The regeneration results of the adsorbent show that the adsorbent has good reusability and can be applied potentially to treat industrial wastewater.

Index Terms: Adsorption, Reactive Blue 4, Crystal Violet, Derivative Spectrophotometric



## A Distance-based Term Weighting Method Applied for Document Retrieval

Chien-Hsing Chen \*
Ling Tung University, Taiwan

Document clustering has stimulated various interesting applications in the information retrieval and machine learning fields. Term assessment and selection are the criterial processes towards an effective document clustering; where term assessment encodes terms weights for their corresponding terms, and term selection attempts to ignore redundant terms involving in the process of document clustering. The most well-known term weighting method, namely term frequency-inverse document frequency (TFIDF), has commonly applied for assigning terms weights supporting for those applications. There are many hot and incoming news over a period of time, the utmost attention terms are thus frequent and occur in a large set of news. When these terms weights are to be measured using TFIDF, their corresponding weights must be highly compromised while this set of news is sufficiently large. In this paper, we present a new distance-based term weighting scheme to consider a basic characteristic in that each news article must be similar or different from others while processing big news corpora which consist of a very large set of news. All the news should not be equivalently considered for contributing distinguishability in weighting a particular term. In our particular use, the weight of a particular term is assessed with respect to distance from an article to others the term occurs. The utmost attention terms are thus delivered in big corpora while considering similarity between news.

Index Terms: TFIDF, Term Assessment, Distance, Text Clustering, Retrieval Challenges



## Implementation of Air Quality Monitoring and Forecasting System Based on IoT Sensor Network

Jaekyung Yang 1\*

Dept. of Industrial and Information Systems Engineering Jeonbuk National University, Republic of Korea

A number of air quality monitoring and forecasting systems have been provided as interests in air quality increase. However, even though such systems including forecasting systems of the National Weather Service have been implemented, it is true that the air quality forecasting accuracy of the systems does not put peoples satisfactory trust. Such systems employ the atmospheric dispersion model that have been mainly used in environmental research and industry area. Generally the model has a strength for forecasting the air quality of a certain national territory. On the other hand, it has a weakness in city area. It is because it ignores spatial factors such as traffic road length, population, number of buildings, etc. Thus, we developed the new machine learning based ensemble prediction model and implemented air quality monitoring and forecasting system based on the IoT sensor network. The ensemble model employs recurrent neural network for temporal data and geographically weighted regression for spatial data. The temporal and spatial predictor is combined by the multilayer perceptron with stacking structure. We installed the eight sensor stations which is capable of measuring PM2.5, PM10, H2S, NH3, VOC, wind direction and velocity. We finally show that our system produce more exact air quality prediction and monitoring results.

Index Terms: Air Quality, Machine Learning, Forecasting and Monitoring System



Track B: Business, Management, Economics, Social Sciences and Humanities



## **Understanding Medical University Entrepreneurship: Optimize** the Processes to Create Medical Device and New Medicine Spinoffs

Hsiang-Tsai Chiang <sup>1\*</sup> Yu-chin Lin <sup>2</sup> Feng Chia University, Taiwan

Due to the dramatic decline of birth rate, six Taiwan universities are terminated with the shortage of tuition caused by fewer students. The sustainability of universities, in Taiwan, are facing the difficulty. The commercialization of universitys scienceand technology, form spin-offs to increase the revenue, has become a prominent issue in higher education policy agenda. The purpose of this study is to attempt to investigate spin-offs process, especially, advantageous for medical university. Using the case of Taipei Medical University (TMU), which now is developing new medical devices and new oncology medicines, also developing a policy to link research innovation and industries with the university spin-offs, as an example. We also examine the high-tech activities involved in the development of medical device and new oncology medicines, describes the technology and innovation management process within the value chain conducted in a UniversityHospitalindustry frame work. Here, may provide medical university, the tools required for the processes to create medical devices and new oncology.

Index Terms: Medical University, Medical Device, New Drug, Spin-Off Process, Optimize



# Accelerating Financial Inclusion Through Government to Person (G2P) Programs: Social Assistance Disbursement Journey from Cash to Savings Account

Hilman Palaon<sup>1\*</sup>, Prof. Dr. Sudarso Kaderi Wiryono<sup>2</sup>, DEA<sup>3</sup>, Prof. Dr. Sudarso Kaderi Wiryono<sup>4</sup>
<sup>1,2,3,4</sup> School of Business and Management, Institut Teknologi Bandung, Bandung, Jawa Barat 40132, Indonesia

The Indonesian government has various types of assistance programs aimed at the poor people or commonly called the Government to Person (G2P) programs. Each program has its own objectives according to the needs of the poor, such as food, education, health, social, housing, energy, agriculture, etc. The assistance provided can be in the form of money, goods, and services. On the other side, the government also has an agenda for the success of financial inclusion, which is providing access to formal financial services. Most of the people who do not have access to formal financial services (unbanked) are mostly on the bottom of pyramid, where most of them are beneficiaries of the G2P programs. Since 2017 the Indonesian government has made a strategy to accelerate the achievement of financial inclusion by channeling the disbursement of social assistance programs through banking services, the fund or assistance disbursed in the form of electronic money and savings account. This paper will explain about the journey of developing the distribution of social assistance programs that have been carried out in the last ten years, starting from giving funds in the form of cash and goods directly to beneficiaries, up to the purchase of rice using a debit card and withdrawing funds at ATM. Through a review of several activities that have been carried out by the government which include program implementation, pilot projects, monitoring and evaluation reports, and surveys, the study reveals that improvisation is still needed especially to answer the sustainability of financial inclusion for the poor. As recommendations for future implementation, the results of this study suggest utilization of the latest technology can accelerate the achievement of the financial inclusion agenda, as well as to ensure the disbursement of G2P programs to be more targeted and useful.

**Index Terms:** Financial Inclusion, Government to Person (G2P), Social Assistance, Bottom of Pyramid, Poor People, Unbanked



# The Study Satisfaction to Increase Service Quality of the Public Van Transportation Route Bangkok to Pattaya

Chadarat Gonkong<sup>1\*</sup>
Preecha Vararattanachai<sup>2</sup>
<sup>1,2</sup>College of Logistics and Supply chain, Suansunandha Rajabhat University, Thailand

The purposes of this research were as follow; 1) Study Satisfaction to Increase service quality of the publice van transportation route Bangkok to Pattaya. To compare passenger satisfaction towards public van services route Bangkok to Pattaya classified by personal factors. And to compare passenger satisfaction towards public van services route Bangkok to Pattaya classified by behavior factors in using the van service. Totally 400 peoples. The questionnaires were as tools for collecting data. The data statistics analyzed were Frequency, Percentage, mean standard, T-Test and (One-way ANOVA). The research found that 1. The majority of samples were bachelor degree in education level. Most of the samples were employee which average salary between 10,000-20,000 Bath. 2. Overview of the answers, the samples satisfactions for van route Bangkok Pattaya services were in medium level. The comparison of satisfaction in using the van service route Bangkok-Pattaya classified by behavior factors in using the van service With statistical significance at the level of .05

Index Terms: Satisfaction, Public Van, Transportation Route Bangkok to Pattaya, Service Quality



## Logistics Management Guidelines Tourism, Amphawa Floating Market

Chaniporn Charnchaisilp<sup>1\*</sup>
Chitpong Ayasanond<sup>2</sup>

1,2College of Logistics and Supply chain, Suansunandha Rajabhat University, Thailand

TThe purpose of this article is 1) to study the opinions of tourists towards the logistics management of the Amphawa floating market. And 2) to study the satisfaction of Thai tourists in Amphawa floating market By presenting the content in this article consisting of Amphawa Floating Market and Tourism History and Conclusions Conceptual differences Concept selection and adaptation to Amphawa floating market However, the knowledge from the publication of this article Can be adapted for use Convenient traffic at the parking lot, safety and shuttle service to Amphawa floating market. Friendly service including selling fresh products It is also a good idea for entrepreneurs in the Thai tourism industry, including shops, restaurants, hotels, transportation service providers. And create a strong culture to advance excellence.

Index Terms: Logistics Management, Tourism, Amphawa Floating Market



### **Direction Development of Warehouse Management**

Chayapat Dumkhum<sup>1\*</sup>
Chitpong Ayasanond<sup>2</sup>
Sukanya Boonyai<sup>3</sup>
<sup>1,2,3</sup>College of Logistics and Supply chain, Suansunandha Rajabhat University, Thailand

The warehouse is an important part of an enterprise in which business operations are important as the sales department. The warehouse is responsible for providing consistent supply, demand to balance and it is also a driven intermediary of the process within the organization. The article has the following objective 1) to review the material, principles, conceptual of the framework, the role of the warehouse to guide the knowledge of people who are interested in developing warehouse 2) to compete for the idea of improving the efficiency of the warehouse management. From the research and preliminary review found that warehouse management is very important. In order to manage the use of space within the warehouse to fit the type of business or application selection of appropriate equipment in the warehouse and warehouse planning in accordance with the good in stock and management of internal systems to enhance the process of document input-output of goods. It has a limited cost in business factors and in the warehouse, investment, equipment, and staff. Using the principles of management, administrative activities within the warehouse, Its can be very cost-effective and its not wasted in various fields. In addition to the importance of the various issues, another important point is adapting the business to survive in the current economic situation and it has the potential to be standardized to have more serious business competitiveness.

Index Terms: Warehouse, Warehouse Management, Waste



## **Service Quality Enhancement of Land Freight Forwarders**

Chirawan Buasuwan<sup>1\*</sup>
Chitpong Ayasanond<sup>2</sup>

1,2College of Logistics and Supply chain, Suansunandha Rajabhat University, Thailand

The objectives of this article are 1) to study the factors affecting the decision of choosing a freight forwarder and 2) to suggest the guidelines for improving freight forwarder services. The tool used in this study is 300 copies of questionnaires with each question designed according to service quality standards of Parasuraman that evaluates 5 dimensions of service quality, including 1. Tangibles, 2 Reliability, 3. Responsiveness, 4. Assurance, and 5. Empathy. The statistics used for analyzing data are descriptive statistics showing percentage, average, and standard deviations.

Index Terms: Quality Enhancement, Service, Freight Forwarder



# The Application of 7R Management Principles to Increase the Efficiency of Plastic Waste Separation

Jirawat Chucharoe<sup>1\*</sup>
Chitpong Ayasanond<sup>2</sup>

1,2College of Logistics and Supply chain, Suansunandha Rajabhat University, Thailand

According to data, plastic waste in Thailand is the 5th highest in the world, equivalent to 2 million tons of total waste. But only 0.5 million tons of plastic can be recycled each year. The remaining 1.5 million tons are disposed of by landfill and burn. Some leftover in the environment the plastic waste crisis is, therefore, a serious problem and must be resolved seriously. Bring to continue making plans for waste reduction and increase the way to recycle plastic by the Plastic Waste Management Subcommittee under the National Environment Board has approved the appointment of 3 plastic waste management working groups, consisting of a working group on the development of plastic waste management mechanisms. In order to jointly create an operation plan Including the development of economic and legal mechanisms to manage the plastic waste working group on promotion and public relations campaigns to create knowledge and understanding create participation from all sectors in the management of plastic waste. And the working group on the development and use of plastic waste to jointly develop finding patterns and ways to increase the rate of plastic recycling By using revolving economic concepts to have concrete results Set a goal to reduce the amount of plastic waste in the sea by at least 50% by the year 2027. From the above policy, we will make changes promoting the recycling industry's plastic resin producer group to consumers throughout the supply chain that will help increase the potential of plastic waste management to be recycled. But the main obstacle is to make everyone share their understanding of the management of plastic waste method for recycling plastic waste. The researcher has studied the 7R principles to apply to increase the efficiency of plastic waste separation compared to the same type of plastic waste management throughout the supply chain providing all parts with knowledge of the 7R principles and can be used to sort plastic waste more efficiently.

Index Terms: 7R, Efficiency, Plastic Waste, Separation



## Increasing The Guidelines Laid Down For The Stock Counting Plan. Within Warehouse: Sangchai Group Company

Orawan Choosoongsong<sup>1\*</sup>
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1,2College of Logistics and Supply chain, Suansunandha Rajabhat University, Thailand

This article aims to 1) to educate the counting of inventory within the warehouse. How to count with planned gross profit counting inventory 2) to suggest for solving to improve the counting of inventory within the warehouse, by presenting this article, consisting of concepts, forms. The plan phase the inventory count .The counting of inventories .The method of counting Progress and counting. However, knowledge of the published article can be put to good use. The inventory Moreover, the company is aware of the physical inventories at current and accurate inventory number. The condition of the product is maintained at the real-time .Along with the ability to produce or sell. If the item counting regardless of the plan and determine how to count inventory accuracy. To maximized the benefits for the business. And find solutions in a timely manner. The guidelines for the planning and control of the product appropriate. It is also commentaries for executives, managers and employees at the warehouse. To enhances operational management within the warehouse. This will affect the personnel who will be assigned the mission has done. According to the organization, and expectations

**Index Terms:** Counting Plan, Inventory, Warehouse



# Fleet Welfare Vehicle Satisfaction; A Case Study of the Tha Ratchaworadit - Sattahip Naval (Chonburi) Line

Phongsakorn Sritas<sup>1\*</sup> Chitpong Ayasanond<sup>2</sup> <sup>1,2</sup>College of Logistics and Supply chain, Suansunandha Rajabhat University, Thailand

The objective of this research is to study the satisfaction of using the navy welfare vehicle. With various factors consisting of demographic factors include (gender, status, education level and workplace) satisfaction factors such as (the service fee is appropriate for the service) (the travel time is appropriate) (the schedule for traveling is sufficient for the needs) (with safety throughout the journey) (the bus is clean and well-advised) so that the navy can know the factors that influence the satisfaction of using the fleet's welfare vehicle and can bring to guide the development of strategies to improve the service of the navy. Or other related companies that are in the vehicle industry to truly meet the needs of users which will result in increased service usage and allow the bus industry to continue to grow in the future.

Index Terms: Fleet Welfare Vehicle, Satisfaction, Tha Ratchaworadit - Sattahip Naval (Chonburi)



## The ABC Analysis for Apply Accounting Product Sorting in Warehouses

Rattiya Phosrithong<sup>1\*</sup>
Chitpong Ayasanond<sup>2</sup>

1,2College of Logistics and Supply chain, Suansunandha Rajabhat University, Thailand

This article is intended for 1) to educate the concept that applies to the inventory sorting system, and 2) provides inventory sorting suggestions to apply to the organization by presenting the content. In this article, the ABC Analysis techniques are used by dividing the priority hierarchy into inventory group A, inventory group B, inventory group C, in order of priority. However, knowledge from publishing this article can be used to manage the arrangement of goods on the shelf to reduce inventory control costs. Reduce the amount of storage in inventory and shorten the length of time to move items that are sold out frequently, as well as the concept of convenience store executives to reduce the cost of warehousing. Enhance enterprise management operations.

Index Terms: ABC Analysis, Inventory, Warehouses



# Consumer Behavior, Service Quality Amenities. The Decision to use Passenger Ships Floating Market Khlong Lat Mayom

Warunya Pookavanach<sup>1\*</sup> Chitpong Ayasanond<sup>2</sup> Sittichai Pintuma<sup>3</sup> <sup>1,2,3</sup>College of Logistics and Supply chain, Suansunandha Rajabhat University, Thailand

This academic article is a study of factors affecting The decision to arrange the boat Floating Market accompaniment of Mayom in Taling Chan. Bangkok Aims to 1) makes the game a discussion Lahore synthetic defendant's agent about factors at influencing the decision to use the services of passenger cruise market Klong Lat Mayom 2) to change the behavior of passengers at present. Affect use Boat service to visit Khlong Lat Mayom floating market and 3) to provide suggestions for Of the business Tourist information Khlong Lat Mayom The analysis results synthesize documents obtained from concepts, theories and research related to various issues such as consumer behavior, service quality, convenience With the decision to use the service From both print and online media, both domestic and foreign, it is found that the behavior of passengers Or the current tour bus Quality of facilitation services Affecting the decision to use the boat trip to visit Khlong Lat Mayom floating market. The findings from this academic article will be useful to executives. And operators the services business t or passenger Floating Market Taling Chan Bangkok Klong Lat Mayom and business services, boat trips to other areas in the solution. Response issues Needs of customers or users to increase competitiveness. It will also benefit the Academic in the introduction of these findings were used as baseline data for conducting research. Will be involved in the future.

Index Terms: Consumer Behavior, Service Quality, Floating Market, Khlong Lat Mayom



## **Measurement of Service Quality Fast Food Restaurant in Thailand**

Suchada Khongmuang<sup>1\*</sup>
Chitpong Ayasanond<sup>2</sup>

<sup>1,2</sup>College of Logistics and Supply chain, Suansunandha Rajabhat University, Thailand

This article aims to 1) Provide knowledge and understanding of the measurement of the efficiency of serving fast food restaurants in Thailand. 2) To provide recommendations to guide the quality of the restaurant service Better food in Thailand. Now fast food has a great influence on Thai consumers. The lifestyles of Thai people in modern times that life is full of hustle and bustle and the popularity of turning to fast food consumption today, since there is no need to wait for a too long time to get food while using the service As well as eating comfortably inside the store Not complicated, many steps. At present, it can be seen that the competition among many fast food restaurant business groups in Thailand has various brands. For example, KFC, McDonald's, Pizza Hut, Texas Chicken, Swensen, etc. are all one of the really fast food restaurant brands with many branches all over the world including branches that occur in Thailand. The strength of providing various service quality for the customers who come to use the service with 5 features, SERVQUAL, including tangibility, reliability, responsiveness, assurance, and empathy. However, fast-food restaurant businesses need to use service-driven principles. Excellent for every customer, the heart of service and delivery of hot food, always fresh because it will make the customer feel the tangible sense Therefore resulting in maximum efficiency and effectiveness for customers who come to use the fast-food restaurant business in Thailand.

Index Terms: Fast Food, Service Quality, Thailand



### Tourism Management in Kanchanaburi

Sripai Sripanomwan $^{1*}$  Thun Chaitorn $^2$  1,2 College of Logistics and Supply chain, Suansunandha Rajabhat University, Thailand

Community tourism is alternative tourism that is currently gaining popularity. The purpose of this research to survey and create a database of community tourist attractions and format the community tourism route in Kanchanaburi Province Surveying tourist destination locations using the Global Positioning System (GPS), creating a community tourist database and map using Geographic Information System (GIS) techniques. Community tourism, which uses network analysis in GIS, found that in Kanchanaburi. There are a total of 40 community tourist attractions and divided into 3 categories which are community tourist sites, history, culture, and nature. This research presents 4 tourist routes which are route 1, historical tourism. Bridge over the River Kwai, 18.1 kilometers, takes 21 minutes. Route 2: Pak Phraek Community, the oldest city of Kanchanaburi, 17.3 kilometers, takes 21 minutes Route 3: visit Erawan waterfall, 53.1 kilometers. Travel time is 53 minutes and route 4 is a good way to visit the city of Kan Ton Chamchuri, a distance of 39.2 kilometers and takes 48 minutes.

Index Terms: Tourism Management, Global Positioning System, Network Analysis, Kanchanaburi



### The Factors and Preparation WMS for Medium Business

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In an age where technology has grown a lot and come to play a role in the work of medium-sized industrial sectors to increase work potential solving various problems such as management problems in the warehouse management process. Information management productivity and labor shortage technology is a goal that many organizations would like to use as a tool to help with work and has continuously increased the technology investment. One technology that many organizations choose to use is a Warehouse Management System (WMS) to manage information on showing information to those involved to see the current number of data, help with labor issues in counting control to prevent inventory loss. It is useful in managing the logistics and supply chain of an organization. But there are many factors that cause an organization to not use this system or tried it and didn't return the target result. There is a problem that affects the organization's supply chain due to a data error cause most of this will happen to medium to large industries. That is capable of investing in technology. The researcher foresaw the problems that occur. Therefore study the factors and preparation for choosing the WMS for warehouse management to be most efficient.

Index Terms: Factors, Preparation, WMS, Medium Business



# Increasing the Efficiency of Freight Transportation: A Case Study of Blue House Company Limited

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Blue House Co., Ltd. is a manufacturer, importer and distributor of products in the garments, apparel, cosmetics, shoes, electrical appliances under leading brands from foreign countries. The company faces freight transportation problems that exceed the limited number of vehicles employed. Many suppliers result in high transportation costs and inefficient vehicle scheduling. The purpose of this research is to propose planning and scheduling methods to increase efficiency in the form of routing. To reduce delivery times, reduce the number of vehicles used on a daily basis and reduce transportation costs by using the saving algorithm method to determine delivery conditions through the VRP Solver program, using the delivery time, loading capacity, and loading time of each product. Service time to find the time and amount of goods loaded in each truck that is most suitable The results show that the algorithm saving method can reduce the number of transportation vehicles used. The most suitable quantity and distance for shipping which can reduce problems by up to 40 percent and take less than 1 second to calculate.

Index Terms: Transportation, Routing, Algorithm Method, VRP Solver



# The Critical Success Factors of Logistics Process Which Affected to Economic Value Added in The Business of Importing Products: A Case Study of ABC Co., Ltd.

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The objectives of this research were: 1) to investigate factors contributing to the success of logistics processes affecting the economic value added in the import business of ABC Company Limited, and 2) to examine opinions toward the economic value added gained from logistics processes in the import business of ABC Co., Ltd. All 52 personnel of ABC Co., Ltd. The research instruments used were questionnaires, and data were analyzed using percentage, mean, and standard deviation. Hypothesis testing was conducted through analyzing Pearson correlation. The findings were as follows: 1) Personnel have opinions toward factors contributing to the success of logistics processes generally at a high level (X = 3.51, SD = 0.36). When considered in term of aspects and arranged according to mean in descending order, the results yielded were: cost leadership, quick response, difference representation, and human resource development, respectively. 2) Personnel have opinions toward the economic value added that was measured from organizational capacity assessment through the balanced scorecard at a medium level (X = 3.30, SD = 0.38). When considered in term of aspects and arranged according to mean in descending order, the results yielded were: customer perspective, internal procedures, financial perspective, and organizational learning and development, respectively.

Index Terms: Success Factor, Logistics Process, Economic Value Added



### **Awareness Practice for Dangerous Goods Air Transportation**

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TThese hazardous materials, also known as Dangerous Goods (DG), frequently shipped by air on both passenger and cargo aircraft, cause a danger to flight safety, passengers and flight attendant also other valuable cargo. Dangerous Goods transportation is an important issue that needs to be emphasize and require expert in terms of the safety of human life. In order to minimize the risks that may arise during the logistics of hazardous materials and to prevent damages and hazards, regulations have been introduced that enable them to be realized in a standardized and systematic whole world. This article will research into the IATA Dangerous Goods Regulations related to Dangerous Goods air transportation, Air transportation accident cause by Dangerous Goods, factors that affect risks in Dangerous Goods air transportation, planning and controlling of safety in Dangerous goods air transportation. The most of the Air transportation accident cause by Dangerous Goods involved cargo being flown on passenger aircraft and discovered after take-off. Thus, the article can guide resource allocation for air carriers to improve safety management of Dangerous Goods air transportation and reduce the likelihood of an Air transportation accident cause by Dangerous Goods.

Index Terms: Accident, Air Transportation, Cargo, Dangerous Goods,



## The Benefit of Cross Border and Transit Cargo Realted to Act of Customs BE 2560

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This article aims to feature the benefit of cross border and trasit to use the capacity out of Bangkok. As of now the world economic situation are recession so the country where use to be a munufacture of textile and electronic part have been shuffle; The two activites which is benefit to a production country are Cross Border the definition of the activities is delivery cargo though kingdom from one custom point which is deliver to one another custom point which is forward under Custom invigilation. Where as the orgin and destination are out of the kingdom. And also there should not be any benefit out of this Cross border. Hence the cargo or activites ment for the benefit on merchandise with in the Kingdom. Another activity is Transit the definition is the transfer of cargo from one vehicle into kingdom and forward to one another vehicle out of kingdom under same Custom invigilation. Where as the origin and destination are out of the Kingdom. Those two activites bring the most benefit out of the production country who have no network to Europe or US destination direct from their origin and the cargo is perisble which is not food stuff but seasonal cloth. So the only way that will delivery them on time for the upcoming season is by Air transportation. In this article will mainly state on land-Air transshipment and Air-air transshipment

Index Terms: Cross Border, Transit, Act of Custom, Air Transport



# **Integrating Complexity Theory with Health Social Work Practice** when Working with Senior People

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Social work intervention in the contemporary healthcare system has proved a challenging practice for health workers, especially when working with senior people whose service experience always varies following nonlinear dynamics rather than linear dynamics. As social work services provided in hospitals are always perceived as the practice in complex adaptive systems, the complexity theory, which reflects continually changing needs and environments, can provide a new pathway for hospital social workers to manage the above-mentioned cases. Herein, the aim of this research is to address the feasibility and adaptability of implementing the complexity theory in hospital social work practice with a particular focus on senior service users. Firstly, this study will analyse the factors that influence the effects of service delivery for those seniors in hospitals and explain why these cases often are perceived as complex. Then it will introduce the complexity theory and complex adaptive system with the explanation of some related basic phrases such as non-linearity, embeddedness, and attractor patterns. In the next section, how the complexity theory can be embedded in hospital social work practice and guides social workers to reform their framework for practice will be addressed. The complexity theory will be used as a complementary theory to support social work practitioners to build a multi-dimensional understanding of complex cases and, in addition, to impact their practice. At last, the conclusion that the complexity theory will positively influence social work practice when dealing with complex cases related seniors will be drawn as the end of this paper.

Index Terms: Health Social Work Practice, Senior People, Complexity Theory, Complex Adaptive System



# **Blockchain Technology Enabling Sustainable Development Verification and Approval**

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World corporations demonstrate good world citizenship responsibilities through their Corporate Social Responsibility Reports (CSRs; also referred to as World Citizenship Reports or Sustainability Reports). Most US S&P 500 corporations complete their annual CSRs. Two common methods of distribution of these CSRs have been through their websites and submission to Global Reporting Initiative (GRI; an independent international organization since 1997). The goal of a corporations CSRs is to demonstrate how its operations are moving towards balancing environment, economics, and equity (or social justice) commonly referred to as the 3 Es. CSR submission to GRI is voluntary and there is generally no independent verification and approval of the submitted CSR. Investors, shareholders, consumers, and government regulatory agencies are interested in the accuracy of corporations sustainable operations data (energy efficiency, CO2 emissions, recycling, fair wages, etc.). GRI has concerns about the accuracy of CSR data and is interested in verified data and reports. The emerging Blockchain technology offers some unique features that can be applied to verify and approve sustainability development methodologies and metrics of a corporations operations as it relates to the 3 Es. GRI can be one of the partners in the process and thus enhancing the trustworthiness of the reports submitted. This research discusses how Blockchain features, such as, distributed database, members verification and approval, security, etc., can enable sustainable developments data verification and accuracy. This can apply to public, private, and other non-business operations (e.g. non-profits). This research also discusses Blockchain technology applicability to supply chain operations (Business-to-Business), thus enabling sustainability effectiveness among businesses. There will be pros and cons during implementation of any new technology. This paper discusses some of these and projects what the future might look like using this technology for sustainability. Key areas of current implementations are also analyzed.

Index Terms: Sustainability, Blockchain, Verification, Approval, Security



# **To Improve Employees Well-being by Implement the Talent Development Program**

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With the extension of life expectancy, people extend the length of career. The study is to implement the talent development program by held a series of lectures, activities and exhibitions. We are look forward to let employees feel that the company take their employees seriously and enhance the employees workplace well-being further! The talent development program include lectures that allow employees to absorb more experience from professionals, workshops let employees explore what they really like, and exhibitions for them to share something with each other. At the meanwhile, we pay attention to the design of posters and presentations of advertising so that the Successful Hits will increase and more and more different ethnic groups will participate. According to these efforts, the program achieves 145% participation rate and gets great employee satisfaction degree. In addition, we received a lot of feedback. We will follow these employees feedback and constantly improve the content of the program in the future, so that employees can get more benefit by participating the program. Furthermore, employees will feel more comfort, more trust, and enhance the value of human resources personnel afterwards!

**Index Terms:** Improve Employees, Implement, Development Program



## Discussion on Adult Language Training in the workplace

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Depending on the international society, there is no doubt for organizations survival to keep the biligual talent as well as future prosperity. Also, there are numbers of studies indicate that more and more people use English to communicate with others, and there are more than 85% global organizations view English as the official language. According to this situation, understanding how to create the success process of recruiting and training to make more bilingual talent has become a critical issue for academics and practitioners. Based on the research of English learning motivation and expectancy theory, this study try to create some training program to implement through theoretical perspective. The program includes the learning team, and salary incentive policy which could improve the bilingual ability of employees, and help the organization get more benefits

Index Terms: International, Bilingual, Expectancy Theory, Learning Motivation, Learning Team



## Behavioral Antecedents and the Moderating Role of Demographics to Household Food Waste

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Researches about antecedents to household food waste generation are increasingly becoming popular. Various dimensions such as food handling, purchasing behavior, waste management behavior, consumer values, the role of external cues and many other set of predictors, including demographic variables were identified by scholars as major influencers of food waste generation. However, there are conflicting inferences about the identified antecedents just as there remains no consensus as to how age, gender and income affect food waste. Moreover, there is limited number of literature on the influence of consumer values on food waste and in view of the local context. With the objective of augmenting extant literature, a survey of 180 primary purchasers of households was conducted, utilizing PLS-SEM as a statistical tool. Findings of this research reveals that food habits such as food conservation, purchasing behavior, and freshness of food response the acceptance of expiration date-based priced and suboptimal food are very important to determine the extent of food waste generation. Environmental concern shows a positive effect on materialism, which supports literature positing that people who expressed high environmental concern do not necessarily have low materialistic values and vice versa. Environmental concern could be a normative belief, which is an individuals perception of peoples expectations that are socially accepted and desirable. Thus, the respondents may have environmental concern because this is the right behavior but this does not refrain the individuals in the pursuit of material life domain satisfaction.

**Index Terms:** Consumer Food Waste, Food Waste, Food Waste Behavior, Food Waste Generation, Household Food Waste



## **Upcoming Events**

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