

PROCEEDING



BIRE
Bali Institute of Research Excellence



MEIT-2020

**3rd International Conference on Innovative
Management Study, Business Economics
Engineering and Information Technology**

**Hotel Santika Seminyak Bali, Indonesia
January 21-22, 2020**

***CONFERENCE BOOK OF
ABSTRACT PROCEEDINGS***

BIRE-2020

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***3rd International Conference on Management Study,
Business Economics, Engineering and Information
Technology(MEIT)***

**Venue: Hotel Santika Seminyak Bali, Jl. Sunset Road No.17, Seminyak, Kuta,
Kabupaten Badung, Bali 80361, Indonesia**

**Conference Theme: Innovative World: New challenges for research
and development.**

SCIENTIFIC COMMITTEE

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Onch Li Chee

Conference Coordinator

CONFERENCE TRACKS

- Basic Science
- Civil Engineering
- Economics, Finance & Accounting
- Business Management
- Electrical Engineering
- Life Sciences
- Mechanical Engineering
- Medicine Sciences

CONFERENCE CHAIR MESSAGE

Dr. Ryan Feinstein

“International Conference of Bali Institute of Research Excellence” is a platform that thrives to support the worldwide scholarly community to analyze the role played by the multidisciplinary innovations for the betterment of human societies. It also encourages academicians, practitioners, scientists, and scholars from various disciplines to come together and share their ideas about how they can make all the disciplines interact in an innovative way and to sort out the way to minimize the effect of challenges faced by the society. All the research work presented in this conference is truly exceptional, promising, and effective. These researches are designed to target the challenges that are faced by various sub-domains of the social sciences and applied sciences.

I would like to thank our honorable scientific and review committee for giving their precious time to the review process covering the papers presented in this conference. I am also highly obliged to the participants for being a part of our efforts to promote knowledge sharing and learning. We as scholars make an integral part of the leading educated class of the society that is responsible for benefitting the society with their knowledge. Let’s get over all sorts of discrimination and take a look at the wider picture. Let’s work together for the welfare of humanity for making the world a harmonious place to live and making it flourish in every aspect. Stay blessed.

Thank you.

Dr. Ryan Feinstein

Conference Chair

Email: ryan@bireacademy.com

Conference Schedule

**Conference Name: 3rd International Conference on Management Study,
Business Economics, Engineering and Information Technology (MEIT)**

January 21-22, 2020

Venue: Hotel Santika Seminyak Bali, Indonesia

Time: Registration & Kit Distribution (09:00 am - 09:10 am)

Venue: Room 1

09:10 am - 09: 20 am	Introduction of Participants
09: 20 am - 09: 30am	Inauguration and Opening address
09: 30 am - 09:40 am	Networking Session

Tea/Coffee Break (09:40 am - 10:00 am)

DAY 01 (January 21, 2020)

1st Presentation Session (10:00 am - 12:30 pm)

Venue: Room 1

Presenter Name	Manuscript Title	Paper ID
Track A: Medical, Medicine & Health Sciences		
Syahmardani Ibnu	Comparison Of The Effectiveness Administration Of Erythromycin And Metoclopramide As Prokinetic After Operation Of Digestive Laparotomy In The Public Hospital Of Dr. Zainoel Abidin Banda Aceh	BAL-4120-101M
San Winata Badiri	The Effect of Putat Air Kernels (<i>Barringtonia racemosa</i>) on the Quality of Sperm in Rat (<i>Rattus norvegicus</i>) that had been exposed to Cigarette Smoke	BAL-4120-102M
M. Ifani Syarkawi Rizal	Comparison of Platelet Rich Plasma Administration with Platelet Low Plasma for Healing Incision Wounds in Cruris of <i>Rattus norvegicus</i> Rats Viewed from Histology of Collagen Tissues	BAL-4120-103M
Track B: Engineering, Technology, Computer & Applied Sciences		
Oegik Soegihardjo	Performance of Mechanical Energy Harvesting Unit for Generating Electricity for Portal Gate System	BAL-4120-101E
Track C: Engineering, Technology, Computer & Applied Sciences		
Husen Maq Desi	Investment Analysis Of Solar Panel Project In Pt.Phms Offices Area Balikpapan	MEIT-JAN20-BI107
PRIJAMBODO, Moko	Developing Strategy Of Maintenance For Gas Pipeline Using Methodology Of Fbd (Fish Bone Diagram) & Hor (House Of Risk)	MEIT-JAN20-BI110
Dhanur Arie Bastian	Financial Literacy and Retirement Planning Among Corporate Employee in Indonesia	MEIT-JAN20-BI111
Ahmad Badawi Saluy dan Budi Prawira	The Influence of Leadership, Working Culture, and Working Environment for the Ministry of Administrative Reform and Bureaucracy	MEIT-JAN20-BI114
Reisa Permatasari	Features Selection of Entity Resolution in Online Prostitution Case on Twitter	MEIT-JAN20-BI118

Lunch Time & Ending Note (12:30 pm - 01:30 pm)

Participants Registered As Listener/ Observer

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

Name: Manoj Anandan
North West Regional Hospital, Burnie Tasmania Australia
BAL-4120-104MA

Conference Day 02 (January 22, 2020)

Second day of conference will be specified for touristy. Relevant expenses are borne by Individual him/herself.

TRACK A

MEDICAL, MEDICINE & HEALTH SCIENCES

Comparison Of The Effectiveness Administration Of Erythromycin And Metoclopramide As Prokinetic After Operation Of Digestive Laparotomy In The Public Hospital Of Dr. Zainoel Abidin Banda Aceh

*Syahmardani Ibnu

Medical Faculty Syiah Kuala University Banda Aceh, Indonesia

Keywords: Prokinetics, erythromycin, metoclopramide, digestive surgery

Introduction: Gastroparesis or postoperative ileus (IPO) is a normal condition, temporary, and a physiological response after abdominal surgery procedures. This condition can also cause other gastrointestinal symptoms such as abdominal pain, bloating, nausea, and vomiting. If prolonged, an IPO can increase morbidity and burden on health costs. The aim of this study was to assess the effectiveness of erythromycin and metoclopramide as prokinetics in patients undergoing laparotomy surgical procedures. **Method:** This research is a double-blind clinical trial research with parallel design. Subjects involved will be divided into two treatment groups will, namely by administering erythromycin 250 mg and administering metoclopramide 10 mg orally per 6 hours in 24 hours after surgery. Independent t test was used as the main analysis with a 95% confidence level. **Results:** A total of 38 subjects were involved in this study which were dominated by male sex with a mean age of 45.11 15.38 and 53.84 10.73 in the erythromycin and metoclopramide groups, respectively. The mean residual volume of gastric fluid in the erythromycin group (33.26 15.33 ml / 24 hours) was more minimal than the metoclopramide group (49.95 17.71 ml / 24 hours) with a significance value of $p = 0.004$. **Discussion:** Erythromycin belongs to the macrolide antibiotic class commonly known as motilin receptor agonist which stimulates motilin receptors on the gastrointestinal tract. This drug has the effect of speeding up the process of emptying the stomach which acts on the motilin receptors found in endocrine cells in the duodenum. **Conclusion:** The administration of erythromycin is more effective than metoclopramide as a prokinetic agent after digestive surgery.

The Effect of Putat Air Kernels (*Barringtonia racemosa*) on the Quality of Sperm in Rat (*Rattus norvegicus*) that had been exposed to Cigarette Smoke

*San Winata Badiri

Resident of Surgery Division in Medical Faculty of Syiah Kuala University, Indonesia

Keywords: Sperm quality, *Barringtonia racemosa*, Antioxidant activities

Introduction Cigarette smoke causes oxidative stress which result in reduces sperm concentration, motility, viability, and morphology. Putat air (*Barringtonia racemosa*) is a medicine plant belonging to the Lecythidaceae family. Extract of *Barringtonia Racemosa* kernels contained anti-oxidant terpenoids, flavonoids, saponins, tannins and polyphenols. The aim of this study was to determine the effect of extract *Barringtonia Racemosa* kernels on sperm quality of cigarette smoke exposed rats. **Methodology** This study used a post test only control group design among 30 male Wistar rats subject. The subject was randomly divided into 5 groups, K1: negative control, K2: cigarettes smoke exposed as positive control, P1: cigarettes smoke exposed and given 100 mg/gBW *B. Racemosa* extract peroral, P2: cigarettes smoke exposed and given 150 mg/gBW *B. Racemosa* extract peroral, and P3: cigarettes smoke exposed and given 200 mg/gBW *B. Racemosa* extract peroral. Analysis was done on day 30 using one-way ANOVA and post-hoc LSD for sperm concentration, motility, viability, and morphology. **Result** The highest sperm concentration was found in P2 (P1 40,60 million/mL, P2 59,80 million/mL, P3 50,80 million/mL; the highest normal sperm motility was found in P2 (P1 42,00 %, P2 61,80 %, P3 50,60 %); the highest normal sperm viability was found in P2 (P1 42,60 %, P2 61,00 %, P3 53,20 %); the highest normal sperm morphology was found in P1 (P1 41,20 %, P2 28,60, P3 37,60) **Discussion & Conclusion** Extract of *Barringtonia Racemosa* kernels can improve sperm concentration, motility, viability, and morphology of cigarette smoke expose rats.

Comparison of Platelet Rich Plasma Administration with Platelet Low Plasma for Healing Incision Wounds in Cruris of Rattus norvegicus Rats Viewed from Histology of Collagen Tissues

*M. Ifani Syarkawi Rizal

General Surgeon Resident Of Medical Faculty Of Syiah Kuala University, Indonesia

Keywords: platelet-rich plasma, platelet poor plasma, the incision

Background; Luka is a form of network outages due to anatomical relationship Ruda mechanism force. When injury occurs on a network, there is a wide range of responses hemostasis, inflammation, bleeding and contamination of bacteria to form necrotic tissue with cell death. Potential platelets with platelets where hemoterapi topical gel can be considered as adjuvant treatment of multidisciplinary process, which is useful for enhancing wound healing process. treatment of wounds with the PRP will accelerate the differentiation of epithelial and produce network with collagen bundles are organized and interlinked, which provides for the growth stimulation of wound healing, Unlike the PRP, domestic workers do not have much content yet platelet PLP has its own associated components process penyembuhan, Research methodology; This research is an experimental research by using the draft post-test only control group design. PNo group selected randomized experiments were further subjected to the treatment and the control group was not subjected to treatment, after that do post test. The treatment group in this study is Rattus norvegicus with the incision on cruris given platelet rich plasma and a group given the low plasma platelets, whereas the control group is the group of rats comparison with the incision in the cruris were not given plasma platelet product. Data will be analyzed by ANOVA. Research result; The results showed that the amount of collagen between the CPC and PLP Award at the incision cruris novergicus Rattus differ significantly p value 0.000 ($P < 0.05$). Conclusion; there is a difference of the amount of collagen in the wound incision cruris Rattus PRP novergicus given to domestic workers.

TRACK B

ENGINEERING, TECHNOLOGY & APPLIED SCIENCES

Performance of Mechanical Energy Harvesting Unit for Generating Electricity for Portal Gate System

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Keywords: Mechanical Energy Harvesting Unit (MEHU), Fly Wheel, Generator Performance, Electrical Load.

The portal gate systems for parking area need electricity for opening/closing the portal (barrier crossbar) and printing the parking ticket. The mechanical energy harvesting unit presented on this paper is designed for supplying electrical energy needed by the portal gate system for its operation. The mechanical energy harvesting unit converted linear movement of the slider into rotating movement of the fly wheel using rack and pinion. The energy stored in the fly wheel is used to turn a small electric generator attached to the energy harvesting unit that provided electricity for the portal gate system. This energy harvesting unit is designed as a breakthrough to produce electrical energy by utilizing the weight of the vehicle that enters the parking space. The linear movement of the slider is gained from the weight of the vehicle that passed on the mechanical energy harvesting unit. This system is appropriate for a stand alone portal gate systems. Three categories of passenger cars (small, medium and large) each with mass of 1300 kg, 1700 kg and 2000 kg respectively were used in the experiment. Considering the mechanical efficiency of the harvesting unit by 60%, three vehicles used were able to produce a maximum rotation of the electric generator of the harvesting units for 2585 rpm, 2964 rpm and 3210 rpm, respectively. Testing of the harvesting unit generator with a continuous rotation with an electrical load taken from LED lights with voltage of 24 Volt, 18 Volt and 12 Volt produces power of 19 Volt x 3.6 mAmp (4000 rpm), 17 Volt x 4.3 mAmp (3500 rpm) and 12 Volt x 11 mAmp (2400 rpm) respectively. Initial testing of the mechanical energy harvesting unit shows that this equipment is capable of producing the required electrical energy.

TRACK C

BUSINESS, ECONOMICS, SOCIAL SCIENCES & HUMANITIES

Investment Analysis Of Solar Panel Project In Pt.Phms Offices Area - Balikpapan

*Husen Maq Desi

MMT Institute Technology Surabaya (ITS), Balikpapan, Indonesia

Keywords: Solar Panels, Investment, Project Feasibility Analysis

Indonesia has abundant potential solar energy due to located along the equator, where the sun shines most of the year with an average daily radiation around 4.5 kWh / m². Along with the decline of the world fossil energy resources particularly in Indonesia and the existence of international policies to reduce global warming, solar energy provides a strategic choice as an alternative energy source. The city of Balikpapan which is crossed by the equator geographically has the potential of solar energy where the sun shines throughout the year with an annual average variation of radiation between 48. The purpose of this study is to provide an economic feasibility analysis of solar panel projects in the PT. PHM offices area located in Balikpapan, East Kalimantan-Indonesia. Feasibility will be examined from the technical and economic aspects and will be evaluated using the case study office building approach at PT. PHM. The economic parameters used in this study are Net Present Value (NPV), Payback Period, Internal Rate of Return (IRR), Return of Investment (ROI), and Levelized Cost of Electricity (LCOE). Furthermore, sensitivity analysis was also carried out in this study on economic calculation variables, namely solar panel prices, electricity selling prices, and variations in solar radiation in a year. The data used in this study are primary data originating from the environment of PT. PHM and some secondary data from outside parties for the calculation of investment costs. It is expected that the installation of solar panels in the office area of PT. PHM can provide positive economic value so that it can be the basis for making decisions for the implementation of the project.

Developing Strategy Of Maintenance For Pipeline Using Methodology Of Fish Bone Diagram & Hor (House Of Risk)

^{1*}PRIJAMBODO, Moko ²Dr. Ir. Imam Baihaqi, MSc
^{1,2}ITS Surabaya, Balikpapan, Indonesia

Keywords: Pipeline , Inspection, Maintenance , Possible Risk & Mitigation Actions, House Of Risk (HOR), Fish Bone Diagram (FBD).

To ensure delivery of oil & gas production, pipeline is playing very important role to transport the raw multiphase fluid from wellhead becoming final product to the end users. Therefore integrity & reliability of pipeline should be well maintained to minimize any potential breakdown by performing inspection & maintenance periodically, as well as with cost effectively. With refer to Government Regulation, PERMEN No 300K/1998, PT MPH is obliged to ensure integrity of the pipeline facilities. Therefore, it is required to provide integrated planning to optimize schedule of inspection and maintenance without jeopardizing the pipeline integrity (safety), target of production & budget availability. Based on the above concerns, it is required to perform detail assessment by listing all possible risks and mitigation actions at PT MPH pipeline facilities, by then to be better prioritizing the maintenance plan to balance between production target & safety/integrity of the facilities. Combination of two (2) different approach is selected to solve the issue which are Fish Bone diagram (FBD) and House of Risk (HOR). FBD is selected as first approach to define the problem, then HOR is used to prioritize the way forward.

Financial Literacy and Retirement Planning Among Corporate Employee in Indonesia

^{1*}Dhanur Arie Bastian,² Sylviana Maya Damayanti,³ Indra Yudha Mambea
Institut Teknologi Bandung, Indonesia

Keywords: Financial Literacy, Retirement Planning, Corporate Employee

The retirement fund system in Indonesia has been thriving to a higher level. The government has mandated its state-owned enterprises to establish a compulsory retirement fund for all workers in Indonesia. Retirement concerns are also becoming pressures for them. The high cost of health care and running out of money are the biggest concern for them. High number of investment fraud cases could harm illiterate employees who try to invest for retirement. In this research, we examine the relationship between financial literacy and retirement planning. The module of financial literacy and retirement planning is designed for this research adapting the previous research modules. There are several adjusted questions to adapt the condition in Indonesia. The respondents are corporate employees throughout Indonesia. This research uses convenience sampling as non-probability sampling technique in gathering the data. There are 665 collected respondents, and the data is processed using the Ordinary Least Square (OLS) regression and Generalized Method of Moments (GMM) regression. The data is tested simultaneously and partially. We find that financial literacy index of corporate employees in Indonesia is 51%. Financial illiteracy occurs among elderly, lower level education, engineer education background, and lower salary level of employees. We also find that there is positive and significant relationship of sophisticated financial literacy to retirement planning. Corporate employees who have higher sophisticated financial literacy are more likely to plan for retirement. Less likeliness to plan for retirement occurs among higher basic financial literacy, women, younger, non-engineer education background, non-financial institution retirement fund, high level salary, and no having children employees. We also find that there is no endogeneity problem in the research model between financial literacy and retirement planning. We believe that government institutions and also corporations are the critical parties who could help to increase financial literacy and create awareness of retirement planning.

The Influence of Leadership, Working Culture, and Working Environment for the Ministry of Administrative Reform and Bureaucracy

* Ahmad Badawi Saluy dan Budi Prawira
Economic and Business Faculty-Mercu Buana University Jakarta, Indonesia

Keywords: Leadership, Working Culture, Work Environment, Organizational Performance

This research aims to obtain information about the influence of leadership, working culture, and the working environment on organizational performance in Ministry of Administrative and Bureaucracy. The data used in this research are the primary data that is collected using questionnaire method and secondary data collected from the Ministry of Administrative and Bureaucracy. The sampling method used is a saturated sample method with respondents of 96 people. The methods of analysis used in this study are multiple linear regression analysis using SPSS program version 25. The results showed that there were positive and significant influence of the leadership variables and the working culture on the organizational performance, while the working environment variables are of negative and insignificant influence.

Features Selection of Entity Resolution in Online Prostitution Case on Twitter

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Keywords: Entity Resolution, Online Prostitution, Regularized Logistic Regression, Active Learning

The effort to find a solution for online prostitution through Twitter is by applying the entity resolution of the identity of social media accounts that have specific features that indicate online prostitution. Entity resolution is the process of determining whether two references to real-world objects refer to the same or different purposes. This study applies entity resolution based on features with the Regularized Logistic Regression training and determination of Active Learning on Dedupe and based on graphs using Neo4j and Node2Vec. The research method used includes stages: (1) data preparation, (2) feature extraction, (3) compiling training data and test data, (4) matching entity resolution, and (5) testing and analysis of research results. The data used is the result of Twitter scrapping of specific tags, with feature extraction based on (a) user information in the bio column consisting of location and extracted text in more detail into personal specifications and contact numbers, and (b) data flow in the form of tweet content in the form of a hashtag based on the top 5 tags. This study found that (1) maximum similarity is 1 when the number of features (personal, location and bio specifications) is complete, minimum similarity is 0.025662627 when the amount of harmful training data (2) the most influencing similarity feature is the cellphone number with the lowest starting range from 0.997678459 to 0.999993523 (3) the parameter -length of walk per source has the effect of achieving the best similarity accuracy reaching 71.4% (prediction 14 and yield 10) when the parameter is : -d 16 -q: 2 -l: 80.

UPCOMING EVENTS

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