BOOK OF ABSTRACTS
International Conference on Innovation In Research
Grand Inna Beach Hotel
Bali, Indonesia
August 28-29, 2018
Keynote Speaker:
Prof. Dr. Ocky Karna Radjasa, M.Sc.
(Director of Research and Community Services Kemenristekdikti)

Invited Speaker:
1 Prof. Bambang Sumintono, Ph.D. (Lecturer in Malaya University, Malaysia);
2 Prof. Dr. Julio Cabral Teehankee (Dean of College of Liberal Arts, De La Salle University, Philippines);
3 Athiqah Nur Alami, S.IP, Ph.D. (National University of Singapore, Singapore);
4 Prof. Dr. Ismanto Hadi Santoso, MS. (Lecturer in Universitas Wijaya Kusuma Surabaya, Indonesia);
5 Evangelos Angelou Afendras, Ph.D (A former lecturer of Indian Institute of Management)
6 Dr. Pranav Kumar (Consultant, Edu Train International Bahrain)
7 Dr. Ir. Hary Sastrya Wanto, MS. (Lecturer in Universitas Wijaya Kusuma Surabaya, Indonesia);
8 Ir. Endang Noerhartati, MP. (Lecturer in Universitas Wijaya Kusuma Surabaya, Indonesia).

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## LIST OF ABSTRACT

<table>
<thead>
<tr>
<th>No</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indonesian Export - Import Performance</td>
<td>i</td>
</tr>
<tr>
<td></td>
<td>Ismanto Hadi Santoso</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Orchid Flowers (Phalaenopsisamabilis L) As A Provitable Business In Urban Areas (Study In Surabaya)</td>
<td>ii</td>
</tr>
<tr>
<td></td>
<td>Hary Sastrya Wanto, Endang Siswati, Akbar Hariputra</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENTREPRENEURSHIP SORGHUM TOWARDS INDUSTRY 4.0</td>
<td>iii</td>
</tr>
<tr>
<td></td>
<td>Endang Noerhartati</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge combination capability in tourism related SMEs in Indonesia: Does the marketing innovation moderate the product innovation-performance relationship?</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ratni Prima Lita, Ma'ruf Ma'ruf and Meuthia Meuthia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local Mineral Formulas for Supplementation of Kacang Goat's Feed Based on Wild Forages, Rice Bran and Sago Stalk</td>
<td>2</td>
</tr>
<tr>
<td>Number</td>
<td>Title</td>
<td>Authors</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3</td>
<td>Predicting Undergraduate Student Retention Using Support Vector Machine (Case Study: STMIK STIKOM Indonesia)</td>
<td>Khalil, Assadatul Abbadiah, Andri and Evitayani</td>
</tr>
<tr>
<td>4</td>
<td>Character Education In Bawang And Kesuna Animation</td>
<td>Ni Wayan Sumartini Saraswati, Komang Kurniawan Widiartha, Luh Putu Ayu Prapitasari</td>
</tr>
<tr>
<td>5</td>
<td>Religious tourism and community economic development potential</td>
<td>I Gede Adi Sudianggara, I Ketut Setiawan, I Nyoman Widhi Adnyana, Putu Satria Udyana, and Kadek Ayu Ariningsih</td>
</tr>
<tr>
<td>6</td>
<td>Group Decision Support System to Determine Tourism Object in Bali with AHP, TOPSIS and BORDA Model</td>
<td>Sari Narulita, Embang Syasyadin and Meri Oktaviani</td>
</tr>
<tr>
<td>7</td>
<td>Prediction System for Students Who Exceed the Study Period Using the K-Nearest Neighbors Approach (Case Study: STMIK STIKOM Indonesia)</td>
<td>Aniek Suryanti, Putu Sugiantawan, and Welda</td>
</tr>
<tr>
<td>8</td>
<td>Dunia Sekar Branding Development Through 2D Animation Illustrated Song</td>
<td>I Gede Iwan Sudipa, I Nyoman Saputra Wahyu Wijaya, Made Leo Radhitya, I Made Avendias Mahawan, and I Nyoman Alit Arsana</td>
</tr>
</tbody>
</table>
I Made Marthana Yusa

9 Automatic High Speed Photography Based Microcontroller

I Gusti Made Ngurah Desnanajay, Ida Bagus Ary Indra Iswara, Anak Agung Gde Ekayana, Putu Praba Santik, and I Nyoman Buda Hartawan

10 Effect of Electromagnetic Wave Interference against Computer Network Quality of Service

I Nyoman Buda Hartawan, Putu Praba Santika, Ida Bagus Ary Indra Iswara, and I Gusti Made Ngurah Desnanjaya

11 Body Mass Index Measurement System As a Desktop-Based Nutrition Monitor

Anak Agung Gde Ekayana, I Nyoman Buda Hartawan, I Gusti Made Ngurah Desnanjaya, and I Dewa Made Adi Baskara Joni

12 INTERMEDIATE AND MOTIVATION ANALYSIS OF STUDENTS INFORMATICS ENGINEERING STUDIES PROGRAM (case study: STMIK STIKOM Indonesia)

Willdahlia Ayu, Ratnaningrum Rara

13 Competitiveness of Crude Palm Oil In West Sumatera Province compare to Other Province In Sumatera Island In Domestic Market
Lisa Nesti, Firwan Tan, Endrizal

14 Study Of Disparity Economic Growth Factors In Indonesia

Naslindo Sirait

15 Analysis Droughts Index By Standardized Precipitation Index (Spi) And Productivity Of Rain-Fed Rice Fields In Kabupaten Indramayu West Java.

Asma Irma Setianingsih, Muzani Jalaludin, Warnadi

16 The Integration between children's rights and Islamic education at Pondok Pesantren

Izzatul Mardhiah, Sari Narulita and Rihlah Nur Aulia

17 The Extended Model Of Consumers' Technology Acceptance Toward Intention Using The E-Wallet

Sugeng Purwanto, Sri Hartini, Gancar Candra Premanto

18 Decision Support System Selection of Tender Winners Project Development Building of STMIK STIKOM Indonesia with TOPSIS Method

Desak Made Dwi Utami Putra, Putu Adi Pratama

19 The Role Of Women In The Preservation Of Life Environment On Tosca Santoso’s Fictional Works
Ririe Rengganis
20 Privacy Related to Cyber Space Activities

Ni Putu Suci Meinarni, and Emmy Febriani Thalib
21 Stemming and Stopword Removal Impact on Document Recommendation System

Wayan Gede Suka Parwita
22 Characteristics of Physico-chemical and Functional Properties of starch extracts from Tubers

Fauzan Azima, Novizar Nazir , and Hendra Cahya Efendi
23 PROFILE OF PERLECAN PROTEIN EXPRESSION AND TRANSFORMING GROWTH FACTOR ALFADUE TO HYPERGLYCEMIAAT RATMODEL

Ibrahim Njoto, Ayly Soekanto, Sie Ernawati, Handono Kalim, Kusworini Handono, Djoko W. Soeatmadji, Abdurrachman, Fatchiyah Fatchiyah
24 Machine Learning Approach for Acute Respiratory Infections (ISPA) Prediction : case study Indonesia

Ni Luh Wiwik Sri Rahayu Ginantra, I Gusti Ayu Agung Diatri Indradewi, and Eddy Hartono

7
Mobile Based Chatbot Application for HIV/AIDS Counseling Using Artificial Intelligence Markup Language Approach

Dewa Putu Yudhi Ardiana, I Dewa Made Adi Baskara Joni, and I Putu Agus Eka Darma Udayana

Analysis Of The Characteristics For Potential Consumer Based On Motivation, Personality And Consumer Life Style (Study On East Java Batik Consumer)

Lestari, Kristiningsih, Wiwik Herawati

Analysis Of Product Innovation And Market Orientation Toward Competitive Advantage (Study On Cereals Products Small And Medium-Sized Enterprises In Jombang Regency)

Dwi Bhakti Iriantini, Mohamad Tohiron

Hyperspectral Image Remote Sensing Classification Using RotBoost

I Gusti Ayu Agung Diatri Indradewi, Ni Luh Wiwik Sri Rahayu Ginantra, and Made Suci Ariantini

The Determinant of Organizational Citizenship Behavior and Examining the Mediating Roles of Job Involvement: The Survey on Lecturers of Higher Education of the Ministry of Industry in Indonesia

M. Arifin, Harif Amali, Hesi Eka Putri

Freight transport performance in West Sumatera

Purnawan and M. Syawaluddin Fatra
31 Seller’s Rights and Obligations of Marketplace in Indonesia
I Putu Gede Budayasa, I Gede Totok Suryawan, Ni Putu Suci Meinarni, Wayan Eny Mariani, and Komang Redy Winatha

32 The Need Of Mathematical Literacy Competency For Informatics Graduates
Preliminary Study At Stmik Stikom Indonesia
I Kadek Budi Sandika, Evi Dwi Krisna, I Nyoman Tri Anindia Putra

33 Empowerment Of The Smallholders’ Cooperative For Palm Oil Plantation Replanting In Dharmasraya District West Sumatera Province, Indonesia
Ira Wahyuni Syarfi, Melinda Noer, Ami Sukma Utami

34 Inventory Control Using ABC and Min-Max Analysis On Retail Management Information System
I Made Dwi Putra Asana, Made Leo Radhitya, Komang Kurniawan Widiartha, Putu Praba Santika and I Komang Arya Ganda Wigunda

35 The Effect Of Cause Brand Fit On Brand Credibility Through Altruistic Attribution Dimodered By Altruistic Value
Adrianto Trimarjono

Influence of Predominant Wind Angle Direction to CO Concentration in The Surrounding Area of Cement Industry

Vera Surtia Bachtier, Slamet Raharjo, Rinda Andhita Regia, and Yudhi Saputra

Action aggressiveness and firm performance with moderator repertoire competition: psychological perspective of top management team (TMT)

Erminati Pancaningrum, Badri M. Sukoco

Evaluating efficacy of tempeh extract supplementation on oxidative stress biomarkers and cytokines among Rattus norvegicus infected by Mycobacterium tuberculosis

Budhi Setiawan, Lusiani Tjandra, Kartika Ishartadiati, Sri Lestari Utami

Agropolitan Sustainability Status Based Chicken Laying In District Lima Puluh Kota

Dwi Yuzaria, James, H., Fitrimawati, Fitri, Ikhsan

Analysis Of Linear Regression On Used Car Sales In Indonesia

Chyntia Kumalasari Puteri, Lia Ninda Safitri

Tourism and Economic Growth Nexus in Indonesia: A Toda-Yamamoto Approach to Granger Causality Test

Elvina Primayesa, Wahyu Widodo, F.X. Sugiyanto
Influence of Emotional Branding and Trust in a Brand against its impact on satisfaction and loyalty of users of features Goo Food on the Go Application Jek di Surabaya

Maqbull Arochman, Dwi Indah Mustikorini

Palm Kernel Cake Fermented with Lentinus edodes in the Diet of Quails

Nuraini, Ade Djulardi, and Ade Trisna

Trading House Agency As Alternative Potential Marketing Of Agricultural Products In Sidoarjo District East Java

Nugrahini Susantinah Wisnujati, Koesriwulandari, Dwie Yudho Prasetyo

Risk Vulnerability Analysis Of Leprosy Using Geographic Information Systems In Padang Pariaman District, West Sumatera

Masrizal, Ramdha Ananda Prima, Randa Ilham

Test Formulation Of Liquid Organic Fertilizer On Growth And Result Of Soybean Plants

Jajuk Herawati, Indarwati, dan Ernawati,

Assessment of the level and key factors affecting sustainable development of integrated small-scale farming agriculture area: The case of highland Solok District, West Sumatra.
Helmi, Rafnel Azhari, Henmaidi, Silfya, and Ibnu Riyadhie

48 Chemical Characteristic of Sweet Passion Fruit (Passiflora ligularis Juss) Seed from Indonesia Based on Maturity Level

ANDASURYANI, IFMALINDA, PUTRI WULANDARI ZAINAL

49 Reduction of CO₂ Emissions from Refinery Industry by Using Limestone for Production of Precipitated Calcium Carbonate (PCC)

Syukri Arief, Sani Helnia Sukma, Admin Alif

50 Problems of Palm Oil Farmers and Documentation of Palm Oil Lexicons in West Sumatra, Indonesia

Dr. Sawirman

51 Optical Properties of Oil Palm Fresh Fruits Bunch (FFB) for Optimum Harvest-Window Prediction

Dinah Cherie, Rini Rini, and Muhammad Makky

52 Rapid Non-destructive evaluation of West Sumatran Indigenous Rice Quality

Muhammad Makky, Santosa Santosa, Kohei Nakano and Renny Eka Puteri

53 Braking Control Strategies of Modern Hybrid and Electric Vehicles
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>The influence of giving Ocimum sanctum L.’s leaf extract to Bactericidal of Escherichia coli with Dilution Method</td>
<td>Hanifullah Ardan Mulyarajasa, Sahadewa Sukma</td>
</tr>
<tr>
<td>55</td>
<td>The application of duolingo in teaching English for young learners</td>
<td>Dinda Firly Amalia, and Bekti Wirawati</td>
</tr>
<tr>
<td>56</td>
<td>Implementation of Digital Marketing Strategy Through Social Media For Young Entrepreneur to Facing the MEA (ASEAN Economic Community)</td>
<td>Ayu Nadia Charissa</td>
</tr>
<tr>
<td>57</td>
<td>RELATIONSHIP BETWEEN NURSES’ PROFESSIONAL SELF-CONCEPT AND WORK PRODUCTIVITY OF NURSING ASSOCIATES AT INPATIENT ROOMS OF DR. M. DJAMIL HOSPITAL PADANG INDONESIA IN 2018</td>
<td>Yulastri Arif, Fatima Nuraini Sasmita, Sila Dewi Anggraini</td>
</tr>
<tr>
<td>58</td>
<td>Development of Student Worksheet on Flat Geometry Learning Based on Rigorous Mathematical Thinking At Universitas Wijaya Kusuma Surabaya</td>
<td>Meilantifa, Janet Trineke Manoy, and Herfa Maulina Dewi Soewardini</td>
</tr>
</tbody>
</table>
Rumen fermentability and invitro digestibility of corn strow and Gliricidia maculata in the ruminant diet

Agustin Fauzia, Ningrat Rusmana, Rahma Devint, Triulina Rima

The use of cassava peel and shrimp waste mixture fermented with Bacillus amyloliquefaciens in ration of laying hens

Mirzah, Montesqrit, Rika Adriana, Ahmad Yunus

Democratization at the regency and city level in Indonesia in the era of regional autonomy

Dr. Bambang Suprijadi, Msi

Oral supplementation of fish oil reduce fasting blood glucose and endothelial damage but can not reduce malondialdehyde level in diabetic male Wistar rat (Rattus norvegicus)

Sukma Sahadewa, Fara Disa Durry, Wimpie Pangkahila, Gde Ngurah Indraguna Pinatih

Wide resection giant cell tumor of distal ulna and stabilization ulnar stump with extensor carpi ulnaris tendon (three case reports)

Savero I, Mujaddid I, Pamudji U, Handry Th, Ambar M

Profile of spondylitis tuberculosis in Prof. Dr. R. Soeharso Orthopaedic Hospital and Dr. Moewardi Hospital
SURAKARTA
JANUARY 2017 – DECEMBER 2017
(Retrospective Study)

Rieva Ermawan, R. Andhi Prijosedjati

65 Improve in Neurological Outcome After Surgical Treatment of Cervical Schwannoma with Tetraparesis – A Case Report

Rieva Ermawan, Denny Adriansyah

66 Supervisory Mechanism of Supplementary Regional Regulation in APBD Implementation.

Seto Cahyono, Shanti Wulandari

67 RESPONSE OF THE GROWTH SUPERIOR SUGARCANE CLONES ON SOIL ACIDITY LEVELS SOURCED FROM BUDCHIP SEEDS

Sri Uchtiawati, Setyo Budi, Yudhi Arifani, Andriani Eko Prihatiningrum

68 Students' perception of Computer Assisted Learning services: Analysis of Structural Equation Modeling

Khoirul Anwar, Slamet Asari, Nur Fauziah, Sri Suryanti

69 REALIZING SMART CITY INNOVATION (SMARTCITY) THROUGH MUTUAL BOND ISSUANCE

15
Agam Sulaksono, Bambang Yunarko, Titik Suharti

70 Strengthening Marketing Access in Supporting the Management of Productive Economic Business in the Village Community of Sambi pondok Sidayu Gresik

Sukaris, Budiyono Prestyadi, Alkusani

71 Business Ethics in the Ethics Era: Industrial Era 4.0

Suyoto

72 DEVELOPMENT OF STUDENTS CENTERED LEARNING (SCL) MODEL IN MATH USING ANDROID BASED OF JUNIOR HIGH SCHOOL STUDENTS

Irwani Zawawi, Dian Rachmawati

73 The Implementation of Video Learning Media in Natural Science Learning for Primary School Students.

Friendha Yuanta,

74 The Use of Code-Switching in English as A Foreign Language Classroom Teacher’s Perspective

Diah Yovita Suryarini

75 ROLE PLAYING METHOD IN IMPROVING STORYTELLING SKILL OF BUYING AND SELLING EXPERIENCES ON PRIMARY SCHOOL STUDENTS

Reza Syehma Bahtiar
76  Web Centric Course in Supporting Primary Students’ Learning Skills and Learning Outcomes

    Yudha Popiyanto

77  Creative Economic Development Strategy Based On Prosesed Agriculture Product In Surabaya City

    Erna haryanti Koestedjo, Dwie Retna Suryaingsih

78  DYNAMICS OF SOCIAL LIFE OF INDONESIAN PEOPLE IN DEALING WITH GLOBALIZATION ERA

    I KetutSuda, Ni Made Indiani, Wayan Paramartha,
    I Wayan Winaja

79  STATE RESPONSIBILITY TO SEA ENVIRONMENT BY CLIMATE CHANGE

    Ria Tri Vinata, Ibnu Asqori Pohan

80  Experiment of a Propeler Wind Turbine Model in a Wind Tunnel with Various Winglet Heights Under Mechanical Loads

    Uyung Gatot S. Dinata, Teguh Maulana Hardi, Yul Hizhar, Adly Havendri, Adek Tasri

81  Performance Test of a Blower as Turbine with Backward-Curved, Radial and Forward-Curved Blades for a Low-Cost Picohydro Power Plant
Uyung Gatot S. Dinata, Zulfikar, Januar Efendy, Asep Neris Bakhtiar

82 Analysis of the Effort and Impact of Determinants for Regional Innovation System In Payakumbuh City

Amna Suresti, Rahmi Wati, Uyung Gatot S. Dinata, James Hellyward, Alizar Hasan

83 Enhancing Mentally Retarded Students’ Comprehension: The Development of MASH Project-Based Reading Technology

Lulu Asrifah, and Yudhi Arifani

84 PREVENTION IN TRAFFIC ACCIDENT USED HUMANIST INTERACTIONS WITH TRAFFIC POLICE AND MOTORCYCLE USERS

Umi Enggarsasi, Nur Khalimatus Sa’diyah

85 THE PROSPECT OF SEA PROTECTION (CORAL REEFS) AS CARBON SINK AND CARBON SOURCE DUE TO CLIMATE CHANGE

Besse Sugiswati, Ria Tri Vinata, Umi Enggarsasi

86 Legal Protection Of Artist In The Endorsement Agreement

R. Besse Kartoningrat, Fries Melia Salviana, Isetyowati Andayani, Handrawan

87 Fishing Quotas Regulation as the Embodiment of Fish Resources Protection
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>88</td>
<td>Bilateral Investment Treaty Effectiveness In Completion Of Capital Investment Disposal</td>
<td>Titik Suharti, and Masitha Tismananda Kumala</td>
</tr>
<tr>
<td>89</td>
<td></td>
<td>Fries Melia Salviana, Desy Nurkristia Tejawati</td>
</tr>
<tr>
<td>89</td>
<td>OPTIMIZATION THE ROLE OF VILLAGE CHIEF AND THE SUBORDINATE ON THE VILLAGE DEVELOPMENT PROGRAM</td>
<td>Endang Retnowati; Edi Krisharyanto; Noor Tri Hastuti</td>
</tr>
<tr>
<td>90</td>
<td>Constitutional Entrepreneurship: Main Strategic to Create Balanced Civilization</td>
<td>Ardhiwinda Kusumaputra, SH., MH. ; Dr. Endang Retnowati, SH., MHum</td>
</tr>
<tr>
<td>91</td>
<td>Original Research Article Designing an Online-Based Questionnaire Application for Mobile Devices</td>
<td>Firman Hadi Sukma P.</td>
</tr>
<tr>
<td>92</td>
<td>SORGHUM TAGLINES CAMPAIGN ANALYSIS : DISCOURSE APPROACH</td>
<td>Muhammad Kusumawardhana, Endang Noerhartati</td>
</tr>
<tr>
<td>93</td>
<td>Antioxidant Activity of loloh Malaka Fruit (Phyllanthus emblica L.) in Ayurveda Medication</td>
<td>Putu Lakustini Cahyaningrum, Sang Ayu Made Yuliari, Cokorda Putra and Ida Bagus Putra Suta</td>
</tr>
</tbody>
</table>
Accelerating Regional Economic Development through Tourism: the Development of Alas Kedaton as a Spiritual Tourism Destination

Putu Krisna Adwitya Sanjaya, Ni Luh Adisti Abiyoga Wulandari, and Ni Komang Sumadi

IDEAS OF DIVINITY BEYOND SYMBOLS:

A STUDY OF PHILOSOPHICAL THEOLOGY TOWARDS THE KARL JASPERS' EXISTENTIALISM (1883-1969)

Ni Nyoman Sri Winarti, I Gde Jayakumara, I Gusti Agung Paramita

TRANSFORMATION CULTURAL CAPITAL TO ECONOMIC CAPITAL:

REVIEW OF PATIRTHAN TIRTHA EMPUL TAMPAKSIRING, BALI

Dr. Ida Bagus Dharmika, MA, Dr. I Gusti Bagus Wirawan, M.Si
Dr. I Wayan Subrata, M.Ag

97 Mediation as Alternative Dispute Resolution (ADR) In the Forestry Sector by Malayu Customary Institution (Lembaga Adat Melayu) In Pelalawan District of Riau Province

Riska Fitriani & Hayatul Ismi, Ferawati,

98 IDENTIFICATION GENETIC VARIATION OF TUMOUR NECROSIS FACTOR IN ACTIVE PULMONARY TUBERCULOSIS

Febtarini Rahmawati

99 LAW, COMMODIFICATION, AND LOCAL WISDOM Portrait of Conflict Relation, between Law, Economics, and Local Wisdom of Bali in Setting the sacred area of temple

I Putu Sastra Wibawa, I Wayan Martha, I Putu Sarjana

Gusti Ayu Ketut Artatik

100 Relationship Structure, Culture and Organizational Climate With Organizational Effectiveness of Higher Education

ARIE AMBARWATI

101 Consumer Behaviour of Fish Product Centre Sentra Ikan Bulak Surabaya

Herman
Does Intellectual Capital have a Positive Effect on The e-Service Innovation of Public Employees?

Dr. Arfah SIP., MSi

INTERCULTURAL BUSINESS COMMUNICATION FOR SMALL MEDIUM ENTERPRISES IN SURABAYA TOWARDS GLOBAL MARKET

Febrina Hambalah

IMPLEMENTASI KEBIJAKAN PROSEDUR PENGAWASAN DAN PENGENDALIAN KAWASAN MANGROVE DI WILAYAH KOTA SURABAYA

(Listi Kasus Implementasi Peraturan Walikota Surabaya no. 65 Tahun 2011 di Pantai Timur Surabaya)

Lunariana Lubis, S.T., M.AP., Agus Wahyudi, S.IP., M.IP.

Evaluating efficacy of tempeh extract supplementation on oxidative stress biomarkers and cytokines among Rattus norvegicus infected by Mycobacterium tuberculosis

Budhi Setiawan Lusiani Tjandra Kartika Ishartadi Sri Lestari Utami

QUALITATIVE METHOD IN CULTURAL MAPPING IN THE BELANDINGAN BALI AGA VILLAGE KINTAMANI BANGLI BALI

Ni G.A. Diah Ambarwati Kardinal, Komang Wirawan,
I Nyoman Harry Juliarthana

107 MANFAAT PRODUK BIOFARMAKA MENUJU INDONESIA SEHAT

I Made Sumarya, I Wayan Suarda, Ni Luh Gede Sudaryati
Israil Sitepu

108 GLOBAL ERA OF GENGGONG PERFORMANCE EDUCATION IN BATUAN, SUKAWATI, GIANYAR VILLAGE.

I Nyoman Winyana

109 THE DEVELOPMENT OF INTERACTIVE POP-UP BOOK TO INCREASE SELF-DEFENSE ABILITY

Anies Listyowati, Myrnawati Crie Handini, Hapidin

110 THE DEVELOPMENT OF TRADITIONAL BATIK PATTERNS FROM SACRED TO PROFAN OF WESTERN REGIONAL PROVINCE OF EAST JAVA

Ika Ismurdiyahwati dan Atiqoh Nasor

111 AGE, INCOME AND NUMBER OF FAMILY AS PREDICTOR OF CONSUMER PREFERENCES DRAGON FRUIT (HYLOCEREUS SP.): STUDIES IN SURABAYA

Endang Siswati, Hary Sastrya Wanto

112 Cubily Artificial Agregat Sebagai Pengganti Kerikil Alami Untuk Campuran Beton Ringan Ramah Lingkungan
<table>
<thead>
<tr>
<th>Page</th>
<th>Authors</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>113</td>
<td>Johan Paing, Soebagio, and Andaryati</td>
<td>Exploring the Type of Fern (Pteridophyta) to Realize the Wonorejo Surabaya Magrove Forest Ecology Balance</td>
</tr>
<tr>
<td>114</td>
<td>Ngadiani, Amalia Septi Dini Restia</td>
<td>Aerobic Composting of Rumen Content Waste and Rice Straw at Different C/N Ratios</td>
</tr>
<tr>
<td>115</td>
<td>Sugito, and Rhenny Ratnawati</td>
<td>Developing instrument of Teaching Physical Education Sport and Health (PESH) Through Thematic Approach in Elementary School</td>
</tr>
<tr>
<td>116</td>
<td>Muhammad Muhyi, Brahmana Rangga P</td>
<td>SMART PEOPLE AS A PARTICIPATION MODEL FOR INFRASTRUCTURE DEVELOPMENT</td>
</tr>
<tr>
<td>117</td>
<td>Suning dan Dwi Muryanto</td>
<td>Using Contextual-Based Questions To Improve Students' Problem Solving Skill In Mechanical Vocational Schools</td>
</tr>
<tr>
<td>118</td>
<td>Sri Rahayu, Liknin Nugraheni, Bambang Sigit_Widodo, and Nur Fathonah</td>
<td>Influence of Protein Pili and Filtrat of Escherichia coli Culture Medium on Motility and Vitality of Human Spermatozoa: In Vitro Study</td>
</tr>
</tbody>
</table>
Sukarjati, Pungky Slamet Wisnu Kusuma, Diah Karunia Binawati

119 POTENTIAL OF THE NEW CONFINEMENT SYSTEM FOR SQUARE REINFORCED CONCRETE COLUMNS

Soerjandani PM, Raka.IGP and Tavio

120 TRADING HOUSE AGENCY AS ALTERNATIVE POTENTIAL MARKETING OF AGRICULTURAL PRODUCTS IN SIDOARJO DISTRICT EAST JAVA

Koesriwulandari, Nugrahini Susantinah Wisnujati, Dwie Prasetyo Yudho

121 COUNTERPRODUCTIVE WORK BEHAVIOR AS AN INTERVENING VARIABLE IN EMPLOYEE ENGAGEMENT AND COMMITMENT RELATIONSHIP TO EMPLOYEES PERFORMANCE

Study on Regional Financial and Asset Management District Government Malang

By Yupono Bagyo and Annastasya Lilla Savitri

122 INDONESIAN COMMUNITY INTEREST AND PERCEPTION ANALYSIS SHARIA BANKING PRODUCTS

Maqbullaa Arochman, Budi Prayitno, Eva Wany

123 The Effect Of Regional Real Revenue, General Allocation Fund And Revenue Sharing Fund With
Moderation Of Economic Growth In Capital Expenditure.

Eva Wany, Budi Prayitno, Puspita Sari Surya Prabawati

Indonesian Export - Import Performance

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Abstract. Analysis of export-import performance in Indonesia to evaluate government policies on the development of exports and imports in promoting national economic growth. The results of the analysis, the linear trend using the least squares method, shows that import values tend to grow larger than the export value, where the average increase in imports is US $8,519.4 million per year, while the average export increase is only US $6,353.7 million per year. The highest export value occurred in 2011 reaching US $203,496.60 million, while the highest import value occurred in 2012 amounting to US $191,689.50 million in the same year the export value was only US $190,020.30 slightly lower. The high import increase was triggered by rising oil and gas imports, while oil and gas exports declined significantly. Imports of oil and gas experienced a significant decline starting in 2015 since the policy of reducing fuel subsidies by the government from US $43,459.90 million (2014) to US $24,613.20 million (2015) and 2016 only US $18,739.80 million. Based on the types of imported goods, there were an average of only 7.51% in the form of consumer goods, 17.40% of capital goods, and the remaining 75.08% were auxiliary goods, or semi-finished goods for further processing in the country. finished goods. Based on the above analysis, it can be concluded that export-import policies in Indonesia are appropriate, especially government policies to reduce fuel subsidies. Although the trend of import values is greater than that of exports but based on the type of use of goods imported mostly (92.48%) to support the industrial sector, which can encourage national economic growth.

Keywords: export, import and economic growth
Orchid Flowers \textit{(Phalaenopsis amabilis L)} As A Provitable Business In Urban Areas (Study In Surabaya)

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Abstract. This study aimed to analyze the effect of seed, fertilizer and land area on the production of Dendrobium orchid flower, furthermore this study also analyze technical and economic efficiency on seeding, adolescent, and adult stages of Dendrobium orchid in Surabaya Kayoon Flower Market. This study using census method for sampling method. Cobb-Douglas type model was used to determine the influence of production factor and technical efficiency, while quadratic equation model was used to determine the economic efficiency. The result of this study showed that the equation model that was used in this study is statistically correct and simultaneously the production factor that was used in the model has significant impact on the production. This result of this study also revealed that land area has partially significant effect on seeding, adolescent and adult stages, then based on cost analysis, it can be concluded that the Dendrobium orchid flower’s price is already above its break-even point.

\textit{Keywords: Technical efficiency, economical efficiency, Cobb-Dauglass Model, Quadratic Model}
ENTREPRENEURSHIP SORGHUM TOWARDS INDUSTRY 4.0

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Abstract. Entrepreneurship development in UWKS has been carried out since 2009 by a series of research activities, community service, and entrepreneurship development. The purpose of this research is to develop entrepreneurship based on sorghum by exploring all potential sorghum as raw materials for entrepreneurship towards industry 4.0 that must have creative and innovative ideas in developing entrepreneurship. Observations cover various aspects of the superiority of each aspect of sorghum and advanced statistical analysis. The results showed that raw materials from sorghum which could be used were grain, stems, roots and leaves. The product that can be derived from the raw material among others are rice, flour, soft brand, and brand. The field tests showed that the machines and equipment for processing common rice that were easily accessible to farmers could be engineered to process sorghum seeds into sorghum rice. Thus, the processing of sorghum seeds can be done easier and closer to farmers. The machine and hybrid
equipment automation is ready to be done by engineering the screen part and blower units. Other results of entrepreneurial products are food products (various cakes, bakery, and cookies), functional drinks, and various fermentation products), health products, and non-food items (cosmetics, batik, and various souvenirs).

Keywords: Sorghum, Sorghum Products, Sorghum Entrepreneurship, and Industry 4.0

Knowledge combination capability in tourism related SMEs in Indonesia: Does the marketing innovation moderate the product innovation-performance relationship?

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Abstract. This study aimed to identify the relationship between knowledge combination capability and product innovation and their influence on company performance. It tested the moderating effect of marketing innovation on a product innovation-company performance relationship on Small and Medium Enterprises (SMEs) of tourism related industry in Indonesia. Based on quantitative approach, data collected from 105 SMEs owners with questionnaire. These SMEs were selected based on two main criteria: producer and seller of food products, and mainly targeting tourists. A Partial Least Square (PLS) was performed to analyze the data. Statistical analysis revealed that marketing innovation significantly moderate the relationship between product innovation and business performance. Meanwhile knowledge combination capability and product innovation were not found significantly affect business performance. This research offers companies with important insights that product innovation is important aspect in boosting the business performance but it is also important to pay
attention to the ability to conduct marketing innovation. Innovation in marketing helps company to renew product design, to improve pricing technique, to manage distribution channel and to design appropriate communication that will significantly deter business performance. The paper provides insights for academics and professionals in the field of small and medium size business and adds to the literature on tourism industry in emerging economies.

Keyword: Marketing innovation, product innovation, knowledge combination capability, performance, SMEs, tourism
Local Mineral Formulas for Supplementation of Kacang Goat’s Feed Based on Wild Forages, Rice Bran and Sago Stalk

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Abstract. Poor growth of grazing kacang goat in the Pariaman region of West Sumatra are related to lack of forage feed due to various limiting factors. Additional feeding of rice bran and sago stalk might be able to fulfill their energy and protein requirement, but the animals are presumably deficient in minerals. The study was aimed to design mineral supplement for better nutrition of kacang goat fed based on wild forages, rice bran and sago stalk. Crude nutrient and mineral composition of wild plants and agroindustry byproducts which are normally consumed or fed to kacang goat were analyzed for dry matter (DM), crude protein (CP), crude fiber (CF), crude ash and minerals (Ca, P, Mg, Na, Mn, Cu, Zn). Samples of plants were collected from three areas where kacang goat are normally grazed, i.e. coconut plantations, banana plantations and idle lands. Mineral feed was then formulated by using locally available materials: Bukit Kamang’s stone powder, roasted fresh water mussel shell and limestone. The local mineral was prepared in two different forms: loose and block. The products were fed to 12 young kacang goat males for 14 weeks in three treatments: P0: no supplementation (control); P1: supplemented with loose local mineral; and P2: supplemented with block local mineral. Each treatment consisted of 4 goats as replication. Parameters measured included: body weight gain, feed intake, feed conversion ratio (FCR), blood minerals (Ca, P, Mg), blood hematology (hemoglobin [Hb], mean corpuscular Hb concentration [MCHC], total red blood cell [RBC], white blood cell [WBC], hematocrit concentration [HCT]) and total protein. Results showed that there were seven kinds of wild forages consumed by goat during grazing. The average crude nutrient and mineral content of the forages were as follows: DM: 17.2%, CP: 16.5%, CF: 18.20%; Ca and P: 4.5 dan 2.1g/kg DM; Mn, Cu and Zn: 86.3, 30.5 dan 48.0 mg/kg DM, respectively. The mineral concentration, total protein and hematological values of goat blood ranged in normal values. The average daily body weight gain was 35.4, 31.7 and 41.2 g/head, and FCR was 22.8, 26.0 and 21.3 for P0, P1 and P2, respectively. It was concluded that mineral supplementation in block lick form gave positive effect on growth performance and feed utilization efficiency. Local mineral offered in block lick had better effect than that in the loose form.

Key words: kacang goat, local mineral, wild forages, blood hematology, mineral blood statues
Predicting Undergraduate Student Retention Using Support Vector Machine (Case Study: STMIK STIKOM Indonesia)

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Abstract. Student retention can be used as a measure of the university performance. Poor student retention would affect the university because it depicts a poor image of a university management. Student retention can be interpreted as the percentage of students who remain active until they are graduated and then we call these kind of students as active students. In this study, we conducted a research on students database to predict whether they are active or inactive students by using the Support Vector Machine and then at last, we as well measured the quality of the prediction model. We use first and second semester GPA, financial status, work status and students origin as predictor attribute. Prediction model that is developed from the student database of STMIK STIKOM Indonesia shown a good result with an accuracy level of 97.46%. By excluding GPA from SVMs model, the performance decrease by 17%-46%. A model with all the attributes used in the classification provides a balance of positive and negative tuples of recognition compared to when one of attributes is omitted from the model.
Abstract. The Character becomes an important part in the journey of a developing country to a developed country. Education needs to display the values of the characters to be able to create human excellence in academic and personality. Technology can be an appropriate approach to conveying character education in this era. One technology used to transfer character values to the realm of formal and nonformal education is animation with the story of Bawang and Kesuna. In Bali, the story of Bawang and Kesuna is one of the popular fairy tales that are told both through formal and nonformal education. Moral messages and character values are presented nicely through a simple but meaningful storyline. Showing two characters with opposite characteristics as an analogy of good and bad. At the end of the story, there is a motivational value on the reward obtained through the properties of the protagonist's character. To review the value of character education in this research used constructivism theory, animation theory, value theory and educational theory. Data collection was done by literature study. The reference for this research is to explain the total value of character education in the animation of Bawang and Kesuna.

Keyword: Education, Character, Animation
Religious tourism and community economic development potential

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Abstract. Recent study data from the Ministry of Tourism revealed that the interest in religious tourism visits in Indonesia reached 12% of all tourist visits. However, unfortunately, it has not worked on more optimal. This article attempts to examine more in-depth into the economic development potential of Luar Batang community, which is life close to the Mosque and Tombs of Luar Batang which are visited by many tourists both local and overseas tourists. With such potential, it is expected that there is more mature management so that potential can be optimized well
Group Decision Support System to Determine Tourism Object in Bali with AHP, TOPSIS and BORDA Model

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Abstract. The purpose of this research is to choose the favourite tourist objects in Bali. The problems that occur in Bali, especially regarding to the tourism object, is the occurrence of some inequality of tourist visits to the Tourism Object. A comprehensive ranking of tourism object allows the determination of favourite tourism objects determined by the tourists. The ranking process also able to know the parameters that affect tourist visits. The ranking process using the Group Decision Support System (GDSS) approach can combine the decisions from multiple stakeholders. The AHP model on GDSS is used to determine the weight of each criterion and alternative, the TOPSIS model is used to determine the individual ratings of each tourism object, and the BORDA model aims to group the individual rankings. The result of the research shows that the tourism object of Tanah Lot is ranked first with the difference value of more than half with other tourism objects. Tanah Lot tourism object become the favourite tourist attraction from the others, while Goa Gajah is the last ranked. The results of sensitivity analysis indicate the criteria of cleanliness and security become the key factor of the ranking of tourism object.
Prediction System for Students Who Exceed the Study Period Using the K-Nearest Neighbors Approach (Case Study: STMIK STIKOM Indonesia)

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Abstract. The study period of students who pass the time limit and high numbers Dropout (DO) in a college can affect the value of campus accreditation. Anticipation of that possibility, the college must make predictions about potential students do not graduate on time. This study aims to build a system capable of predicting students who have the potential. If students with unpredictable graduation risks can be identified in the early stages, then the indication of dropout rates may be reduced by providing special appeals or treatment to students at risk. Prediction analysis applies the K-Nearest Neighbors method to dig up the trace data stack and look for the proximity of the data with the new data. The test data used alumni data in 2011 with 100 students as sample data. This method of classification is based on several attributes, namely the evaluation of the 1st semester to semester 6, the number of GPA, credits that have been taken each semester, number of credits passed, and the number of credits that did not pass. The result of classification becomes the output of the system which is then entered into the testing phase. This stage compares the output with the original data. The comparison value is the level of accuracy of the system that has been built.

Keywords: Prediction, Classification, Data Mining, K-Nearest Neighbors, Students
**Abstract.** In this paper, author conducted action mode research in the form of Dunia Sekar illustrated song (video clip) which is conveyed the theme song/original sound track in the form of 2 Dimensional animation. This research is a continuation of the author's previous research which is design of children's story book entitled Dunia Sekar as a medium of Hinduism values literacy. As the development of previous research, the focus of this research is on brand development as part of marketing strategy, instilling character / character traits and conveying Hinduism values. The concept model of the development of the Dunia Sekar brand is to realize the synergy of the trinity or the golden triangle of the entertainment industry that includes the print(book/comic)-animation-game products of commonly developed countries like Japan and the United States. Dunia Sekar is a brand that was born to facilitate the education of character and values of Hinduism to Indonesian children until the middle age of early teenagers (5-15 years old). The development of Dunia Sekar branding is an expansion of three initial goals that are: (1) Delivery of Hindu values more pleasantly; (2) provide an overview or reflection Positive model 'role model' for children; (3) Can serve as a tool for parents to accompany learning process with their children. The "Dunia Sekar", built as a Hindu Indonesia brand, also aims to provide social impacts to the Hindu community through the "Aksi Dunia Sekar" program which will include "love to read" programs and story telling activities for Hindu Indonesian children. From the results of the preliminary evaluation of the form of the illustrated song of Dunia Sekar theme song found that the illustrated song of Dunia Sekar in 2D animation format can be used as an animated intro series that can be realized in the next stage of research. The 2D animated form is more suitable than 3D animation to maintain the brand or visual image of the characters that appear on the children story book in a 2 dimensional drawing style. There are several visual aspects that need to be improved in order to enhance the appearance of the video clips such as the consistency of Sekar character display, featuring Sekar parent with full view, and the enhancement of background image detail.

**Keywords:** Dunia Sekar, illustrated song, 2 Dimentional animation, branding strategy
Automatic High Speed Photography Based Microcontroller

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Abstract. High-Speed Photography is a technique to capture a moment that moves very quickly. This technique is commonly used by photographers and scientists for research purposes, especially in the fields of physics, chemistry, and metallurgy. To capture the moment that moves quickly the photographer must squeeze the camera manually, then the camera will tend to shake, and the picture is not taken correctly. Also, there is also a delay between squeezing the camera with the shutter movement that adds error factor. In this study designed a high-speed automatic photography tool using a sound sensor that can freeze objects automatically when the sound is heard. To design and make this High-Speed Photography tool automatically use Arduino Uno and FC-04 Voice Sound. The results of the overall test conducted to test all the components contained in the tool High-speed automatic photography. The first test scenario is to put the tool ± 50 cm will work optimally, the second test scenario is the sound sensor response when the balloon object to distinguish the object to photograph. This tool is capable of taking pictures automatically when the sound is heard.
Effect of Electromagnetic Wave Interference against Computer Network Quality of Service

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Abstract. The need for power grids and computer networks is a critical thing to note. Placement of cables in the building will affect the quality of services provided, especially on computer networks. The computer network transmits digital data that is very susceptible to interference of electromagnetic waves. The electrical cable is one of the media that can produce electromagnetic waves. In this study measurement of electromagnetic waves on electrical wiring, for the quality of computer network services. The type of power cable tested is the power cable used in the NYAF and NYM cables, while for the computer network cables tested are UTP and STP computer network cables with categories 5e (Cat 5e) and 6 (Cat 6). The Quality of Service parameters tested in the study this is Throughput, Jitter, Delay, and Packet Loss. The instrument used to measure electromagnetic wave radiation is the Electromagnetic Radiation Detector DT-1130. The results of this study indicate that the interference of electromagnetic waves generated by the power cable affects the quality of service computer network.
Body Mass Index Measurement System As a Desktop-Based Nutrition Monitor

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Abstract. Today, having a healthy body is everyone's dream, from the age of the children, teenagers to adulthood. Personal health must be maintained to run all the activities that are being done. One of the factors that affect the health condition is the nutritional status of a person, which sometimes decreases or increases too high. Body mass index is the most commonly used indicator to know the nutritional status of a person. This system uses two sensors, the load cell sensor as a weight gauge and ultrasonic sensors as a measure of height. Processing data using Arduino Uno and the results of data processing from microcontroller issued to the LCD and stored on the PC database as data Body Mass Index which further processed and displayed the person's nutritional status directly. After the test, the system successfully measured the weight and height that will be processed into the value of Body Mass Index. The test of this system is performed by randomly selected respondents, both children and adults. Value of the measurement system is also compared with the value using standard tools for measuring weight and height, and the results have near 100% accuracy.
INTERMEDIATE AND MOTIVATION ANALYSIS OF STUDENTS INFORMATICS ENGINEERING STUDIES PROGRAM (case study: STMIK STIKOM Indonesia)

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Abstract. Bali as a world tourism destination becomes one of the reasons for the proliferation of entrepreneurship to attract tourists who choose a vacation to Bali. Local and foreign tourists have their own interest in local culture and creativity. Thus the greater the competition that occurs among the existing tourism actors. Not only in the tourism industry, creativity-the growing creativity is also needed by the community in competing in the local market in Bali. Creativity is emerging and can be developed by looking at how much the public wants, especially in Bali in becoming an entrepreneur. Entrepreneurship at this time not only based on how much capital a person must have but includes several things such as courage to try, leadership, etc.. STIKI Indonesia is one of the existing IT campuses in Bali which has the concept of entrepreneurship-oriented campus that develops and fosters the soul of Entrepreneurship to the students. This study aims to see how big the interest of students in STMIK STIKOM Indonesia in entering the world of entrepreneurship and see the factors-what makes the students interested to become an Entrepreneur. This study takes a sample of students who have received entrepreneurship courses.

Keywords: entrepreneurship interest, entrepreneurship
Competitiveness of Crude Palm Oil In West Sumatera Province compare to Other Province In Sumatera Island In Domestic Market

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Abstract. There are six provinces that became the largest production center of palm oil in Indonesia but West Sumatera Province is not included in those provinces. In fact, West Sumatera Province, which is still dominated by agriculture sector, and for plantation sub-sector has contributed of 6.57%. The aim of this study is to analyze the competitiveness of CPO export of five provinces located in Sumatera Island in domestic market and compare it with CPO competitiveness in West Sumatera Province with the time series data from 2000 to 2016 using RCA (Revealed Comparative Advantage) Index and identifying the internal and external environment with the palm oil industry by SWOT analysis, are the type of analysis used to maximize the power and opportunities but at the same time can cause weakness and threats. The results show that on average the RCA value produced by RCA > 1, and only South Sumatera and Jambi Province with RCA <1. Every year the analysis of each province shows fluctuating of RCA values that tend to decline, except the value of RCA Provinces West Sumatera showed an increase. One of the reasons of the declining RCA values is that each province has started to focus on the development of CPO downstream products.

Keywords : competitive, CPO, RCA, West Sumatera, SWOT Analysis
Study Of Disparity Economic Growth Factors In Indonesia

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Abstract. Economic growth still continues to be used as an indicator of the success of the economic development of a country or region, but these indicators should be criticized because of high economic growth does not always have a positive impact on increasing of the well being and reducing disparity in income distribution. The purpose of this study is to describe the variables that affect economic growth in a country, then examines the factors that cause disparity in Indonesia's economic growth and policies that should be done by the government against it. The results of this study are some researchers use different variables or indicators in determining economic growth in Indonesia. One of the causes of economic growth disparity are almost all regions in Indonesia, namely capital expenditure as part of the direct spending of local governments whose numbers are not the same because of differences in fiscal capacity each region. Some of the recommendations are given to reduce the disparity of economic growth

Keywords: Disparity, economic growth, region government
Analysis Droughts Index By Standardized Precipitation Index (SPI) And Productivity Of Rain-Fed Rice Fields In Kabupaten Indramayu West Java.

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Abstract. This study attempts to map drought and analyze rice productivity of Rain Fed Rice Fields in Kabupaten Indramayu West Java. Methodology which used in this research is descriptive. Arc GIS 10.9 is used for mapping the SPI and it will be used to analyze rice productivity of Rain-Fed Rice Fields in Kecamatan Indramayu West Java. The result showed that District Indramayu experienced drought began in May to October. The area that is prone to drought in the same period of the last 10 years is Anjatan regions with 33 times scene drought. August experienced scene drought most. District of Indramayu have planting patterns in the 2 times rice planting season and various kind of crops. The growing season of rice starts on November-December-January and the second growing season starts on May-June-July. The Pattern of productivity from the first planting period to the second planting period on average for 10 years showed a decline. This is followed also with dryness index. The increased of productivity only happen in growing season in 2007, 2008, 2011, and 2013 in a period of 10 years. Gantar, Haurgeulis, and Indramayu are district with rain-fed rice fields. The pattern of crop rotation in these area paddy and various kind of crops in each planting season. The productivity from the first planting period to the second planting period on average for 10 years showed a decline. This is followed by the value of the drought index which, during the first planting period, on November-December-January is wet-normal and then became quite dry and very dry during the second planting period May-June-July.

Key Word: Drought, Rice Productivity, Rain-Fed Rice Fields
The Integration between children's rights and Islamic education at Pondok Pesantren

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Abstract. The education of Muslim communities in Indonesia is synonymous with the culture of pesantren. However, over time, pesantren education is claimed to be education that is not child-friendly. This study attempts to examine the integration model between children’s rights and Islamic education implemented in several Pesantren in several regions in Indonesia.
The Extended Model Of Consumers' Technology Acceptance Toward Intention Using The E-Wallet

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Abstract. The technology acceptance for consumers is still an interesting part to be studied until today. Although Technology Acceptance Model (TAM) has been widely referred to by researchers of various sciences, there are always vulnerability gaps that can be studied. Those gaps still have not been able to answer the problem especially related to cognitive and affective factors in understanding consumer behavior. The object used in this research is Go Pay as e-wallet tool that is an electronic money as a technology product which is still relatively new as an alternative of payment instrument. This payment instrument has become part of National Non-Cash Movement by government of Republic of Indonesia in order to socialize e-money as a means of payment in term of Less Cash Society. The modeling of this research has integrated the TAM model by involving affective factors, namely Pleasure, Arousal, and Dominance (PAD) from Mehrabian & Russell's theory (1974) and prior experience variable as a direct effect on perceived usefulness and attitude toward usage, then its influence on adoption intention. The purpose of this research is to develop, to test and to identify research model by integrating TAM model, PAD theory, and prior experience toward the attitude and the intention to use e-wallet. The sample in this study is millenial aged people who have known e-wallet in some areas of East Java with a total sample of 170 respondents. The data were collected using questionnaire using Likert scale with analysis technique using Partial Least Square (PLS). The results showed that the Prior Experience, Perceived Usefulness and Perceived Easy of Use support consumer intention using go pay, meanwhile the Dominance of affection factor does not support it. We expected to provide theoretical and managerial benefits for business people in understanding the acceptance of technology for consumers.

Keyword: Technology Acceptance Model, Pleasure, Arousal, Dominance, Prior Experience
Decision Support System Selection of Tender Winners Project Development Building of STMIK STIKOM Indonesia with TOPSIS Method

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Abstract. STMIK STIKOM Indonesia is a college that has been established since 2008. In the process to build the existing building on STMIK STIKOM Indonesia, should used the contractor that have to meet some criteria such as Letter of Offer, Certificate of Registered as a service provider, Tax Document, Building Design Picture, Implementation schedule, Construction Business License, Company's experience in last 3 years and price, which takes at least 2 months to get a winning contractor whereas the desired building should be built immediately to be used in teaching and learning activities. To produce a decision support system for the selection of the tender winner, this study using the TOPSIS method. TOPSIS is one of the multicriteria decision-making methods that are widely used to process decisions practically. The resulting system can help the decision maker to determine the contractor who won the tender of building projects in STMIK STIKOM Indonesia.

Keywords: decision support system, tender, winner, criteria, topsis
The Role Of Women In The Preservation Of Life Environment On Tosca Santoso’s Fictional Works

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Abstract. This paper aims to describe the role of women in environmental preservation contained on Tosca Santoso’s fictional works, especially novels Sarongge and Ladu. The women in the two novels are portrayed as having a love for the environment and sustaining the environment on the damaged areas, whether the damage caused by human intervention or damage caused by natural disasters. On Sarongge, the woman who plays an important role in sustaining the environment is Karen. Karen educates and invites the community to participate in preserving and improving the environment damaged by human intervention. Furthermore, on Ladu, woman who plays a role in sustaining the environment is Arti. The women on Sarongge and Ladu have a love for the environment, which further encourages them to safeguard, preserve, and improve the environment as it should be. Through feminist literary criticism, this paper describes the love of the environment and the journey and the effort in preserving the damaged environment, whether the damage caused by human intervention or damage caused by natural disaster on Sarongge and Ladu novel by Tosca Santoso.

Keywords: women, environment, preservation
Privacy Related to Cyber Space Activities

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Abstract. Human Rights become an integral part in the various interactions that occur in cyberspace. Interaction between users of the virtual world is a distance interaction which is not necessarily meet in person. This can lead to potential lies or even the use of one's identity. Utilization of the intended identity is, using the identity of others with economic motives or certain crime motives. The principle of "The Right to be Let's Alone" is interesting in this study. Discussing issues that occur in cyberspace related to social phenomena related to privacy done through case studies of several phenomena contained on the internet and mapping the problem and conduct assessments with relevant legislation. Patterns of disturbance to human rights have similarities with one another, which in essence is the disruption of one's comfort in the virtual world. The cause of the above problems arises because, firstly, the lack of understanding that everyone has the right to privacy, the second actually happens the opposite, they are very upholding freedom of expression so as to forget there are other rights (person) is disturbed, and the third is the interest factor. Eg: economic interests, sales-related spam on social media, etc.

Keywords: Privacy, Human Rights, Cyber Law
Stemming and Stopword Removal Impact on Document Recommendation System

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Abstract: Stemming and stopword removal is process that requires a lot of resources in the text preprocessing. The resources used in stemming and stopword removal are directly proportional to the amount of stopword, text, and document. Elimination of stemming and stopwords is one of many option which can reduce process in document based recommendation system. However, the elimination of stemming and stopword removal have an impact on the recommendation system accuracy. This research determine the impact of stemming and stopword removal in document based recommendation system. The system used in this research is recommendation system that recommend thesis supervisor based on similarity student preliminary poposal (UPP) document and lecturers scientific publications. Student preliminary poposal and lecturers scientific publications are document in Bahasa Indonesia. Research begins with analysis to map out the components to be used in each recommendation systems testing. Then proceed with the rearrangement of recommended system components based on testing focus. The research result is precision, recall, and f-measure values comparison between each recommendation system component elimination. Elimination of stemming and stopwords show that the elimination generate precision and f-measure value worse than the system with stemming and stopword removal. However, system with elimination give a better result at recall value. In the future research, recommendation system need some development to improve the precision, recall, and f-measure value with modification in stemming method using Sarawi project and increase the amount of lecturers publication.
Characteristics of Physico-chemical and Functional Properties of starch extracts from Tubers

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Abstract. This research was aimed to determine the physico-chemical and functional properties of tubers starches and find out a suitable application in food products. Starch from tubers that analyzed were sweet cassava, bitter cassava, white sweet potato, red sweet potato, yellow sweet potato, purple sweet potato, cocoyam, yellow potato, red potato and yam bean. The results of the physical analysis of tubers starches were yield (6.90-17.57%), fineness (89.05-92.28%), whiteness (90.05-97.26), the shape of granules starch (oval, round, truncated and polygonal). The results of chemical analysis of tubers starches were water content (6.36-8.70%), ash content (0.20-0.48%), fat content (0.16-0.37%), protein content (0.14-0.16%), starch content (85.7-89.05 %), amylose content (13.28-20.30%), degree of acid (0.97-1.50 ml NaOH 1N/100g) and residual sulphite (31.44-45.61 ppm). The results of the functional properties analysis of tubers starches were water absorption capacity (0.870-1.231), oil absorption capacity (0.820-1.185), Freeze-Thaw Stability (18.85-47.45%), swelling power at 95°C (12.18-24.01 g/g), solubility at 95°C (8.40 to 23.10%), the beginning temperature of gelatinization (32.7-74°C), maximum viscosity (340-3884 BU), setback (30-810 BU) breakdown (70-2420 BU), the stability of pasta (-60-(-635) BU).

Keywords : Tubers, starches, physico-chemical properties, functional properties
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PROFILE OF PERLECAN PROTEIN EXPRESSION
AND TRANSFORMING GROWTH FACTOR ALFADUE
TO HYPERGLYCEMIAAT RATMODEL
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ABSTRACT: Indonesians have diets with carbohydrate as the dominant component which is accompanied by other components covering vegetable-animal proteins, fats, minerals, vitamins, and waters. The carbohydrate-dominated diet risks at raising blood sugar levels. If this condition continues to happen, it will cause diabetes (diabetes mellitus). Today, the population of diabetes in the world, particularly in Indonesia, is increasing. Data of WHO in 2000 mentioned that there were 171,230,000 people with diabetes in the world. Indonesia was in the fourth rank with 8,426,000 diabetes sufferers. The risk of having high sugar level exposure can affect almost all parts of the body, organ systems, tissues, to the cellular level. The exposure to high sugar levels causes disturbances in the joints in the form of changes in the microcellular environment. If it continues to happen, it will lead to joint diseases, for example: Osteoarthritis. In 2030, the number of people with diabetes in Indonesia is expected to increase to 21,257,000 people (WHO, 2000). The risk of osteoarthritis disease increases along with all the financial losses due to the morbidity of the disease and decreased work productivity caused by this disease. Excessive carbohydrate diets will result in the exposure of high sugar levels on the joint surface. It will cause a negative impact of microcellular disorders that increase the risk of joint trauma. It needs to conduct a research about the effect of carbohydrate diets on the perlecan in articular cartilage, where the function of the perlecan to the chondrocytes of articular cartilage is to support the regeneration of articular cartilage by increasing the secretion of anabolic chondrocyte factors so that the progressivity of articular cartilage damage decreases and the risk of Osteoarthritis disease also lowers.

METHODS: six groups of thirty adults male rats were divided into: controle (K0), lower diet 1 (A), lower diet 2 (B), standard diet (C), over diet 1 (D), over diet 2 (E). Controle group were not performed anterior cruciate ligament transection (ACLT), but five groups were performed ACLT to develop osteoarthritis condition for maintaining for two months. Perlecan protein expression, and expression of TGF-α were analyzed using Western Blotting method. Perlecan protein expression was fluctuative stable at group (a) < (b) compare to controle group (K0), but decreasing at grup (e) < (d) < (c) compare to controle group, which opposite to increasing over diets. TGF-α as catabolic factor was fluctuative increasing at group D > group C > E compare to controle group, but sligtly stable at group A and B compare to controle group. Interaction of perlecan and TGF-α as one of others factors which determine cartilage health under hyperglycemia condition. RESULT AND DISCUSSION: This aim as early research as a based to next research for accomplish of pathogenesis of osteoarthritis caused by hyperglycemia. Present study conclude that hyperglycemia was influence to cartilage health due to changing of perlecan protein expression.

Keywords: Hyperglycemia, perlecan protein expression, TGF-α, pathogenesis of osteoarthritis, cartilage health.
Machine Learning Approach for Acute Respiratory Infections (ISPA) Prediction: case study Indonesia

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Abstract. Acute Respiratory Infections (ISPA) is a disease that attacks the breath through the nose, throat including adnexa network like sinuses with symptoms such as fever, sore throat and cough. In Indonesia ISPA ranks first cause of death in infant group and toddlers with percentages 22.30% of all toddler mortality. In this study we conducted a study to predict and diagnose disease in a person whether positive suffering from ISPA or negative in accordance with the symptoms caused by using the machine approach. In this research Support Vector Machine get the best accuracy.
Mobile Based Chatbot Application for HIV/AIDS Counseling Using Artificial Intelligence Markup Language Approach

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Abstract. Acquired Immune Deficiency Syndrome (AIDS) is a fearsome epidemic for modern society as the virus itself shortening the human life expectancy. Based on the report issued by the National committee of sexually transmitted diseases monitoring agency. In the 3rd quarter of 2017, Bali is the 4th most province with major HIV infection in the country. One of the foundations that focuses on HIV/AIDS assistance and prevention in Bali is Spirit Paramacitta Foundation. The problems faced by the Foundation are the limitations of the counselor and the reluctance of the community to consult. With the advancement of the information technologies and to support the goodwill of foundation is the basis of why this research exists. The goal of this research is to build a mobile-based chatbot application using Artificial Intelligence Markup Language (AIML), that will aid the foundation in giving people a reliable HIV/AIDS related information. AIML is used because it can make bots close to human capabilities. The application would be able to emulate the human conversation as good as the usual counseling session. The result of this research is chatbot has been able to help Spirit Paramacitta Foundation in counseling and disseminate information related to HIV/AIDS to the community.
Analysis Of The Characteristics For Potential Consumer Based On Motivation, Personality And Consumer Life Style (Study On East Java Batik Consumer)

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Abstract. In marketing science, in order to win the competition, the important thing to prepare the marketing strategy is mapping consumers through understanding of consumer behaviour and characteristics. Consumers can be segmented on the basis of several things, among others, based on their motivation in purchasing, personality and lifestyle. Motivation shows the process of incurrence of encouragement so that consumers move to buy a product. Personality is defined as psychological traits within ones that determine and reflect how a person responds to his environment. Personality tends to influence one's choice of product. Plummer in Engel (2001: 386), says that lifestyle measures human activity in many ways, how they spend their time (activity), their interest on what is considered (interest), views (either) other people and the basic character that has passed in life (life cycle), income, education, and where they live. This study aims to determine the characteristics of batik consumers in East Java that will be useful in determining the strategy of market segmentation and targeting of batik products. The type of research used is descriptive research, with data collection techniques using questionnaires distributed to batik customers in East Java in four research areas namely Sidoarjo, Bangkalan Madura, Tuban District, Lamongan and Surabaya as batik centers of East Java. Population in this research is all of batik consumer residing in batik industrial center with sampling method is mixed between Purposive sampling and area sampling. While the data analysis technique used in this study is K Means cluster analysis. The result of the research shows that batik respondents of East Java are divided into 4 clusters in which the highest number is cluster 1 which has the following characteristics. This cluster contains respondents who agree on the statement that they are people who have the following characteristics: have the motivation to preserve the nation's culture, high aesthetic value, seeing the batik has a religious / philosophical meaning, functional motifs use as clothing. They also have an open-minded personality, interact with others, be careful about decisions and tend to avoid conflict, have good emotional stability. They have a lifestyle that works in the formal sector, often following social activities, likes to shop for free time, loves artwork, loves Indonesian products, loves cultural heritage, cares about fashion, tries to perform well in public, feels important to love culture, patriotic spirit, wants to improve people economy and preserve culture. So the batik marketer should consider the characteristic for the target market and do the right strategy for handling this cluster.

Keyword: segmentation, targeting, motivation, personality, lifestyle, cluster analysis
Analysis Of Product Innovation And Market Orientation Toward Competitive Advantage (Study On Cereals Products Small And Medium-Sized Enterprises In Jombang Regency)

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Abstract. The condition of competition for cereals products small and medium-sized enterprises (SMEs) in Jombang Regency is increasingly tight. Every cereals products SMEs must be able to survive and create competitiveness. One of the important things that need to be done and noticed by every cereals products SMEs is maintaining existing customers as well as looking for new potential customers. The purpose of this study is to analyze the extent to which product innovation and market orientation affect the competitive advantage in cereals products SMEs in Jombang Regency. The population selected in this study is cereals products SMEs in Jombang Regency. Sample determination using purposive sampling as a part of non-probability sampling. The sample size is 120 cereals products SMEs in Jombang Regency. Data collection using questionnaire with scale answer 1 (Strongly Disagree) up to 10 (Strongly Agree). Data were analyzed multiple linear regression through SPSS program. The results showed that multiple linear regression model can be used to predict the effect of product innovation and market orientation to the competitive advantage of cereals products SMEs in Jombang Regency. The conclusion is product innovation and market orientation have a positive and significant impact on competitive advantage in cereals products SMEs in Jombang Regency.

Keywords: Product Innovation, Market Orientation and Competitive Advantage
Hyperspectral Image Remote Sensing Classification Using RotBoost

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Abstract. In machine learning, the hyperspectral data classification has several challenges, the large of data dimension is one of it. With Ensemble Learning, we can improve the performance of hyperspectral data classification. One of Ensemble Learning methods is RotBoost which is a combination of Rotation Forest and Adaboost methods. In this paper, the RotBoost performance is evaluated by measuring its accuracy. In addition, this paper also investigates the effect of base classifier and Boosting iterations on accuracy. Experimental results on AVIRIS data, show that RotBoost produces better accuracy than Rotation Forest (best is 88% accuracy). The parameter values of S and T also have little effect on RotBoost accuracy.
The Determinant of Organizational Citizenship Behavior and Examining the Mediating Roles of Job Involvement: Survey on Lecturers of Higher Education of The Ministry of Industry In Indonesia

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Abstract. This study investigates whether talent management, personality and grit affect the organizational Citizenship Behavior and if so, whether the effect is mediated by job involvement. Using a sample of 217 lecturers of Higher Education of The Ministry of Industry In Indonesia under condition 2018, this study revealed that the talent management, personality and grit are positively related to the organizational citizenship behavior. This study proved the association between the talent management and personality to organizational citizenship behaviour is partially mediated by job involvement. However, this study found the job involvement does not mediate at all the relationship between Grit and Organizational Citizenship Behavior. This empirical finding reinforces previous studies about the relationship between talent management and personality to organizational citizenship behavior. The extension of the theoretical concepts constructed in this study, to prove the association between the grit and organizational citizenship behavior mediated by job involvement, can not be proven in this study. Although some propositions suggest a link between grit, job involvement and organizational citizenship behavior, this study proved that the causal relationship between these variables does not exist. Finally, this finding offers empirical evidence of the importance of job involvement on the relationship between talent management and personality to organizational citizenship behavior. It indicates that the presence of talent management and the potential of personality do not automatically increase the level of organizational citizenship behaviour of lecturers, if there is no job involvement inside it. Furthermore, this research recommends strategy of increasing the level of organizational citizenship behavior in Higher Education by increasing the job involvement.

Keyword: Organizational Citizenship Behavior, Job Involvement, Lecturers of Higher Education

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Freight transport performance in West Sumatera

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\textbf{Abstract.} Most of economic regional developments in Indonesia depend on freight transport system, efficient freight transport system would produce low cost of transport, it will affect on the price of good and the market. Freight transport in Indonesia is usually served by trucks, these mode has been identified as the transport mode that operate with high cost and inefficient. This paper shows the result of research on freight transport in West Sumatra that operated in Padang. This result is based from direct interview on 100 truck drivers in Padang. It shows that majority the trucks serve freight transportation between cities in West Sumatera and other Province in Sumatera island, most of goods that transported from Padang are construction materials. During deliver the goods, they require time about 1-2 days and always stop several times for break and eat. This is because the drivers drive the truck alone. Most of freight loading and unloading activities were conducted directly in the warehouse/factory. The total operational cost spends during delivery to other province in Sumatera Island between Rp 1 millions - Rp 2 millions, there are illegal retribution for about 1-5\% of operational cost, these retributions are conducted by person or organization. The Regulations that impede the performance of freight transport are prohibition of truck enter the city in the morning and afternoon at peak hours.
Seller’s Rights and Obligations of Marketplace in Indonesia

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Abstract. Business competition in the current era of globalization requires business people to innovate, not only regarding production but also in marketing. Marketing media which currently a trend of society is through a digital store known as a marketplace. Marketing through the marketplace requires businesses to comply with the provisions applicable to the marketplace. Those provisions are rights and obligations between parties involved in buying and selling activities within each marketplace. This research focuses on the rights and obligations of sellers as goods or services provider in the marketplace transaction. Each marketplace has different provisions regarding the rights and obligations of the seller. Several marketplaces sampled in this research were determined by purposive sampling method. Implementation of the rights and obligations of the sellers is analyzed using descriptive study by considering customer complaints that violate the provisions of the marketplace where the seller is running its business.
The Need Of Mathematical Literacy Competency For Informatics Graduates
Preliminary Study At Stmik Stikom Indonesia

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Abstract. This study aimed to determine the category of needs of competency of mathematical literacy for graduates of informatics bachelor's degree and analyzing the suitability of the material taught on the group of mathematics subject at STMIK STIKOM Indonesia with the requirement of graduate mathematical literacy competence. The research design that has been used was mixed methods research with concurrent strategy (concurrent mixed methods). This method is chosen to streamline research time, as well as to produce comprehensive data (qualitative and quantitative data) at almost on the same time. The data obtained were analyzed descriptive-quantitatively. The mathematical aspects of the mathematical literacy competencies were evaluated consist of eight dimensions, namely (1) the ability to think and use logical reason in mathematics, (2) argue mathematics, (3) mathematical communication, (4) mathematical modeling, (5) propose and solve mathematical problems, (6) representations, (7) symbols, and (8) tools and technologies. The results shown that the competence of the taught mathematical literacy is "sufficient required" by graduates. In addition, there is an indication of the lack of conformity between the learning outcome which was formulated in the curriculum and the real competencies which were required by graduates.
Empowerment Of The Smallholders' Cooperative For Palm Oil Plantation Replanting In Dharmasraya District West Sumatera Province, Indonesia

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Abstract. In West Sumatra, cooperatives of smallholders palm oil plantation (PIR-Trans scheme) generally no longer performs its function as a social economic institution. Therefore, it needs a strategy to empower the cooperatives (KUD) in replanting period. The main objective of this study was to identify and analyze the management of KUD and find a strategy for re-functioning KUD management in order to realize the goal of sustainable palm oil plantation production. The research was conducted in Dharmasraya District. Research method is qualitative descriptive. The study found that KUD has not been able to function as a farmer's social economic institution in replanting because; a). The cooperatives are not transparent and accountable. b). The cooperative does not yet have data and document about their development planing and monitoring for the implementation of the strategic plan, c) Supervision, control and social responsibility have not been fully implemented. The strategy to solve the problems are: (a) The cooperative must have a financial plan for replanting; (b) The cooperative should establish an institutional guidance, develop operating standards for maintaining during the unproductive and productive period (c) The cooperative need assistance to assure markets and supplies, bargain, purchase inputs production, maintain and harvest the plantation.
Inventory Control Using ABC and Min-Max Analysis On Retail Management Information System

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Abstract. Determination of reorder point aims to meet the safety stock. This is a central parameter of inventory control. This study aims to find reorder point based on goods classification and safety stock. This approach is implemented in retail information systems that have been running. The information system has about 15,000 active items with the number of sales transactions around 1,100 per day. The problem in determining the reorder point is the unavailability of the safety stock reference. Lack of safety stock information triggered the ordering goods error. This error causes over stock. It can increase the potential of expired goods. In this study the researcher classifies the goods and determines the amount of safe stock to control the inventory. We used ABC analysis method for goods classification. It divides the group of goods into A, B, and C. The amount of safe stock is determined based on the goods sales history using Min Max Analysis method. Classification result is used to determine the limits on the inventory of allowed items to be ordered. Limitation safety stock amount refers to the limits from the min max method result. While, testing is done by comparing cost before and after implementation of this method.
The Effect Of Cause Brand Fit On Brand Credibility Through Altruistic Attribution Dimodered By Altruistic Value

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Abstract. Increasingly tight product competition encourages business people to be more proactive and innovative (Kotler and Keller, 2012) Competitive differentiation strategies become one of the important strategies to retain customers based on attributes and quality. Differentiation by adding emotional value (eg emotional value) eg involving customers whose social activities is a strategy that can strengthen the position of products in the market (Kotler and Keller, 2009: 66). CSR (Corporate Social Responsibility) is a strategy that can be defined as a form of corporate awareness in the form of social programs by setting aside some profit (profits) for the benefit of people and the planet (planet) in a sustainable manner based on procedure (procedure) (Groza et al., 2011). Polonski and Speed (2001) explain that CrM is a donation made by a company to social issues (or cause) based on the amount of income received by the company from the sale of products. To achieve the success of CrM the company should adapt the brand to the appropriate social activities so that customers can assess the suitability between the brand and the created social event (Higgins, 1986; Shell, 1989; Larson, 1994; Speed and Thompson, 2000) Relevance between cause brand fit will indirectly affect attribution altruistic (Zdravkovic, 2010) to brand credibility (Rifon, 2004) have a significant effect on brand credibility (Rifon, 2004). and altruistic value plays a role to moderate the effect of cause brand fit on brand credibility (Alcaniz et al., 2009). This study aims to examine the effect of cause brand fit on brand credibility through altruistic attribution and moderated by altruistic value. The research was conducted on aqua consumers in East Java by using purposive sampling technique. To test the hypothesis used Moderating Regression Analysis (MRA) with the program SPSS ver 23. The result of research shows that the cause of brand fit has significant effect on brand credibility, altruistic attribution has significant effect on brand credibility, altruistic value has an effect on brand credibility but does not moderate the relationship between brand fit and brand credibility.

Keyword: cause brand fit, altruistic value, altruistic attribution, brand credibility
Influence of Predominant Wind Angle Direction to CO Concentration in The Surrounding Area of Cement Industry

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Abstract. This study aims to determine the effect of predominant wind angle on the concentration of CO received by receptors (receptor position) due to the cement industry. This research was conducted in the surrounding area of the cement industry in Padang City. The sampling of CO concentration was undertaken at 3 sampling points, that is Komplek Unand Blok D, Padang Besi Road, and Batu Gadang Street, that is representing of the receptor positions (α), ie 0°, 45° and 90°. In addition, sampling was also conducted at background point in Bukit Sungkai, Batu Busuk, Padang City. Sampling CO concentration at 4 sampling points using an impinger. The sampling of each location was done every hour for 24 hours of measurement (24 data per sampling point), with a total of 96 data. The results showed CO concentrations range between 124.502 and 287.292 μg/Nm3. The highest concentration was found at α 0° (Komplek Unand Blok D) while the lowest concentration was located at α 90° (Batu Gadang Street). Meanwhile, CO concentrations in the background point (Bukit Sungkai, Batu Rukuk) is relatively lower than the three sampling point above, ranging from 44.22 μg/Nm3 up to 74.13 μg/Nm3. The decrease in CO concentration on wind coming angle occurred from 0° to 45° by 13.79% and α 0° to 90° by 25.38%. This decrease happened by shifting α from 0° to 90°. This indicated that there is an effect of predominant wind angle direction towards CO concentration received by the receptor

Keywords: predominant wind angle direction, cement industry, receptor position, the decrease of CO concentration, background concentration
Action aggressiveness and firm performance with moderator repertoire competition: psychological perspective of top management team (TMT)

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Abstract. This study aims to explore strategies for competitive action conducted over time with a dynamic process model of the competitive interaction between firms with a top management team (TMT) psychological perspective. The data analysis was based on a sample of 124 respondents from the top management team (TMT) of 3 and 4 star hotels in Surabaya and then analyzed with moderator regression analysis (MRA) approach. Data collection using questionnaire The analysis results show that TMT aggressiveness action has a positive impact on firm performance, while repertoire competition weakens the relationship between aggressiveness action and firm performance. Based on the results of the study, then on the competitive conditions between companies, top management will perform aggressive actions in response to actions performed by major competitors. Such actions can improve the performance of the company, but the various forms of competition performed by the major competitors, resulting in weakening the relationship of aggressive action with the performance of the company. This study contributes to the competitive dynamics especially in the top management team’s psychological perspective (TMT) by examining the TMT response on the company’s competitive relationship with its competitors, thus impacting on competitive behaviour. Keyword: action aggressiveness, firm performance, repertoire competition
Evaluating efficacy of tempeh extract supplementation on oxidative stress biomarkers and cytokines among *Rattus norvegicus* infected by *Mycobacterium tuberculosis*

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Abstract. Background: Tempeh is a soybean-based food product originating from Indonesia which has the potential as an affordable nutritional support to accelerate recovery process of tuberculosis (TB). Objective: The purpose of this study was to evaluate the effect of ethanolic tempeh extract supplementation on the biomarkers of oxidative stress and proinflammatory cytokines in male rats (*Rattus norvegicus*) infected by *Mycobacterium tuberculosis*. Method: The method was an experimental laboratory randomized posttest-controlled design. Thirty-five male rats were divided randomly into five groups and infected by *Mycobacterium tuberculosis* strain H37RV 50μl intratracheally. The first, second and third groups received the extract tempeh supplement at concentrations of 200, 400 and 800 mg/kg body weight respectively. The supplementation was performed on day 30 after infection procedure and administered orally for 14 days. The fourth group was a control group (CMC-NA), and the rats in the fifth group were to be sacrificed to confirm the presence of TB using histopathology analyses. Total antioxidant capacity (TAC) and Malondialdehyde (MDA) levels were assessed using colorimetric method while C-reactive protein (CRP), tumor necrosis factor alpha (TNF α), interferon gamma (INF γ), interleukin (IL)-2, IL-6, and IL-10 were measured by Elisa method. Result: There were no significant differences in the levels of MDA, CRP, TNF α, IL-2, IL-6, IL-10 at all concentrations in comparison with control. Tempeh extract provision increased levels of TAC at 200 (*p* = 0.011), 400 (*p* = 0.027), 800 (*p* = 0.029) kg/ body weight concentrations without dose-dependent characteristic compared to control. At the concentration of 800 mg/kg body weight supplementation, the level of INF γ was lower than control (*p* = 0.0047). Conclusion: Supplementation of ethanolic tempeh extract has not shown positive effect and described weak efficacy on oxidative stress biomarkers and proinflammatory cytokines in the animal model of tuberculosis.

Keywords: Tempeh extract, tuberculosis, oxidative stress, cytokines, supplementation
Agropolitan Sustainability Status Based Chicken Laying In District Lima Puluh Kota

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Abstract. The Government of Lima Puluh Kota has established Mungka subdistrict as Agropolitan area for laying chicken, however its development looks sluggish due to some obstacles. This study aims to examine the sustainability of the area development using multidimensional scaling method, viewed from 5 dimensions of sustainability namely economic, ecology, social culture, infrastructure and technology, and institutional dimension. The analysis was also supported by leverage and montecarlo analysis to determine the attributes that influence the sustainability of the region. The analysis shows that the development of agropolitan area of laying chicken does not have non significant impact on rural development in Lima Puluh Kota. This is indicated through the low ecological dimension, although the economic dimension shows better results. Social and cultural dimensions are good, but the dimensions of infrastructure and technology still lack support for the sustainability of the region. The institutional dimension shows poor results. Attributes that affect the sustainability of the area that must be addressed are the lack of availability of upstream-to-downstream agribusiness facilities and infrastructure such as raw materials, agricultural machinery, marketing and road conditions, which are major obstacles in the process of regional development.

Keywords: Agropolitan, Sustainability, ecology, economy, social culture, technology,
Analysis Of Linear Regression On Used Car Sales In Indonesia

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Abstract – There are few things that drive the business of selling used cars in Indonesia continues to increase, namely new car prices are higher. So the prospective buyers the ability to purchase power not too strong, buying a used car is one option. Linear regression is a statistical analysis of several variables relationship model according to the form of the relationship of linear equations explicitly. The purpose of this research is to apply the method of Linear Regression on selling used car Toyota Innova, and Honda CRV in Indonesia, especially in the cities of Jakarta, Bandung, Surabaya, and Semarang. Used car sales prices are influenced by the age factor car, car mileage, color car, car transmission, and car type. The results showed, an analysis of age factor car sharing and car has a mileage rating of 62.6% level of confidence. By adding some other variable that is the color of the car, the transmission and the cities of car sales has a value of more than 75% accuracy.

Keywords: Linear Regression, Used Car Sales
Tourism and Economic Growth Nexus in Indonesia: A Toda-Yamamoto Approach to Granger Causality Test

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Abstract: This study investigates the relationship between economic growth and tourism in Indonesia for the period of 1995 to 2015. This study uses Toda-Yamamoto causality test along with its prerequisite test required. The results show that tourism causes a change of economic growth and support the uni-directional causal relationship. This suggests that the results support the tourism can encourage economic growth. It is also in line with the tourism-led growth hypothesis. As a consequence, the government should allocate more resources on the development of the tourism industry, specifically by supporting infrastructure development and promoting tourism in Indonesia through more advertisements, remove the visa restrictions, and discount program for tourist groups. Thus, an expansive government policy is required to increase the international demand for Indonesian tourism and to stimulate the development either of private or public tourism infrastructure.

Keywords: Economic Growth; Tourism Expenditures; Tourism-led Growth; Toda-Yamamoto Causality
JEL Classification: C22; E01; F43; L83; O53
Influence of Emotional Branding and Trust in a Brand against its impact on satisfaction and loyalty of users of features Goo Food on the Go Application Jek di Surabaya

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Abstract. The purpose of this study to determine the effect of emotional branding (X1) and trust in a brand (X2) to the satisfaction (Z) and its impact on user loyalty of GO-FOOD service feature on the GO-JEK application at Surabaya University Wijaya Kusuma Surabaya students (Y). The sample in this research were 130 respondents. The sampling technique used purposive sampling, with the criteria: the respondent has the GO-JEK application and the respondents ever use the GO-FOOD service feature on the GO-JEK application. The analysis technique used to test the hypothesis is Structural Equation Modeling (SEM). Hypothesis test results show that, emotional branding (X1) not significant impact on user satisfaction GO-FOOD service feature on the GO-JEK application at Surabaya University the first hypothesis (H1) is not supported. Trust in a brand (X2) significantly affects user satisfaction GO-FOOD service feature on the GO-JEK application at Surabaya University Wijaya Kusuma Surabaya students (Z). Satisfaction significant effect on user loyalty GO-FOOD service feature on the GO-JEK application at Surabaya University Wijaya Kusuma Surabaya students (Y), Thus, in the test of the fourth hypothesis (H4) only partially supported.

Keywords: Emotional Branding, Trust in a Brand, User Satisfaction, User Loyalty.
Palm Kernel Cake Fermented with *Lentinus edodes* in the Diet of Quails

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**Abstract. Background and Objective:** Palm kernel cake (PKC) represents a viable alternative poultry feed component after being fermented by the lignocellulolytic fungi, *Lentinus edodes* (produces ligninase and cellulase), which increases PKC nutrient levels and quality. The present study was conducted to evaluate the effect of utilizing PKC fermented by *L. edodes* (PKCF) in quail diets on egg production performance. **Methodology:** The present study used a completely randomized design (CRD) with five dietary treatment groups (0, 10, 15, 20 and 25% PKCF) and four replicates per treatment (10 quails per replicates). Two hundred 12 week-old quails were included in the study. Diets were isonitrogenous (20% crude protein) and isocaloric (2800 kcal kg⁻¹ diet). The measured parameters were feed consumption, hen day egg production, egg weight, egg mass, feed conversion, and egg cholesterol content. **Results:** Addition of dietary PKCF levels up to 25% resulted in good feed consumption, hen-day egg production, egg weight, egg mass, feed conversion, and egg cholesterol content but decreased (p<0.01) egg cholesterol content. **Conclusion:** Up to 25% PKCF in the diet resulted in good production performance while reducing the cholesterol content of quail egg, indicating that this feed supplement should be considered for industrial use.

**Key word:** egg cholesterol, fermentation, *Lentinus edodes*, palm kernel cake, quail production performance
Trading House Agency As Alternative Potential Marketing Of Agricultural Products In Sidoarjo District East Java

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Abstract. The ASEAN Economic Community (MEA) is a free market in the ASEAN region that will impact on economic performance in the territory of Indonesia. The impact can be market opportunities and negative effects of lower competitiveness. Farmers are farmers with their products. Farmers have to produce with low prices and good quality, then the solution existence of the Trading house is expected. In Sidoarjo there is a Trading house to provide efficient and effective marketing solutions like farmers, but how the performance of the trading house, then in this study readiness Trading house in helping farmers, local governments as regulators.

Keyword: Trading house, Agriculture, Marketing, MEA
Abstract. Objective. Leprosy is a contagious disease of chronic infection of the skin caused by Mycobacterium leprae which causes complex problems. Based on West Sumatera Provincial Health Office data, Padang Pariaman Regency is the biggest contributor of leprosy in West Sumatera, ie 4.2% in 2015 and 8.3% in 2016. This study aims to determine the vulnerability of leprosy risk factors based on Geographic Information System in Padang Pariaman District. Method: Case-control study is conducted in 32 leprosy patients and 32 controls are selected based on matching the age and gender adjusted to the cases. Using non probability sampling method with total sampling technique. Data are analyzed using Univariate, Bivariate (Mac Nemar), Multivariate (Logistic) and Spatial. Results: The result of bivariate showed that there is a significant relationship between history contact OR=5.6 (95% CI 1.6-19.3), knowledge level OR=9,0(95%CI 2.0-38.7), personal hygiene OR = 7.0(95%CI 1.5-30.8) and occupancy density OR = 13.0(95%CI 1.7-99.3) with the incidence of leprosy. The result of multivariate analysis shows that the knowledge level is the most dominant factor contributing to the incidence of leprosy. Spatially the area vulnerable to leprosy is Pauh Kambar in Padang Pariaman District. Conclusion: The dominant risk factors that contribute to the incidence of leprosy in Padang Pariaman District is the level of knowledge. It is suggested that health workers should increase the extension of personal hygiene and education about leprosy to the community, how to spread and prevention to the community gradually and sustainably especially in the area of Pauh Kambar.

Keywords: Leprosy, personal hygiene, occupancy density, contact history, knowledge level, GIS
Test Formulation Of Liquid Organic Fertilizer On Growth And Result Of Soybean Plants

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Abstract. The objective of this research is to know the result of Liquid Organic Fertilizer (LOF) formulation on growth and yield of soybean crop. The hypothesis of this research is; (1) Suspected different LOF formulations provide different growth and yields of soybean crops; (2) suspected formulations F2 (LOF water hyacinth + banana cobs) will have a better effect on the growth of soybean crop than other formulation; (3) suspected formulations F7 (LOF water hyacinth + fish bone + chicken egg shell) will have a better effect on soybean crop yield than other formulations. The research was conducted by using Randomized Block Group Design with the following treatment: F = LOF Formulation; F0: without LOF (Control), F1: LOF water hyacinth (BioEcgon), F2 = BioEcgon + banana hump, F3 = BioEcgon + bone fish, F4 = BioEcgon + chicken egg shell, F5 = BioEcgon + banana hump + fish bone, F6 = BioEcgon + banana hump + chicken egg shell, F7 = BioEcgon + fish bone + chicken egg shell, and F8 = BioEcgon + banana hump + fish bone + chicken egg shell. From each treatment repeated 3 times, so it takes 27 plots of experiments (9x3 = 27) with a plot / plot of 18 m² (3x6). The parameters observed are plant height, number of leaves and dry weight of soybean seeds / ha. The data obtained were analyzed by Analysis of Variants (Anova), if there is a real difference followed by 5% BNT test. LOF application with various formulations is expected to improve the growth of soybean crops, so it can increase the yield of soy / ha, in the long term aims to increase land productivity and can prevent land degradation, as well as one solution in overcoming the problem of organic waste.

Keywords: Formulation, LOF, and Soybean Results
Assessment of the level and key factors affecting sustainable development of integrated small-scale farming agriculture area: The case of highland Solok District, West Sumatra.

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Abstract. The sustainable development of small-scale farming is very much determined by how this farming develop into integrated agriculture area. The development of the integrated area of small-scale farming are related to the provision of agriculture extension support, social capital development, economic of scale and distribution of the products. This study attempted to assess the level and key factors affecting the development of small-scale farming at the highland of Solok District. A mix research method were applied: in-depth interview, survey, and focus group discussion (FGD). The results of the research indicated the need to organized small-scale farming into an integrated agriculture production area, the development of social capital, integrated agriculture extension services, development of synergy among various actors/stakeholders, provision of support services by the relevant public agencies.

Keywords: sustainable development; integrated small-farming development; agriculture extension; social capital; agricultural public policies.
Chemical Characteristic of Sweet Passion Fruit (Passiflora ligularis Juss) Seed from Indonesia Based on Maturity Level

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Abstract. Sweet passion fruit (Passiflora ligularis Juss) cv. Gumanti is superior varieties of sweet passion fruit that is widely cultivated in Solok Regency of West Sumatra Province, Indonesia. This fruit can consume directly as fresh fruit and can be processed into juice that gave a by-product such as the seeds. The purpose of this research is to analyze the chemical properties of seed of cv. Gumanti based on maturity level so that the nutritional content is known. Chemical analyses were performed such as proximate analysis, antioxidant activity, total phenol, and fatty acid content. Proximate analysis showed that the seeds of passion fruit are rich in oil content (20.74 ± 0.34%) and carbohydrates (59.94 ± 1.34%), but didn't give significant difference based on maturity level (P>0.05). Furthermore, the result showed strong antioxidant activity (IC50: 50-100 ppm), where there was a significant based on maturity level (P < 0.05). Total phenol analysis showed a linear relationship with antioxidant activity. Fatty acid analysis showed that linoleic acid, linoleic, and stearic acid were a type of acid that is commonly found in fatty acid and showed characteristic similar with the seeds of acid passion fruit. Thus, the seeds of sweet passion fruit also have potential as a raw in the food industries, chemical, and pharmacy such as the seeds of acid passion fruit that have been reported by previous researchers.

Keyword: proximate analysis, antioxidant, fatty acid, total phenol.
Reduction of CO₂ Emissions from Refinery Industry by Using Limestone for Production of Precipitated Calcium Carbonate (PCC)

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Abstract. A research innovation has been prepared in the process of reducing of CO₂ emissions by using of limestone for the formation of Precipitated Calcium Carbonate (PCC) by carbonation method and ammonium chloride as an additive. PCC was obtained by utilizing of CO₂ exhaust from the refinery industry of Pertamina. The PCC formation reaction was performed at room temperature and atmospheric environment with CO₂ gas flow rate of 0.8 L / min simultaneously. The reaction product was very fine white powders. XRD data obtained information that it has been formed crystals PCC calcite type with crystal size in the range 90 - 98 nm. The SEM images analysis shown that the morphology of PCC products were cubic-shaped with a particle size of about 8-15 μm. An interesting feature of this research is that by using this process, we can reduce the amount of CO₂ emissions by up to 70%.

Keywords: PCC, carbonation, CO₂ emission, simultaneous process
Problems of Palm Oil Farmers and Documentation of Palm Oil Lexicons in West Sumatra, Indonesia

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Abstract. There are many serious problems of palm oil business to solve by the government instead of the black campaign from numerous international NGO on palm oil issues as an environmental parasites. This article just focus on farmers problems, palm oil company problems, media of education, lexicons documentation, and and palm oil museum in West Sumatra. The conflicts between palm companies and farmers or society around the plantation in West Sumatra are also explored. Data were collected through interviews, existing records, focus group on discussion, meetings and social networks. A thematic content analysis was used to investigate. The results proved there are still many issues that need to be resolved since from land clearing, seeding, planting, treatment, spraying, fertilizing, harvesting, and marketing. The farmers for example do not understand the ideal way how to plant the palm oil. In terms of the type of palm oil seeds obtained as well. The farmers have difficulties in finding the good palm seed. Besides no adequate transportation particularly in remote area, the farmers often use the unlabelled palm seed. The farmers not also have lack of human resources but also lack the knowledge on palm oil. The farmers mostly do not use the protector like the mask and the hand gloves in spraying the palm. Besides the cost of fertilizing and expensive harvesting, the fertilizer subsidy is often manipulated by the supplier and distributor. On the other side, not just there is no clear regulation on managing the land of palm plantation, but also lack of surveillance from the government. There is also no irrigation for the watered land available. Some farmers also use the protected lands to plant their palm. The farmers plant the palm if an unoccupied land is available. Besides education for the farmers, documentation of palm oil lexicons and palm oil museum are needed.

Keywords: Palm Oil, Problems of Farmers, Palm Oil Lexicons, Company, West Sumatra
Optical Properties of Oil Palm Fresh Fruits Bunch (FFB) for Optimum Harvest-Window Prediction

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Abstract. Oil palm is among the strategic commodity of Indonesian agroindustry. The oil produced from the fresh fruits bunch through several steps of extraction process. The oil palm industry contributes to the advancement of country’s economy, development and human resource. It provides job for more than 50 million Indonesian, directly or through secondary activities. Today, the industry needs to improved its efficiency, to address market competition and global demand. In the upstream region, oil palm plantation still practices outdated method, particularly harvest. Improper harvest decision contributes to national production loss of 15%. This study aimed to identify the optimum time for harvesting the oil palm FFB. When harvested on prime and optimum ripe, the FFB can yield 25-28% of oil extraction rate (OER), much higher than the current 18-20% nation-wide OER. While the FFB is commonly harvest according to its physical properties (fruits’ colour and the number of loose fruits), the visual based observation is subjective and prone to influence by the mental state of the labour. Here, device which can identify the FFB true ripeness is needed to perform proper harvest when the FFB truly obtained its optimum ripe. Our previous studies suggest that, upon grading, the FFB quality can be identified by its optical properties. The same approach opens the possibility to be used when evaluating the FFB for harvest. In this study, the FFB colour model was established to identify the optimum harvest window of FFB under observation.

Keywords: optimum-yield, colour model, agroindustry, efficacy, oil extraction rate
Rapid Non-destructive evaluation of West Sumatran Indigenous Rice Quality

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Abstract. Determination of indices of indigenous west Sumatran rice varieties were done in order to evaluate its moisture contents (MC) rapidly by means of non-destructive evaluation. The MC are essential for evaluating the rice true price as well as its quality upon consumption. The MC also dictate method of post-harvest handling of the product. The grains MC strongly correlated to the its physical properties upon storage. Higher MC will reduce the product self-life, increase the chance of damage, and further accelerate the degradation of starch into sugar, thus increase the health-related risk upon consumption. In general, 12-14% MC are ideal for storing the rice. The objective of this study is to identify MC of indigenous rice from west Sumatra, Indonesia. The evaluation was rapidly performed by means of non-destructive evaluation using 1000-25000nm NIR spectral assessment. The grains samples were put into special modified cuvette, and its infrared radiation footprint was measured using spectroscopic techniques that measure the absorption of radiation, as a function of frequency or wavelength. The sample absorption of energy (i.e., photons), from the radiating source was determined as a function of frequency, and employed as analytical chemistry tool to determine the presence of moisture, and quantify the amount of the moisture present. The absorption spectroscopy employed to studies the molecular and atomic physics of H₂O in the sample. A model was established to correlate the spectral property of samples’, and its MC, as measured by primary method (i.e. oven method). The model was setup by means of Principal Component Analysis (PCA) and Partial Least Square (PLS) method. The model accuracy determined through RMSEC, RMSEP, and bias. The results suggest that the MC can rapidly identified with acceptable accuracy using this method.

Keywords: moisture content, quality indices, NIR, absorption, PCA-PLS Model.
Environmental issues and oil resource depletion have urged government and car manufacturers to reduce production of combustion engine vehicle and at same time give more attention to hybrid and electric vehicle (HEV/EV). Fortunately, we have seen these future cars on the rood, for example, Nissan Leaf, Chevrolet Volt and Toyota Auris hybrid. To attract the buyers, these cars must have better efficient in term of equivalent liter per km. One way to achieve this goal, brake blending is incorporated to replace conventional brake system. This paper aims to investigate and compare the performance of such braking system using road test data. Recovered energy and driver comfort are two main aspect analyzed in aforementioned cars. Based on investigation detailed braking data on many driving conditions, it was found that different manufacturers employ different control strategies and have unique feature, respectively. Also, brake blending could cause driver confusion due to different pedal feeling experienced as in the combustion engine car.
The influence of giving Ocimum sanctum L.’s leaf extract to Bactericidal of Escherichia coli with Dilution Method

Hanifullah Ardan Mulyarajasa, Sahadewa Sukma

Abstract. Diarrhea is an endemic in Indonesia. According to data from Health of Ministry of the Republic of Indonesia 2015, in 2015 there were 18 times outbreaks scattered in 11 provinces, 18 cities with case fatality rate up to 2.47%. The purpose of this research is to know the influence of giving Ocimum sanctum L.’s leaf extract to the bactericidal of Escherichia coli with dilution method. This research is analytic experimental with post hoc control design. The population of this research is Escherichia coli as much as 24 samples that divided into 6 groups. Research result, there aren’t effect of giving Ocimum sanctum L.’s leaf at concentrations of 20% and 40% to the bactericidal of Escherichia coli while at concentrations of 60% and 80% there are effect to bactericidal of Escherichia coli with dilution method. For the next research, researcher hopes to the next researcher to use concentrations 60% - 100% in order to know concentration of how much extract Ocimum sanctum L.’s leaf has maximal effect to kill Escherichia coli with dilution method.

Keywords : Ocimum sanctum L’s leaf extract, Escherichia coli, Dilution Method
The application of duolingo in teaching English for young learners

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Abstract. The aim of the study is to describe the application of duolingo in teaching English for young learners. Duolingo is a free application which appeals similar to games for smartphones, this application not only can be used on smartphone but also on tablet and computer. During the learning process using duolingo, the four skills, reading, writing, listening and speaking are present through elaboration of questions, affirmative and negative sentences, small texts and excerpts to be heard and transcribed, and it is also possible to the students to record their own pronunciation to assess their oral performance. This application contributes to increase the vocabulary, to improve pronunciation and in simple grammatical structures. By using duolingo, students enjoy the learning process and managed to build knowledge and gain familiarity with the English language. The learning process includes grouping, explaining, exercising and evaluating.
Implementation of Digital Marketing Strategy Through Social Media For Young Entrepreneur to Facing the MEA (ASEAN Economic Community)

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Abstract. This research is conducted to know the implementation of digital marketing strategy through social media for young entrepreneurs to face MEA. The sample is young entrepreneurs who used social media for their product market in Surabaya. The sample is young entrepreneurs who used social media for their product market that has more than 50,000 followers, a company engaged in garment industry, and between 17-25 years old. Then, the samples chosen for this research were @jancok.id, @giyomi, and @dgirlstoresby. And with a qualitative analysis approach. From these results indicate that young entrepreneurs have been doing digital marketing strategies in business. There are various strategies about digital marketing but in this paper will be discussed one effective and targeted method that is Basic Triangle Formula consisting of product selection strategy, product conversion strategy, and marketing formula. By using basic triangle formula method then marketing in digital world can be more easily controlled by young entrepreneur. With young entrepreneur and productive people with integrity, intelligence, innovative, and creative character, Indonesia will be ready to increase the capability to compete with other ASEAN member countries.
ABSTRACT. Nurses’ professional self-concept at the inpatient rooms of Dr. M. Djamil Hospital, Padang shows results that not yet optimal, as there are still nurses who have an inferior leadership or unfavorable attitudes. This condition can give negative effects on work productivity of nursing associates in the inpatient rooms. The purpose of this research was to determine the relationship between professional self-concept of nurses and the work productivity of nursing associates at Dr. M. Djamil Hospital, Padang in 2018. The research design was analytical descriptive with cross-sectional study approach. The samples were 168 nursing associates at the hospital, and the sampling was based on proportional random sampling. Based on the results of this research, the good work productivity of nursing associates was 71%, and the good professional self-concept of nurses was 78%. There was a relationship between nurses’ self-concept professional and work productivity of nursing associates at Dr. M. Djamil Hospital, Padang. The researchers suggest that service institutions should improve nurses’ professional self-concept by managing training activities on managerial and caring.

Kata kunci : Professional Self-Concept, Work productivity
Development of Student Worksheet on Flat Geometry Learning Based on Rigorous Mathematical Thinking At Universitas Wijaya Kusuma Surabaya

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Abstract. This study aims to develop student worksheet based on Rigorous Mathematical Thinking (RMT) to know the understanding of the concept of flat geometry in the students of Mathematics Education Study Program at Universitas Wijaya Kusuma Surabaya. Rigorous Mathematical Thinking (RMT) is a learning approach to mediate students in using and adapting to their cognitive function to build understanding and understanding of concepts. The results of this study are the value of the test results of learning and student responses to knowledge. After implemented on the student then got the result according to an indicator of RMT that is four students there is at a high level, three students are at average level, two students in low concentration. The response of most students to RMT-based learning is positive.
RUMEN FERMENTABILITY AND INVITRO DIGESTIBILITY OF CORN STROW AND *Gliricidia maculata* IN THE RUMINANT DIET

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**ABSTRACT**
The aim of this research was to determine the utilization of corn straw and *Gliricidia maculata* in the diet on rumen fermentability and invitro digestibility. This research used randomized block design with 4 treatments and 4 replications. Ration consist of 60% forage and 40% concentrate. The treatments were ratio of corn straw and *Gliricidia: maculata* T1 = 30% corn straw + 30% *G. maculata*; T2 = 40% corn straw + 20% *G. maculata*; T3 = 50% corn straw + 10% *G. maculata*; T4 = 60% corn straw + 0% *G. maculata*. The parameters observed were rumen fermentability (pH, ammonia (NH₃) and Volatile Fatty Acids (VFA) production) and invitro digestibility (neutral detergent fiber (NDF) digestibility, acid detergent fiber (ADF) digestibility, cellulose digestibility and hemicellulose digestibility). The result showed that the ratio of corn straw and *G. maculata* had no effect (P>0.05) on rumen pH, VFA production, NDF digestibility, Cellulose and Hemicellulose digestibility, but treatments had significant difference (P<0.05) on NH₃ producton and ADF digestibility. The conclusion of this research was corn straw can be used 60% and 40% concentrate in ruminant diet without *G. maculata* with pH 6.9 VFA production 120.63 mM, the digestibility value of NDF, cellulose and hemicellulose were 52.65%; 52.10%, and 69.32% respectively. NH₃ production value was 16.95 mg/100 ml and ADF digestibility was 45.10%.

**Keywords:** corn straw, *Gliricidia maculata*, rumen fermentability, in-vitro digestibility
ABSTRACT. This study aims to determine the effect of cassava peel and shrimp waste mixture fermented by Bacillus amyloliquefaciens in laying chicken ration on feed consumption, egg production, feed conversion and yolk color of laying hens. This study was using 200 laying hen strain Isa Brown age 38 weeks and single cage measuring 30 cm x 35 cm x 33 cm. The experimental research was using Completely Randomized Design (CRD) consisted of 5 treatments and repeated 4 times. The treatment was the use of cassava peel and shrimp waste mixture fermented shrimp waste (CASASWF) in the ration, ie R0 (0% CASASWF), R1 (5% CASASWF), R2 (10% CASASWF), R3 (15% CASASWF), and R4 (20% CASASWF). The observed variables were feed consumption, hen-day production, feed conversion and egg yolk score. The result of the analysis of variance showed that the cassava peel and shrimp waste mixture fermented by Bacillus amyloliquefaciens in the ration have no significant effect (P> 0.05) on the feed consumption, hen-day egg production, feed conversion and egg yolk score. The conclusion of this study that the utilization of cassava peel and shrimp waste mixture fermented can be used in laying hens diet until 20% in ration, and the conditions obtained feed consumption 119.80 gram, hen-day production 92.04 %, feed conversion 2.45, egg mass 54.02 % and egg yolk score 7.88.

Keywords: Cassava peel, Shrimp waste, Bacillus amyloliquefaciens, laying hens, performance
Democratization At The Regency And City Level In Indonesia In The Era Of Regional Autonomy

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Abstract. The purpose of this study is to analyze and describe democracy in the level of regency and city in Indonesia in the era of regional autonomy. The research method is explanatory case study using qualitative approach in accordance with the explanation of Bogdan and Taylor, (1975), (Moloeng 2004: 6). The results of the study suggest that: 1). Democratization in the form of institutionalization of participatory and pro-poor values is a social transformation that occurs through social practices which cross time and space (structuration). Structuration occurs in four dimensions, namely signification, domination-authoritative, domination-allocative and legitimation. 2). In the process, there are factors that constraint both agency and the structure: a). From the aspect of structure, the enabling factors are political reform and regional autonomy while the constraining factors are old regime, neo-patrimonialism of the bureaucracy and pragmatism of the society. b). From the aspect of agent, the enabling factors are new Regents and mayors and progressive bureaucrats (state actors) as well as NGOs, the media, intellectuals, associations, and the combination of state-society organizations (public actors). Meanwhile, the constraining factors are old bureaucrats (state actors) and pragmatic grassroots leaders (public actors). 3). In the institutionalization of democracy the process of mutual reinforcement between state and society actors occurs. And 4). The achievement of institutionalization of democracy in participatory and pro-poor values can occur due to non simultaneous movement patterns. The early movement is participatory, and then it leads to pro-poor.

Keywords: Democratization, Structuration, participatory, state and society.
ORAL SUPPLEMENTATION OF FISH OIL REDUCE FASTING BLOOD GLUCOSE AND ENDOTHEL DAMAGE BUT CAN NOT REDUCE MALONDIALDEHYDE LEVEL IN DIABETIC MALE WISTAR RAT (*Rattus norvegicus*)

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ABSTRACT. The main target of hyperglycemia is endothelial dysfunction involving pathways; protein kinase activation, heksosamin activation, polyol activation, and Advanced Glycation End Products (AGEs) formation, trigger reactive radical superoxida (O$_2^-$) to stress oxidative. Malondialdehyde (MDA) is an end product of lipid peroxidation in body and is an indicator of oxidant-antioxidat level in diabetic patients. Fish oil composing mostly omega 3 as an antioxidant can reduce oxidative stress and hyperglycemic condition. This study aimed to investigated the effects of omega-3-rich fish oil in lowering blood sugar levels, inhibiting oxidative stress and aortic endothelial cell damage in diabetic rat models. This study was an experimental study using post test only control group design. Thirty-two rats divided into two study groups (n = 16 individuals per group), including the diabetic rats group (as control) and the diabetic rats group given fish oil doses of 300 mg/kilogram body weight/day. Provision of fish oil was performed for 28 days used Blackmores® fish oil. Blood sugar and malondialdehyde levels were analyzed by spectrophotometric method. The number of aortic endothelial cells was analyzed by hematoxylin-eosin staining. Comparability test showed that the average number of fasting blood glucose level after treatment in both groups showed highly significant differences (p=0.00). Although MDA level was reduce in treatment group than control group, but statistically not significantly difference, p=0.43. Comparability test showed that average of endothelial cell between control and treatment group significantly different (p=0.00). It was concluded that fish oil supplementation containing omega-3 in diabetic rats can lower blood glucose level and can inhibit endothelial cell damage.

**Key words:** hyperglycemia, fish oil, fasting blood glucose, oxidative stress, endothelium, malondialdehyde.
Wide Resection Giant Cell Tumor of Distal Ulna and stabilization ulnar stump with extensor carpi ulnaris tendon (Three Case Reports)

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ABSTRACT. Background: Giant cell tumor (GCT) of bone occurred in the distal end of the ulna is extremely uncommon. Wide resection is usually indicated in such cases and at times it may be necessary to remove a long segment of the distal ulna. The functional reconstruction of the defect after resection has been a challenge. Wide resection of the distal ulna with or without reconstruction or stabilisation of the ulnar stump is the recommended treatment for GCTs in such locations. Patient and Method: A total of 3 cases of giant cell tumor of distal ulna. They treated with wide resection and stabilization of ulnar stump by extensor carpi ulnaris. We evaluating outcome use Musculoskeletal Tumor Society (MSTS) Score for upper extremity. Result: There were 3 patients. all of them present with lump of their wrist and the pain over the lump. Patients treated with wide resection and stabilization of ulnar stump by extensor carpi ulnaris. The result from evaluation of Musculoskeletal Tumor Society (MSTS) Score were average 24 point. Conclusion: Giant cell tumour of bone is a rare, generally benign, locally invasive tumour. The ulna distal extremity is an unusual site for a primary bone GCT. Any ulnar resection proximal to the insertion of pronator quadratus can lead to instability in the form of radio-ulnar convergence and dorsal displacement (wringing) of the ulnar stump. This can result in diminution of forearm rotation and weakness with grasp. The main goal of the stabilization is to stable, pain-free and functional outcome of wrist. In this case report our patient with giant cell tumour were treated with wide resection and stabilization of ulnar stump by extensor carpi ulnaris. All of the patient satisfied with our treatment.

Keywords: giant cell tumor, wide resection, stabilization of ulnar stump, Musculoskeletal Tumor Society Score
PROFILE OF SPONDYLITIS TUBERCULOSA IN PROF. DR. R. SOEHARSO ORTHOPAEDIC HOSPITAL AND DR. MOEWARDI HOSPITAL SURAKARTA JANUARY 2017 – DECEMBER 2017

(Retrospective Study)

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Abstract. Tuberculosis represent of orthopaedic challenge, a disease caused by Mycobacterium tuberculosis, one of the most common problem in the developing countries. Indonesia the most TB contributing country. Tuberculosis a Multi-Systemic Disease with Intra Pulmoner or Extra Pulmoner Tuberculosis manifest, One of the Extra Pulmoner Tuberculosis form is musculoskeletal TB, involvement as for spondylitis TB.

This study aimed to evaluated Spondylitis TB profile and for database for next study at orthopaedic hospital Prof. DR. R Soeharso dan General Hospital Dr. Moewardi Surakarta.

The retrospective study included all patients diagnosed with Spondylitis tuberculosis with operative treatment in Prof. Dr. R. Soeharso Orthopaedic Hospital Surakarta from January 2017 to Desember 2017. This research was conducted by gathering patients’ data and evaluating them based on neurological post-operative with ASIA Score.

Seventy-five patient with Spondylitis tuberculosis, 54 patients was treated in RSO Prof. dr. R. Soeharso, and 21 patients was treated in RSU dr. Moewardi. There are 35 males (%), and 40 females (%), with average 35 years old. With involved region of Spondylitis tuberculosis are 5 patient Cervical spine, 22 patient Thoracal spine, 21 patients Lumbar spine, 27 patient Thoracolumbar spine. Most operative treatment is Debridement, laminectomy, posterior stabilization for 47 patients. With good neurological outcome after 3 months are 66 case (89%).
Spondylitis tuberculosa majority on adult (productive age) with most predilection on thoracolumbar region. With good outcome on debridement, laminectomy and stabilization treatment.

Keyword: Spondylis tuberculosa, Mycobacterium tuberculosis, Thoracolumbar.
Improve in Neurological Outcome After Surgical Treatment of Cervical Schwannoma with Tetraparesis – A Case Report

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Abstract. Schwannoma is a benign, encapsulated, benign tumor that grows slowly from neural fairy cells in the nerve sheath. Extracranial schwannoma is a rare case. These tumors can cause neurological deficits because of their intradural location and suppress the spinal cord so it needs to be decompressed to prevent permanent nerve damage. We reported one case of cervical schwannoma with a neurologic deficit in the form of a weakness of the four limbs with a preoperative diagnosis, we finally performed a laminectomy and tumor excision with the result of a return of neurological function in the patient.

Keywords: Schwannoma, cervical, laminectomy, benign tumor, tumor excision.
Supervisory Mechanism of Supplementary Regional Regulation in APBD Implementation.

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Abstract. Service to the community has become the goal of the state, and it becomes the duty of the government to realize the service to the people. The ultimate goal of government is to maintain a system of order, so that people can live a natural life, and create conditions that enable each member of the community to develop their ability and creativity for the sake of mutual progress. The Republic of Indonesia is divided into several regions, provinces and regions of the province divided into districts and municipalities, where each province, district, and city, it has one local government. One part of the government in Indonesia is regional government, this is as regulated in the Article 18 UUD 1945, as currently given follow-up with the issuance of Law no. 23 of 2014 on Regional Government. In Article 1 of Law no. 23 of 2014, it is mentioned that the Regional Government is a regional chief as an element of the Provincial Administration, whose duty is to lead the implementation of government affairs, which is the authority of the autonomous region, while the Provincial Council (DPRD) is a regional representative body domiciled as the organizing element of the Government Area. In the implementation of a local government, the position of the DPRD is vital, although according to the Law no. 23 of 2014 that the DPRD is only domiciled as an element of the district administration. This shows that the relationship between DPRD and local government is not placed on a separation of powers. Nevertheless, the DPRD still has three functions, namely the function local regulations formation, budgeting functions, and supervisory functions. The implementation of each three function of DPRD is subsequently elaborated in various regulations, and technically regulated in DPRD regulations on the rules of the DPRD. This research will be focused on the function of DPRD oversight, namely the function of local regulation formation, while the budgeting function is not an object in this research. The supervisory function is undertaken to ensure the realization, as well as the effectiveness of the established policies. Basically, if the local government policy is carried out in accordance with what has been established, then the DPRD can carry out minimal supervisory functions. But if there are many deviations in the implementation, then the supervisory functions of the DPRD should be maximized. Institutionally, the DPRD has a political supervisory function. The function of the DPRD is strategic, because it will see from the aspect of the objectives achievement plan which has been set in the Regional Medium Term Development Plan (RPJMD), and the Local Government Work Plan (RKPD). Therefore, political supervisory can be attributed to administrative supervisory. This indicates that the supervisory function implemented by the DPRD at the policy level, will create checks and balances which indicate the working relationship between the DPRD and
the Regional Government. Implementation of such supervision is generally influenced by the existence of legislation as the foundation, situation and condition of politics in the related region, knowledge and also the willingness of the Leaders and members of DPRD in carrying out supervisory function, legal culture in local government, problem of limited time and available budget. Therefore, then this research held to discuss:

1. Are the mechanisms and execution of DPRD supervisory function to the Local Regulation (APBD) done effectively?

2. How does the supervisory function resulting on improving people’s welfare?

This research is a sociological normative law research, considering that this discussion is based on the implementation of legislation regarding supervision by District DPRD to Regional Regulation of APBD. This study aims to find the right method of mechanism and implementation of supervision, to improve the welfare of the community. Furthermore, to analyze and find the results of supervision that resulting on improving people’s welfare.

Keywords : DPRD, Local Regulation APBD, Supervisory Function, Effective, People’s Welfare
RESPONSE OF THE GROWTH SUPERIOR SUGARCANE CLONES ON SOIL ACIDITY LEVELS SOURCED FROM BUDCHIP SEEDS

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Abstract. Low productivity of sugarcane crop effects directly to sugar production. The low sugar production makes price principal sales become high. As a result, farmers’ income becomes low. One of causing low productivity is the variety of sugarcane crop which is planted has not good quality. One of efforts to increase sugarcane productivity is by producing superior sugarcane variety by doing crossing. This research cooperates with PG Gempol krep produced some sugarcane clones including SB1, SB2, SB3, SB4 and P3. The objective of this research is knowing growth response of some sugarcane clones on soil acidity levels sourced from budchips seeds. This research used random complete group design which consist of two factorials and repeated three times. The first factor is sugarcane clones consist of SB1, SB2, SB3, SB4, P3 and BL as the control. The second factor is soil acidity levels consist of soil with pH 4.5, pH 7 and pH 8.2. The growth indicators of plant which observed include plant height, number of leaves, number of tillers and chlorophyll. The result showed that there is significant interaction of treatment sugarcane clones sourced from budchips seeds on variables number of tillers and chlorophyll. The treatment of soil acidity levels showed significant interaction on the growth of sugarcane clones sourced from budchips seeds. There is no significant interaction between treatment sugarcane clones and soil acidity levels on sugarcane growth which planted from budchips seeds.

Keywords: Growth, Sugarcane Clones, Soil Acidity Levels, Budchips.
Abstract. This study aims to analyze the perception of computer-assisted learning services mainly for high school students with restricted learning technology in an isolated area namely Bawean island. In particular, this study is to analyze the importance of teacher behavior, credibility, communication, and accessibility to the use of computer assisted learning in Bawean areas. By using a questionnaire that has been distributed to 117 Respondents, Using structural equation modeling of these four variables, the results of the study showed that teacher behavior (1.00), credibility (1.00), and communication (1.00) were perceived to be the most influential compared to the variable of teacher service (0.74) on computer-assisted learning in the Bawean areas. Accordingly, for learners who are not yet fully literate in technology, the role of teachers is highly prominent especially the ones constituting respectable behavior, credibility, and communication on the use of computer-assisted learning. Further research is recommended to be accomplished chiefly in other potential areas to ensure the influential power of these four variables.

Key words: perception, computer assisted learning services
REALIZING SMART CITY INNOVATION (SMARTCITY) THROUGH MUTUAL BOND ISSUANCE

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ABSTRACT. Smart city development in the effort to embody Pancasila in the form of four precepts concerning democracy, meaning the community as a smart city component to participate in the development of the Regional Government / Regional Government. The position of the Regional Government as a pioneer in the procurement of facilities and infrastructure. Also rules the relationship between the local government, stakeholders, city residents. Smart city its existence as a preventive and curative of all problems of the Regional Government. Practice there is no Regional Government that issues Regional bonds considering the legal umbrella is not complete. There is also no mutual fund that works with the Regional Government. Finally das sollen has a crowdfund / BOT institution. The institution will disburse funds for the Regional Government to procure ICT equipment. The experience of other countries has moved that smart city is a place of communication to promote the welfare of the citizens of the city. Some Regional Governments carry out development through smart city. The reason is to have ICTs that enable smart city development. The Regional Government, which has a small regional revenue, will use the Corporate Social Responsibility fund from the provider. this research is expected to provide a breakthrough for smart city development.

Keywords: Crowdfund, operational transfer transfers, small PAD regions, democratic principles.
Abstract. The lack of success of village economic activities can occur because the community groups have not been involved comprehensively in every process of regional development, development and utilization of available resources in the region. Tourism villages are one potential that can be used as an alternative source of income for the community and will create the potential for the development of other productive economic enterprises. The results show the achievement of this community service activity with the strengthening of marketing management, specifically the strategy to market edugrowisata products: 1) Knowledge and understanding of participants in marketing management, especially marketing strategies for business, proven that participants have strong motivation and how to manage themselves (management self) in successful / failed management in business; 2) Participants have been able to make market segmentation on the products offered; 3) The target of the business established by the village is also known, and; 4) The ideas positioning (positioning) the products have been understandable, especially alternative positioning proposed "traveled and charity" and "tourist begoan"

Keywords: Tourism, marketable, Positioning
Abstract: the aims of this article to find the owner of the data, to see result of the work of all parties with costs that are also issued separately and who benefit the most. The result showed that Ownership of data remains and is entirely in the hands of the data producer. There is no data monopoly between a group of people, corporations, or other institutions. There is recognition of ownership rights for anyone who contributes to the process of data creation and collection. Ask the Executive Government and the Legislative Council to issue legislation and regulations that support and ensure the spirit of the manifesto so that this movement can be realised, Inviting all levels of society to join and support this movement for equality and justice for all parties.

Keyword: Business Ethic, Ethnic Era, 4.0
DEVELOPMENT OF STUDENTS CENTERED LEARNING (SCL) MODEL IN MATH USING ANDROID BASED OF JUNIOR HIGH SCHOOL STUDENTS

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Abstract. The development of learning media in this era is very common, technology-based learning media is one of them. In this case we will develop android-based learning media that will be used by seventh graders students in mathematics subject of junior high school in Gresik. Create android-based learning media by providing Students-Centered Learning (SCL) approaches in it is one of the aims of this research. The instruments to collect data are interview and questionnaire through mathematics teachers and 100 students. According to the data processing then continued with the development of the media which is made based on the previous need analysis for further be made android-based learning media by creating application. This application can be operated by students in their mobile sources; smartphone, laptop, or computer.

Keywords: learning media, mathematic, Students Centered Learning (SCL), Android-based learning.
The Implementation of Video Learning Media in Natural Science Learning for Primary School Students.

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ABSTRACT. The purpose of this research is to find out the implementation of video learning media in Science subject of primary school students. This research is motivated by a lack of creativity in the use of instructional media in learning process, especially on science subject. Science is one of the subjects that learn things related to nature, accordingly contextual approach commonly used in science learning. However, not all science subject material can be explained using contextual approach. This can be happened because we as humans experience space and time limitation. To overcome this problem, the instructional media is needed to clarify the certain science material that cannot deliver in contextual approach. Accordingly, the students can see real examples without direct observation. The video as instructional media is chosen because this media consist of two elements which are audio and visual. By the presence of these two elements, students are expected to be able to receive, understand, and remember the science material. This study uses qualitative method with case study approach. Observation and interview were use as data collection method. The result showed that the implementation of video as instructional media in science learning on primary students is able to improve students’ understanding on Science material.

Keywords: Video learning media, Science subject, Primary school students.
The Use of Code-Switching in English as A Foreign Language Classroom Teacher’s Perspective

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Abstract. Code-Switching is the phenomenon that usually occurs in English as a Foreign Language (hereinafter will state as EFL) classroom. The EFL class is for the non-native English speakers learning English in a country where English is not commonly spoken, such as English learning in Indonesia. However, code-switching is often seen as a negative attitude but people seem to code-switch frequently. The aim of this study is to investigate teacher’s perspective in doing code-switching in the EFL class to Indonesian students. This study uses qualitative descriptive method. The data was collected primarily from interviews. The result shows that the teachers used code-switching as little as possible or in a small portion in EFL class. In general, the teachers used code-switching primarily when to explain the language rules and sometimes to trigger students’ participation to share their opinion. Furthermore, analysis of the data showed that, based on teacher’s perspective, the code-switching was done to serve pedagogical purposes.

Keywords: Code-switching, English as a Foreign language, Teacher’s perspective
ROLE PLAYING METHOD IN IMPROVING STORYTELLING SKILL OF BUYING AND SELLING EXPERIENCES ON PRIMARY SCHOOL STUDENTS

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ABSTRACT. In this current learning, the students are seen as subjects that develop through learning experiences while the teacher plays more role as facilitator and learning motivator for the students, helping and giving easiness for the students to get the learning experiences based on their ability. Yet, what is happened nowadays, many teachers dominate the learning activities. It makes, the students less involve in learning participation and less gain meaningful experience. The purpose of this research is to know the procedure of applying role playing method in improving story telling skill of buying selling experience in traditional market and to know the improvement of storytelling skill of buying selling experience in traditional market after role playing method is applied. This research uses qualitative method using study case approach. The data collection techniques that researcher used are observation and interview. While the data analyzing technique that researcher used in this research is done descriptively by using data analyzing technique model of Miles and Huberman. The data analyzing stages include data reduction, data display, and conclusion drawing/verification. The result of the research is the improvement of storytelling skill, especially in buying selling activity in traditional market through role playing method.

Keyword : role playing method, storytelling skill, buying selling activity in traditional market.
Web Centric Course in Supporting Primary Students’ Learning Skills and Learning Outcomes

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Abstract. This research is about Web Centric Course in supporting primary students’ learning skills and learning outcomes. Web Centric Course is categorized as learning resources by utilization in which it can make use e-mail, mailing list, file transfer protocol, new groups, and world wide world to support primary students’ learning skills (to think, to participate, to behave) and learning outcomes (cognitive, affective, psychomotor)

This research is qualitative descriptive in nature. Interview, observation, and documentation were used as data collecting technique. Interview was used to find out more about the respondent’s problem. Observation is intended to study the subject about behavior and the meaning of behavior.

This research described Web Centric Course through email in supporting skills of active thinking, question and answer participation, collaborative behavior; mailing list in supporting skills of critical thinking, expressing opinion participation, accepting ones’ opinion; file transfer protocol in supporting skills of reflective thinking, discussion participation, and tolerance; new groups in supporting skills of critical thinking, discussion participation, responsible; world wide web in supporting skills of active thinking, questions and answer participation and collaborative behavior, and supporting learning outcomes. Result of the study showed that Web Centric Course is supporting primary students’ learning skills and learning outcomes.

Key words: Web Centric Course, Learning Skills, Learning Outcomes
Abstract. This second year research aims to analyze the implementation of policy strategies for developing creative businesses processed by food crops and fisheries. through an increased production approach to take advantage of open market opportunities. By using respondents from the first year research, the business development strategy is implemented through the increasing of the products. To analyze the difference in marketing time between before the increasing of the product and after the increasing of the product use the independent t-test. The results of this second years research showed that between before product improvement with the situation after the increasing of the product, against the marketing time, there was no significant difference. That means the policy of developing creative businesses of processed agricultural products in the city of Surabaya with a strategy to increase the number of products can be applied, because the marketing time before increasing the product and after is not significantly different.

Key word: Creative business, Independet t – test.
DYNAMICS OF SOCIAL LIFE OF INDONESIAN PEOPLE IN DEALING WITH GLOBALIZATION ERA

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ABSTRACT. This paper intended to study the dynamics of social life of the community, especially the Indonesian community who recently seemed disturbed. Historically, the people of Indonesia are very diverse, seen from the aspects of ethnicity, religion, and culture. In a very long time, the people of Indonesia can live in peace and harmony, although their existence is very multicultural. This can happen, because the Indonesian people so far have a high tolerance, so they can live together in harmony and mutual respect for each other. However, along with the influence of global culture sweeping the country, the dynamics of socio-cultural life of Indonesian society began to be disrupted. It is evident that in recent years Indonesia has often experienced conflict due to religious, ethnic, and cultural issues. To address the widespread interfaith, inter-ethnic and cultural conflicts among Indonesians, there are several strategies to be taken, such as: (1) The religious education system in schools should not make children become fragmented according to religion, as this may cause fanaticism of their own religious teachings and contempt for the teachings of other religions and such a way is very dangerous to the integrity of the Indonesian nation; (2) Religious education must be able to provide understanding to learners about universal religion. Because basically the religions that exist in this world are nothing but the way to the same goal; (3) The need to understand the teachings of religion universally, so as to develop maturity and openness to the minds of the students, so that religion is not understood only in six types such as Hinduism, Islam, Christianity, Catholicism, Buddhism and Confucianism. But every quest for God, truth, goodness, compassion, and glorification of fellow human beings and the universe can also be understood as a religion; (4) It is necessary to understand the function of religious education, ie neo confessional, in the sense that in addition to functioning to improve the religiosity of learners with their own religious beliefs, it also serves to provide the possibility of openness to studying the religion of others just to foster tolerance in religious life.
Keywords: Social life, tolerance, religious life, global culture, religious education.
STATE RESPONSIBILITY TO SEA ENVIRONMENT BY CLIMATE CHANGE

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Abstract. The impact of global climate change has been a particular concern of the world community and nations, including Indonesia. As an archipelagic country that has a wide range of natural resources and high biodiversity, Indonesia has great potential to be adversely affected by climate change and also has great potential to contribute in mitigation and adaptation to the negative impacts of climate change. The United Nations Framework Convention on Climate Change (UNFCCC) sets out several targets for reducing Green House Gas (GHG) emissions in the context of climate change mitigation. Blue carbon Indonesia is stored in the marine environment has great potential as an absorber or hoarder of carbon dioxide that can reduce GHG emissions.

Indonesia's coastal and marine areas have the potential to absorb approximately 138 million tons of carbon equivalent per year or five times more than the potential absorption of tropical forest ecosystems in Indonesia. The carbon sequestration potential can reduce 25 percent of global carbon emissions. The amount of carbon storage shows that the ocean can play an important role in climate change mitigation. However, the complexity of blue carbon management and its implementation capacity still requires in-depth study. The analysis in this paper uses the type of normative legal research, which is done by analyzing related laws and regulations, with the approach of problem statute approach and conceptual approach. Legal construction in the management of blue carbon is required as a form of protection of the marine environment as a climate balancer.
Experiment of a Propeller Wind Turbine Model in a Wind Tunnel with Various Winglet Heights Under Mechanical Loads

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ABSTRACT. This reports the result of an experiment on a propeller wind turbine model with winglets. The wind turbine model with a diameter of 24 cm was built using a three dimensional (3D) printer for similar propeller blades and the same blade weights. The test was to know the power coefficient (Cp) characteristics of the turbine model with various winglet heights under various mechanical loads. The experiment was carried out in a wind tunnel having a rectangular test section with 40 mm width at wind speeds up to 5.4 m/s. The experiment was conducted with a variation of the percentage of winglet height to propeller radius of 0%, 2%, 4%, 6%, 8%, and 10%. The model was tested with increasing mechanical loads from no-load condition up to no-rotation by using a dynamometer brake. The experiment showed several characteristic results for the models with and without winglet. With increasing mechanical loads at a constant wind speed, turbine tip speed ratios (TSRs) decrease and the power coefficient increases up to a maximum point at a certain TSR before it starts to decrease until no-rotation condition (a TSR of 0). With increasing wind speeds, the local maximum power coefficient increases up to a highest value, and, then decrease. All maximum Cp values are located at TSR less than 1. The power coefficient performance of the turbine model with a winglet is better than that without a winglet. The turbine performance showed an increase with increasing winglet heights. However, after it reaches a maximum, it decreases with increasing winglet heights. The model without winglet showed a Cp maximum of 0.11 at a TSR of 0.6. The optimal winglet height percentage is 6% at a TSR of 0.75 that results in a Cp value of 0.14. Therefore, the winglet effect tested can result in a Cp increase of 27%.

Keywords: Propeller wind turbine model, winglet, wind tunnel, power coefficient.
ABSTRACT. This report shows the performance test result of a small radial turbine for the application of a picohydro power plant. The turbine is built from a commercial centrifugal blower, which its working fluid flow is reversed, for a low cost hydro power plant. The tested blower could act as a picohydro turbine due to the similarity of its volute and impeller with a radial Francis turbine’s scroll case and runner. The test was to know the characteristics of output power and efficiency of the turbine with and without modification of the runner blades. The picohydro turbine tested was originated from a 352-Watt, six-blade blower with an impeller diameter of 6.7 in and its unmodified blades had a shape of backward curve. The experiment of the blower as turbine was carried out in a small water turbine experiment apparatus with a head of 12 meter. The experiment was conducted with a variation of three blade angles of the turbine runner, i.e., backward-curved, radial and forward-curved blades. The turbine was tested at various mechanical loads from no-load condition up to no-rotation condition using a prony dynamometer brake. The result showed that with an increase in mechanical loads at a constant head, turbine rotation speeds decrease and both output power and efficiency increase up to a maximum point at a certain rpm value before they start to decrease until no-rotation condition. With increasing head values, the local values of the maximum efficiency decrease, but those of the output power decreases. The test showed the efficiency performance of the turbine with blade modification is better than that without modification. The maximum efficiency of the tested turbine with forward-curved blades is higher than that of the radial one. The maximum efficiency of the radial ones is higher than that of the forward-curved blades. So, the blower as turbine requires blade angle modification to improve its efficiency for applications of picohydro power plant.

Keywords: Blower as turbine, picohydro turbine, blade angle, turbine output power, efficiency.
Analysis of the Effort and Impact of Determinants for Regional Innovation System In Payakumbuh City

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ABSTRACT. Research had been conducted to map the maturity level of a regional innovation system in Payakumbuh City, West Sumatra, Indonesia in 2016. The result showed that the average maturity level of the regional innovation system based on ANIS (Analysis of National Innovation System) is still at a developing level. Further research was already carried out to determine the intervention portfolio for improving the maturity level at upcoming years by measuring the effort and impact indexes of 30 regional innovation system determinants. This measurement was carried out to select which determinants can be carried out most effectively and most efficiently by the government to strengthen the Payakumbuh regional innovation system in the early stage. By analysing the determinant characteristics relevant to the Payakumbuh potentials that have low effort and high impact to the regional innovation system, the determinants for the intervention could be determined. The priority determinants for improving the maturity level of Payakumbuh innovation system should be regional innovation policy, cluster policy, innovation-friendly regulations, innovation service providers, financing schemes of science, technology, and innovation (STI), applied research programs, joint funding schemes, STI assistance efforts, cluster development programs, basic and applied research institutions, and involvement of large industries. This result suggests specific programs for Payakumbuh city government to improve its regional innovation system.

Keywords: Regional innovation system, effort index, impact index, innovation system determinant
Enhancing Mentally Retarded Students’ Comprehension: The Development of MASH Project-Based Reading Technology

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Abstract The development of reading technology through PBL strategy using MASH was aimed to meet mentally retarded students’ needs in learning reading. The study employed research and development design through analysis, design, development, validation, implementation, evaluation, try out and final product which conducted at an extraordinary public school in Gresik Indonesia. Reading technology using MASH resulted three main parts PBL pre-, whilst-and post- reading activity within MASH technology. The result of experts’ validation from an English teacher who assessed the technology revealed the score was 78% that sorted out into ‘very good’ category and an Informatics teacher who assessed the media revealed the score was 74% that sorted out into ‘good’ category. While, the result of the students’ response related to the product showed the total score was 79% that the students agreed with MASH media to be used in the teaching and learning process. As its effectiveness toward the improvement of mentally retarded students’ reading comprehension is not measured yet, so an experimental study is addressed for further research to meet the issue of MASH reading technology.

Keywords: reading, Mash, PBL strategy, mentally retarded students
PREVENTION IN TRAFFIC ACCIDENT USED HUMANIST INTERACTIONS WITH TRAFFIC POLICE AND MOTORCYCLE USERS

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Abstract. The means of transportation is the need of every person, With the growth of a country’s economy and the growing number of people, the more activity needs of transportation equipment, The purpose of this study is To be able to minimize the existence of traffic accidents, it is necessary Humanist interaction between Traffic police officers with users of motor vehicles. The method used in this research is with empirical juridical approach, that is using primary and secondary data, and qualitative analysis presented descriptively, Research conducted in Police Republic of Indonesia. Based on the results of the research, it can be concluded that humanist interaction between traffic police officers and motor vehicle users is with the Safety Riding Program, and by held sympathetic surgery, traffic police officers not only conduct the action for road users who violate but also provide counseling or reprimand for road users to comply with traffic rules.

Keyword: Traffic Accident, Accident Prevention, Humanism Interaction
THE PROSPECT OF SEA PROTECTION (CORAL REEFS) AS CARBON SINK AND CARBON SOURCE DUE TO CLIMATE CHANGE

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The sea as the outermost of the state is in uncertainty due to global warming as a result of increasing carbon emissions into the atmosphere, resulting in melting of polar ice or polar ice melts and changing patterns of seasons and sea level rise as a result of rising temperatures and temperatures Seawater that can significantly result in coral bleaching and ocean acidification. This condition will be very dangerous for the territory of Indonesia which 2/3 of its territory is sea. But with the development of science there is a new concept that the sea is no longer as a carbon sink, but already in a position as a net carbon source. While the condition of Indonesian coral reefs in the area of coral triangle is one of the richest in biodiversity in the world. Coral reef ecosystem also functions as a net carbon source. Therefore, the Government of Indonesia should immediately provide legal protection related to the marine environment. The analysis in this paper uses the type of normative legal research, which is done by analyzing related laws and regulations, with the approach of problem statute approach and conceptual approach. Prospects for the protection of the marine environment, especially coral reefs are needed as an effort to protect the sea as carbon sink and carbon source.

Keywords : Climate change, Sea, Coral reefs
Legal Protection Of Artist In The Endorsement Agreement

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Abstract. Competition in trade in the era of globalization can be said differently when compared to the previous period. The era of globalization makes many business actors get competitors from outside the country without the need to establish a company in Indonesia. Therefore, marketing strategy should be strengthened, one of them is with endorsement. With the endorsement, the business actor uses the artist to do the promotion, thus most business actors have got their fans as buyers. Although it may have a negative impact on the artist because as the image of the product must be associated with the artist, including the negative image, that's why it takes legal protection for the artist so the problem is made: a. What are the legal characteristics of the Endorsement Agreement? And; b. What is the legal protection provided to the artist as an endorser against a lawsuit from a third party who has been harmed by a suspended product?

Research with the title and problems above is a normative study, considering the discussion is based on the rules of the relevant legislation. In the discussion of the formulation of the problem at number one will be used approach concept and rule of law approach to find and analyze the legal characteristics of the endorsement agreement, then for the discussion of the formulation of the second problem, then the characteristic of the law will be analyzed based on the perspective of whether it has provided legal protection or not.

Endorsement agreement is basically a cooperation agreement between the business actors and artists in the field of product marketing in order to attract many buyers. The business actor has the right to market the product and the obligation to pay some money, while the artist has an obligation to market the product and the right to get some money and product from business actor. The legal protection that can be granted is the legal protection in the endorsement agreement that the artist has no liability whatsoever when there is a loss from a third party because of the product.

Keyword: Endorsement, Agreement, artist, business actors, marketing
Fishing Quotas Regulation as the Embodiment of Fish Resources Protection

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Abstract. Act No. 45 of 2009 authorizes the Minister to determine the Total Allowable Catches (TACs) in the Fishing Area of the Republic of Indonesia (FARI). The determination of TACs is used as an effort to preserve fish resources in Indonesian marine. TACs is catch limits by all the fishing actor within a certain period that are set for most commercial fish stock in FARI. TAC is different from fishing quotas. TACs did not set fishing quotas, either for individual or corporation which have fishing activities. TACs mechanism is inadequate for overfishing or overexploitation to fish resources prevention because there are still some FARI that classified as overexploited for certain species of fish. The aim of this study was to find a better legal mechanism than TACs which can be used to prevent overfishing. The research method used is the normative research method with the statute approach. The conclusion is the fishing quotas regulation is required for the protection of fish resources in Indonesia and prevent the monopoly in fishing and fish trade in Indonesia.
Bilateral Investment Treaty Effectiveness In Completion Of Capital Investment Disposal

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Abstract. Investment is one of the important aspects of a country's economy. This is because the country will get many benefits, both directly and indirectly. Legal certainty is an important matter in attracting foreign investors, especially legal certainty related to dispute resolution. Article 32 of Law No. 25 of 2007 concerning Investment has stated that there are several ways to resolve disputes, including deliberation, arbitration and court. Bilateral Investment Treaty (BIT) is an agreement carried out between governments in investment. The Bilateral Investment Treaty (BIT) regulates various clauses related to the implementation of an investment. Bilateral Investment Treaty causes legal certainty and increases foreign investment in Indonesia. This research is aimed at finding dispute resolution in the field of investment that is fast and precise and beneficial for both the host country and investment. The research method will be conducted by finding data on the frequently used settlement procedures, speed, and accuracy in resolving investment disputes, analyzing the concept of the Bilateral Investment Treaty (BIT) and using it in resolving investment disputes. After doing the research, PERSPECTIVE will be carried out, the researcher will also create an ISBN textbook and make a presentation related to the publication.

Keywords: Bilateral Investment Treaty (BIT), Dispute Settlement, Planting Capital
Abstract. Act Number 6 of 2014 on Villages, has governed village authority, included village governance, village development, village community development and empowerment based on community initiatives, rights of origin and customs. The recognizing of this authority, based on the importance of village development to fulfill the prosperity of the rural community. Village, is the main idea of *Negara Kesatuan Republik Indonesia*. One of main component to run the village sustainable growth, and become the agent of change is the role of village chief with the subordinate. The issues is the role of village chief and subordinate, still not optimal yet. This is due to the lack of capability of village chief and subordinate, ineffective governance, unsatisfactory level of prosperity, lower accessibility and infrastructure, also lack of leadership. In an effort to optimize the role of village chief with the subordinate, restructuring and understanding about sensibility and intelligence on selecting the village chief to the community must be done. Ensure transparency and professionalism in process of recruitment until the level of implementation, through clear rules. Explore and discover the potential value in the village, so it can be used as source of village income. It will increasing significantly on the sustainable of village development.

Key word: Optimization, Village Chief and the Subordinate, Village Development
Constitutional Entrepreneurship: Main Strategic to Create Balanced Civilization

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Abstract. Constitution is a social contract. Become a binder for the establishment and proceed of the systems on a state. Constitution also become a fundamental guideline of the state. Constitutional entrepreneurship is a one step forward on establishing a balanced civilization, between human interests in economic development, consistency in the law and the integrity to protect environment. Entrepreneurship is a basic spirit of how to make a positive change in society, not only based on profit. Entrepreneurship in today's world, is often oriented only to business interests. Somehow, there is a different spirit between business and entrepreneurship. The spirit of entrepreneurship, need to be strengthened by combining with the main value of constitution. The dominance of economic interest, only makes everything measured by money. As well if the domination by law, it gives rigidity on a state. The environment is like a container, which always provides all needs on living. Human deserve to protect the environment, so that it will always bring benefits for human life. Through constitutional entrepreneurship, it will be more easily to create a balanced for human civilization. Not only on a concept and theory, but also to the next level on implementation.
Designing an Online-Based Questionnaire Application for Mobile Devices

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Abstract. **Background:** In a decision making and assessment, a lot of data is needed as a reference, the data needed can be obtained through filling out a questionnaire distributed to the public. With the rapid development of technology in the IT field, it becomes a necessity to create an online questionnaire application so that it can be accessed anywhere and anytime via the current mobile device. Online-based data storage needs are also important in a questionnaire, if all this time a questionnaire is made in paper form, this paper will discuss how to make an online questionnaire application. With the location of data storage also in an online server that can facilitate data processing. Application design is tailored to mobile devices that are now owned by everyone. This paper aims to provide an effective and efficient solution for researchers, companies or individuals who want to use questionnaires as a method of data collection.

**Keywords:** Questionnaire Application, Mobile Device
SORGHUM TAGLINES CAMPAIGN ANALYSIS: DISCOURSE APPROACH

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Abstract. The development of sorghum as an alternative food in Indonesia has been carried out for several decades ago, but officially there is no national sorghum taglines intended as an alternative food campaign in Indonesia. This campaign is needed in order to anticipate the decline in the ability to meet needs and reduce dependence on imports of staple foods of rice and wheat. In various areas of sorghum, it has long been known and cultivated, but its role is getting dimmer and getting less attention in its development. Therefore, it needs an effort to ignite public awareness, and encourage a mass movement to consume sorghum as part of the daily diet. The research objective is to criticize and present alternative sorghum National campaigns. The research method uses a complete grammatical discourse approach that fits the context, text and situation so that it can strengthen the language campaign. Result shows that the taglines campaigns that have been circulating are displayed in the form of fragmentation, description, and regional spots. Future campaigns can be based on consumer segmentation, are lateral and can ignite the emotional side of supporting the Indonesian food security.

Keywords: Sorghum Campaign, Taglines Campaign, Discourse Approach, and Social Linguistics
Antioxidant Activity of *loloh* Malaka Fruit (*Phyllanthus emblica L.*) in Ayurveda Medication

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**Abstract.** Traditional medication method in Bali use the Ayurveda principle known as *Usadha*. *Usadha* used herb or fruit as main component of medicine. One of them is Mallaka fruit (*Phyllanthus emblica L.*) and commonly in Bali known as *kalimaka*, *kalimoko*, *kalimlika*. Mallaka can be processed through boiling using water and consumed as traditional drink (*loloh*). Mallaka fruit has been known to contain vitamin C as antioxidant. Therefore this research aims to determine the antioxidant activity of mallaka fruit *loloh* using DPPH (2,2-difenil-1-pikrilhidrazil). The result showed that mallaka fruit *loloh* obtained was antioxidant activity with antioxidant capacity 164 mg/100 mL and IC50 691,1 µg/Ml. Further contains vitamin C obtained was 0,184 mg/100mL, Flavonoid was 3,15 mg/100mL, phenol was 375 mg/100mL and tannin was 546 mg/mL. Based on these result mallaka fruit *loloh* can be use as an alternative for traditional medication.

**Keywords :** Antioxidant activity, Malaka (*Phyllanthus emblica L.*), *loloh* and Ayurveda

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Accelerating Regional Economic Development through Tourism: the Development of Alas Kedaton as a Spiritual Tourism Destination

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Abstract. Tourism has long been considered as one of vital pillars in economic development. It has been an important choice for development in Indonesia, not excluding Bali. Bali Province has varied tourist attractions, which are predominantly based on the spirit of Hinduism. Alas Kedaton, as one of these tourist attractions, situated in Kukuh Village, is seen to be suitably developed as a spiritual tourism attraction. The name Alas Kedaton is derived from the word ‘alas’, which means jungle, and ‘kedaton’, which means the palace. This name suggests that this place is ‘the jungle where the King resides’. One of the kings who has chosen the Pura Dalem Kahyangan Kedaton as the residence is Sire Dalem. Hinduism views forest not only from its economic aspect, but also from religious point of view that has made it one of the sacred places. This is represented by the existence of temples around a forest. The Pura Dalem Kahyangan is believed to serve spiritual power, as means of avoiding all sorts of dangers, which is indicated by the image of Ganeca and the image of Durga Mahesasurawardani which is believed to provide protection and conquest. Those images are stored inside the Meru Pura, and have served as religious bond for Kukuh Village in a socio-religious bond. Religious tourism is a new trend as a higher quality tourism as it has been able to contribute to socio-cultural aspect with its unique traditions and customs as determinants of regional economic increase, providing employment opportunities, and improving people’s quality of life. Therefore, it is a strategic opportunity for the region to accelerate its economic development through spiritual tourism development.

Key words: economic development, spiritual tourism, community empowerment, and Alas Kedaton.
Abstrak. The philosophy as a belief is the preparation for the way to believe in the revelation. And the philosophical belief is the final destination of thoughts. The philosophy is a belief in the hidden divinity that everything is possible only as a *chiffer*. The man is free because God exists. Freedom is the same as existence and there is no existence without transcendence. But the man is free during the hidden transcendence. The man is a reflection of his belief in transcendence. Karl Jaspers’ philosophical thought has a parallelity of philosophy with the Hindu philosophical frame that lies in the nature of immortality, namely: *philosophia perennis*, “perennial philosophy”. In this connection, there are four categories which are the essence of the perennial philosophy. First, the phenomenal world is the “manifestation” of the divinity base of the universe. The second category, the man can know something about the divinity base through ordinary thought, but more so through intuition. The third category, man has the nature as “I”, but also as the perennial “self” or in other words, “I”, including the phenomenal world, is the firework of the divinity in the soul. The fourth category teaches the purpose of the man: to be one with the perennial self, and acquire intuitive knowledge of the divinity base.
ABSTRACT. The place where Hindus take holy water for religious purposes is often referred to as the Patirthan Temple. The word patirthan is also found in various books such as Negaraketragama, Pararaton and several other books, it is explained that in that place happened water taking and also held religious ritual. Some foreign researchers who are concerned about Patirthan, among others, A. J.Bernet Kempers (1959), F.D.K. Bosch (1961), Th.A. Resink (1968) and others.

Of the many Patirthan temples in Bali, the Patirthan Tirta Empul temple is presumably built during the reign of the Ancient Bali during the reign of Sri Candra Bhaya Singha Warmadewa who issued the Manukraya inscription dates 882 saka (960M) and it was stated that the King inaugurated two springs called ‘tirtha in the water’ (Bernet Kempers, 1991). Here that in ancient times the Balinese people took holy water for the sake of religious ritual activities they performed in the holy places and parhyangan in their village. In addition to other activities undertaken here, among others, nunas tamba (beg for medicine) to eliminate the various diseases they suffered.

Today the rapid development of tourism, communication and mobility are increasingly smoothly causing some of Patirthan temple to be the object of the visit of the travelers. In general, the existing Patirthan temple has added a new function that is as a tourism object that is more dominant than religious function because we realize that taking water for religious only at certain times but different from the activities of travelers every day. Various advertisements contained in newspapers, websites, and brochures that offer this object can be read clearly about it. Pragmatic, commodification is a growing phenomenon today, everything can be sold and traded to earn money, with money they can meet all the needs. With money they can buy all the new needs created by that needs (consumerism) to elevate the symbol of social status. In the era of development, Patirthan temple today
is dominated by activities that bring money compared with religious ritual activities that had been given the place of the past. The shift in the way of thinking and society from the spiritual to the material has become more real, the reality has shown the cultural capital transformed into economic capital.

This research will solve some of the problems described below: 1) why there is a transformation from cultural capital to economic capital? Are there any implications for this implication of people's lives? Theoretical orientation of research using approach of cultural studies through commodification theory, dekonstruksi. The method used in this research is qualitative method, descriptive qualitative and interpretative data analysis with data collection techniques, namely observation, in-depth interview, literature study and document.

Keywords: Cultural Capital, Social Capital, and Patirthan Temple

Mediation as Alternative Dispute Resolution (ADR) In the Forestry Sector by Malayu Customary Institution (Lembaga Adat Melayu) In Pelalawan District of Riau Province

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The lands used for Hak Guna Usaha of oil palm plantations are state owned land and community owned land. Community owned land by investors is freed from the hands of the people who control it with sporadic compensation. The tenure is stated on the area of land used and the boundaries of the controlled land so that it becomes clear about land tenure, but often this HGU permit overlaps with forest land already mapped to the forestry service. Thus the investor has a guarantee to do business / invest in other words with the right to use the company feels secure. Implementation of the rights of investors is still unfulfilled, namely the right to obtain legal certainty associated with the harrassance of HGU. HGU or permits that have been held by investors and then sued again or claimed from the community that is around the company, so there are various conflicts wrong forestry conflict that occurred in Pelalawan District of Riau Province. There are even Limited Liability Companies that open the land without the permission of HGU or HTI. Dispute dispute settlement efforts between the community and the company are carried out in various ways, and are pursued with the assistance of those who can facilitate the agreement with the parties to the dispute. So is the case with the dispute that occurred between the community and the company in Pelalawan District, conducted with efforts negosiation, namely by the process of negotiation or bargaining, in the problems arising in the community in Pelalawan District with the company, in addition it is necessary role communities, Malayu customary institutions (Lembaga Adat Melayu), or the government as in the case of conflict resolution through mediation with the
role of mediator. Mediation can be done if the outcome of this negotiation does not affect the agreement desired by the parties, so the land dispute continues even to the conflict with anarchy actions, such as the destruction of the land managed by the company. So the role of Malayu Customary Institution (Lembaga Adat Melayu) in Pelalawan District is needed. In this case the Malayu Customary Institution as an institution that accommodates the problems of the community, especially the indigenous people, one of which is the land issue. The role of Malayu Customary Institution (Lembaga Adat Melayu) in conflict resolution as mediator. This is very necessary option, alisement of the role of Malayu Customary Institution (Lembaga Adat Melayu) in the settlement of conflicts that occur in the surrounding community.

Key Word: Mediation, Forestry, Malayu Customary Institution

Original Research Article
IDENTIFICATION GENETIC VARIATION OF TUMOUR NECROSIS FACTOR IN ACTIVE PULMONARY TUBERCULOSIS

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Abstract. **Background:** Tuberculosis a major cause of mortality throughout the world, therefore, early diagnosis for the prevention is needed. One of the disease control strategies is the use of molecular genetics and its role in the severity of active pulmonary tuberculosis. **Methods:** Recruited 97 respondents criteria: having active pulmonary tuberculosis patients, and having a mean age of 38.35 years, 3 mL of the research subjects vein blood were taken. Next, DNA isolation was performed, and the DNA was detected using melting curve real-time PCR Light Cycler. **Results:** The allele pattern, resulting from the inspection of SNPs TNF 238 and 308 genes, was more specific with the genotype frequencies of pulmonary tuberculosis TNF-238 94(96,91%)GG and TNF-308 90(92,78%) homozygous GG. The TNF-α gene variants do not directly give different clinical manifestations of pulmonary tuberculosis patients. **Conclusion:** Significant correlation test existed among the five types of TNF-α gene polymorphisms, i.e. p = 0.0001, r = 27%.
two-tailed correlation test was significant between the levels of TNF-alpha ELISA with the severity of pulmonary tuberculosis ($p=0.916$).

**Keywords:** Polymorphism, TNF-alpha gene, Active pulmonary tuberculosis
LAW, COMMODIFICATION, AND LOCAL WISDOM

Portrait of Conflict Relation, between Law, Economics, and Local Wisdom of Bali in Setting the sacred area of temple

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The island of Bali due to the development of tourism experienced a significant change in terms of development. The development in Bali not only gives positive impact to the welfare of the people, where the price of land that becomes the basic capital of tourism development in Bali becomes expensive, but on the other hand gives negative impact with the increasingly widespread development activities, the area which initially did not become the commodity of development and tourism eventually dragged also experienced commodification. The land located in the sacred area of temple in Bali was originally used as a reforestation and protecting area from the existence of temple in Bali in accordance with the local wisdom of each region is increasingly becoming a tourism commodity as well. So that required the role of other elements to control the occurrence of commodification of the sacred area. The role of the law is necessary in that case, the law is placed as commander in controlling the occurrence of commodification of the sacred area of temple in Bali. The law among other, both from the law of the State, religious law, or from the customary law prevailing in Bali.

Key word. Law, Commodification, Local Wisdom
The presence of the ASEAN economic with the aim of realizing economic integrity in the area of Southeast Asian nations that aims to increase the competitiveness of ASEAN on China and India in attract more foreign investment will give the consequences for the exchange of goods and services between sesame a member of the state in the region. College as agent of change renewal in the community has the role and a big responsibility in produce young generation and human resources capable of competing in providing labor professional among the members of ASEAN.

The purpose of this study was to determine the direct and indirect relationship between organizational structure organizational culture and organizational climate to organizational effectiveness. This study uses a quantitative approach to the ex post facto research category and is a non-experimental research. The hypothesis of this study aims to prove the relationship between variables. Location of the study was conducted in Malang East Java that includes a population of as many as 1164 people lecturers in 55 private colleges which are spread throughout the city of Malang. The samples used in this study were 349 people from 20 private colleges in the city of Malang. Data was collected using a questionnaire or a questionnaire sent by post to the respective missing randomly selected respondents. The analysis used the PLS method to prove the hypothesis of the research undertaken.

The conclusion of the results of modeling the relationship six variables studied were generated in this study include: Organizational structure directly affect the effectiveness of the organization, but did not have any direct contact with the culture and climate of the organization, A direct relationship was significant relationship between culture and organizational climate to organizational effectiveness, as well as the subsequent results the findings in this study were the existence of a significant direct relationship between organizational climate with the culture of the organization.

Suggestions from this research for the leadership of the university can be used as a tool for the evaluation of faculty performance, management and governance colleges, as well as the development and strengthening of cultural and university conductive climate for learning in higher education. For the authorities in developing and improving the quality of private universities. For further research is still many variants of factors and construct research that has not been investigated in this study.

Keyword: Organizational structure, organizational culture, organizational climate, organizational effectiveness.
ABSTRACT

Consumer decision to make a purchase in a shopping place influenced by many factors. Surabaya has a place to shop various fish processed products called Sentra Ikan Bulak (SIB) is interesting to inquire how the behavior of consumers. This study aims to analyze consumer behavior of Sentra Ikan Bulak. This study uses qualitative research methods with data used are primary data, primary data with interviews of 19 informants. The result of the research shows that factors influencing consumers shopping to Sentra Ikan Bulak shows 6 factors consist of; Location, Facilities, Product Diversity, Price, Parking and Seller's Choice. The Result of Consumer Behavior Analysis from Consumer Habit category of shopping to Bulak Fish Center is mostly declared uncertain, and for the day of visiting most of the visiting on Sunday and Saturday.

Keywords: Consumer Behavior, Shopping Center, fish.
Does Intellectual Capital have a Positive Effect on The e-Service Innovation of Public Employees?

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Abstract
Intellectual capital (IC) and e-service innovation has emerged as one of the most popular areas of research in the field of public administration nationally and internationally. This study investigated the relationship between IC and e-service innovation. IC was found to be a significantly better predictor of e-service innovation. The implications of this finding for public administration research and practice are discussed. The self-administered questionnaire was distributed at the the Main Port Authority Office of Tanjung Perak Surabaya. Using a sample of 84 randomly selected employees were collected from them.
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ABSTRACT
The formal establishment of ASEAN Economic Community in 2015 marks a distinctive change of how business runs in the region. Within free movements of goods, services, and investments, as well as freer flow of capital and skills, The Small and Medium Enterprises in Surabaya, are forced to adjusting itself in order to survive the competition. One of the challenges in the adjustment is the intercultural business communication. The SMEs in Surabaya have to equip themselves with soft skills needed to be able to communicate and to market their products and services abroad. Of course this can not be done solely, a lot of sectors should be contributing in making this goal achieved. This paper aims to identify which sectors could contribute in improving the intercultural business communication skills needed for SMEs in Surabaya. Based on qualitative data collected, we concluded that the government, private sector, higher education, and civil society could contribute more in improving the intercultural business communication skills for SMEs in Surabaya under Quadruple Helix Model.

Keywords: Business Communication, Intercultural, SMEs, Quadruple Helix Model
IMPLEMENTASI KEBIJAKAN PROSEDUR PENGAWASAN DAN PENGENDALIAN KAWASAN MANGROVE DI WILAYAH KOTA SURABAYA (Studi Kasus Implementasi Peraturan Walikota Surabaya no. 65 Tahun 2011 di Pantai Timur Surabaya)

Oleh:

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ABSTRACT

East Coast Surabaya or better known as Pamurbaya, is a mangrove forest area on the east coast of Surabaya and is located in the eastern part of Surabaya which is directly adjacent to Madura Strait. The condition of Mangrove Forest in Pamurbaya from year to year continues to be degraded. Illegal logging for the opening of ponds, settlements, recreation or timber is the cause of destruction of mangrove forests in Pamurbaya. Monitoring policy and control of mangrove area is a policy made to protect and conserve mangrove area. Monitoring and controlling policy of mangrove area in Surabaya is contained in Mayor of Surabaya Regulation No. 65 Year 2011. This Mayor Regulation adopted various policies made by central government. The purpose of this policy is to maintain and preserve mangrove well in all mangrove areas in Surabaya.

The purpose of this research is to know and analyze policy of monitoring and controlling procedure of mangrove area in Surabaya city area, especially Pamurbaya region and factors supporting and obstructing policy of monitoring and controlling procedure of mangrove area in Surabaya city area, specially in Pamurbaya region. This research uses qualitative descriptive approach with data retrieval technique by observation, in-depth interview, and documentation. While the data analysis techniques used in this study using data collecting, data reduction, display data and withdrawal conclusions.

The results of this study in perspective Merilee S. Grindle that the implementation of Mayor of Surabaya Regulation No. 65 of 2011 on procedures for supervision and control of mangrove areas in the city of Surabaya is good.

Keywords : Implementation, Regulation, Mangrove
Evaluating efficacy of tempeh extract supplementation on oxidative stress biomarkers and cytokines among \textit{Rattus norvegicus} infected by \textit{Mycobacterium tuberculosis}

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Abstract.

Background: Tempeh is a soybean-based food product originating from Indonesia which has the potential as an affordable nutritional support to accelerate recovery process of tuberculosis (TB). Objective: The purpose of this study was to evaluate the effect of ethanolic tempeh extract supplementation on the biomarkers of oxidative stress and proinflammatory cytokines in male rats (\textit{Rattus norvegicus}) infected by \textit{Mycobacterium tuberculosis}. Method: The method was an experimental laboratory randomized posttest-controlled design. Thirty-five male rats were divided randomly into five groups and infected by \textit{Mycobacterium tuberculosis} strain H37RV 50μl intratracheally. The first, second and third groups received the extract tempeh supplement at concentrations of 200, 400 and 800 mg/kg body weight respectively. The supplementation was performed on day 30 after infection procedure and administered orally for 14 days. The fourth group was a control group (CMC-NA), and the rats in the fifth group were to be sacrificed to confirm the presence of TB using histopathology analyses. Total antioxidant capacity (TAC) and Malondialdehyde (MDA) levels were assessed using colorimetric method while C-reactive protein (CRP), tumor necrosis factor alpha (TNF α), interferon gamma (INF γ), interleukin (IL)-2, IL-6, and IL-10 were measured by Elisa method. Result: There were no significant differences in the levels of MDA, CRP, TNF α, IL-2, IL-6, IL-10 at all concentrations in comparison with control. Tempeh extract provision increased levels of TAC at 200 (\(p = 0.011\)), 400 (\(p = 0.027\)), 800 (\(p = 0.029\)) kg/ body weight concentrations without dose-dependent characteristic compared to control. At the concentration of 800 mg/kg body weight supplementation, the level of INF γ was lower than control (\(p = 0.0047\)). Conclusion: Supplementation of ethanolic tempeh extract has not shown positive effect and described weak efficacy on oxidative stress biomarkers and proinflammatory cytokines in the animal model of tuberculosis.

Keywords: Tempeh extract, tuberculosis, oxidative stress, cytokines, supplementation
Abstract

Belandingan Village is one of Bali aga villages in Kintamani mountain area. However, unlike other bali aga villages in Kintamani, Belandingan Village has not been well documented as an bali aga village in Bangli district because it is still very rarely used as a research object. Belanding itself has many cultural potentials both tangible and intangible. The integrity of the space pattern, the uniqueness of the tradition which is still being carried out to date and supported by beautiful landscapes makes Belandingan village has a cultural heritage attraction that can be developed as a heritage tourism. Belandingan Village is also included in 15 villages supporting the Mount Batur tourism area, which became a world geopark by UNESCO in 2013. Mount Batur became the first world Geopark in Indonesia. The method chosen in conducting potential mapping is an exploratory qualitative method through survey methods, interviews and observations. This method was chosen because of the lack of information obtained by the author regarding Belandinan Village. The survey was conducted to obtain information about settlement patterns. Interviews with community leaders were conducted to obtain socio-cultural data from the community. The method of observation is done by the writer in making observations on the implementation of the mock ceremony which is found in the comparison to find out the uniqueness of the process. These observations take a I time because the procession takes at least 18-36 hours. Data collection is done through primary and secondary data collection.

Key Words: Bali Aga Village, Cultural Heritage, Qualitative Method
MENYERAHKAN PRODUK BIOFARMAKA MENUJU INDONESIA SEHAT

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Abstrak

Biofarmaka merupakan sediaan hayati yang berasal dari alam yang memiliki khasiat sebagai obat. Produk biofarmaka dikategorikan kedalam tiga jenis yaitu jamu, obat herbal terstandar (OHT), dan Fitofarmaka. Tujuan penelitian untuk mengetahui manfaat produk biofarmaka dalam menuju Indonesia sehat. Penelitian deskriptif kualitatif dengan metode pengumpulan data observasi dan pencatatan dokumen. Hasil penelitian menunjukkan bahwa manfaat produk biofarmaka dapat meningkatkan kesehatan di masyarakat, lebih efektif, lebih terjangkau, dan efek samping relatif lebih kecil. Penggunaan produk biofarmaka memiliki daya saing global yang dimanfaatkan oleh penduduk beberapa negara seperti: RRC (Republik Rakyat China) mencapai 90%, Chile mencapai 71%, Kolombia mencapai 40%, Perancis mencapai 49%, Kanada mencapai 78%, Inggris mencapai 60%, Amerika Serikat mencapai 42%, dan Jerman mencapai 73%. Dalam menuju Indonesia sehat produk biofarmaka dapat dimanfaatkan. Berdasarkan hasil penelitian bahwa produk biofarmaka dapat dimanfaatkan dalam pelayanan kesehatan formal untuk meningkatkan derajat kesehatan di masyarakat menuju Indonesia sehat.

Kata Kunci : Manfaat, Produk Biofarmaka, Indonesia Sehat.
GLOBAL ERA OF GENGGONG PERFORMANCE EDUCATION IN BATUAN, SUKAWATI, GIANYAR VILLAGE.

Abstract

The performance art of Genggong Batuan in the 1973 era had become a performance art that attracted particular attention to the performing arts of traditional Balinese entertainment. The uniqueness and uniqueness of the form of the work was not enough to be able to maintain its popularity on the entertainment stage. One of the causes of the existence of Genggong art became unpopular in the life of the people of the Global era was the role of education which was allegedly not in favor of the Genggong art like in Batuan Village.

This writing study departs from a qualitative method designed to obtain answers in more depth. Data analysis is done by observing the validity of the data directly in the field other than stored documentation. The theory used to dissect the power issue is taken from Boerdeu's power theory which emphasizes the realm of power and also the habitus that occurs in society.

The final result of this study is able to provide clarity and findings related to the art education process related to the extinction of Genggong performance art in Batuan Village.

Keywords: Global Era Power, Genggong Performing Arts Education, Batuan Village

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THE DEVELOPMENT OF INTERACTIVE POP-UP BOOK TO INCREASE SELF-DEFENSE ABILITY

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Abstract

The aim of the study was to develop an interactive pop-up book to improve the self-defense abilities of Group B kindergarten students in Surabaya. A sample of 49 kindergarten students was determined by random multi stage sampling. The research method consists of five stages, Phase I determines the needs analysis by conducting library research, institutional assessment, media analysis needs. Stage II media conceptual planning. Phase III develops media based on the validation of experts. Stage IV applies the media from one-to-one tests, small group tests, to effectiveness tests that are implemented into the sample. Stage V revision based on evaluation of the effectiveness of the results of revision-testing objectives to make the final model. Data analysis used qualitative and quantitative analysis. Expert validation of children's self-defense ability proves that the value of each indicator is above the critical value of 0.30, so that all indicators are valid to measure self-defense ability in accordance with early childhood development (5-6 years). The results showed that reading sexual prevention interactive pop-up books had a significant effect (P <0.05) in improving children's ability to defend themselves.

Keywords: learning media, interactive pop-up book, self-defense ability
The Development of Traditional Batik Patterns from Sacred to Profan of Western Regional Province of East Java

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Abstract

The main problem is that batik patterns in East Java Province do still have aspects of function, philosophy and aesthetics of batik in the archipelago culture as found in traditional patterns of ancestral heritage from the past or have undergone changes in transformation or deformation of forms and meanings, because this is handled by the current generation, given that cultural development is usually in accordance with the development of civilization. The purpose of this research is to provide documentation of traditional batik patterns into batik patterns that exist today to make inspiration for the development of art in the future without ignoring the concept of the predecessors and the technology used. This research is a qualitative research about the development of traditional batik patterns from various districts in the western region, East Java province. The pattern studied includes one pattern from Madiun, Trenggalek, Pacitan, Kediri, Mojokerto, Sidoarjo, Lamongan, Tuban through the study of visual languages, mythical aesthetics and cosmological philosophy as well as data collection methods and techniques. The results of research in various regions in the province of East Java found the tendency of traditional style batik patterns that already exist were influenced by the pattern of batik style in Central Java Province.

Keywords: patterns, batik, profan, sacred, development
Abstract

This study aims to analyze the attributes of dragon fruit that becomes consumer preference in consuming dragon fruit and analyze the relationship of consumer characteristics with dragon fruit consumption. Consumer preferences were analyzed by multi-beat Fishbein, while to know the influence of consumptive characteristics on dragon fruit was used multiple linear regression analysis. To support multivariate analysis of Fishbein and multiple linear regression were taken by using accidental sampling method 80 respondents. The results show that the taste becomes the main preference for consumers to buy dragon fruit. Consumer characteristics that significantly influence dragon fruit consumption are age, income, and the number of family dependents.

Keywords: Preference Consumer, Dragon Fruit, Multiple Linear Regression Analysis, Fishbein Multiattribute Analysis
Cubily Artificial Agregat Sebagai Pengganti Kerikil Alami Untuk Campuran Beton Ringan Ramah Lingkungan

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Kata Kunci : cubily, artificial, agregat, beton ringan, ramah lingkungan
Exploring the Type of Fern (Pteridophyta) to Realize the Wonorejo Surabaya Magrove Forest Ecology Balance

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Abstract. Plant Fern (pteridophyta) as plant communities in biodiversity have important ecological functions in the mangrove forest ecosystem. The research objective is to determine the type, diversity index and place of life of nail plants. This research was conducted from March -June 2018 in the Surabaya mangrove Wonorejo. Descriptive type of research to obtain information about species diversity of sporangium, diversity index and influential environmental factors. Roaming method by direct observation and exploring each location point that can represent the types of ecosystems or vegetation in the area under study. Samples were obtained from 5x5m soil plots at 5 research stations. The results is diversity index of species of ferns were found to be low, there were only 3 types of nail plants from the pteridaceae family, with Acrostichum aerum species, Acrostichum speciosum and Pytirogramma calomelanos. Wonorejo Surabaya mangrove forest is not suitable as a place to live for nails such as habitat, temperature, humidity, light intensity and wind speed.

Keywords: nail plant, mangrove forest
Aerobic Composting of Rumen Content Waste and Rice Straw at Different C/N Ratios

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Abstract. The aim of the research is to produce the quality of organic fertilizer that meets the standards of the Minister of Agriculture No. 70 of 2011 concerning Organic Fertilizers, Biological Fertilizers, and Land Improvement. The composting process uses 20 kg of rumen contents of Madura cattle and rice straw is placed in the reactor for 50 days. The raw material consists of three variations: 1) 60% rumen content and 40% rice straw, 2) 50% rumen content and 50% rice straw, 3) 40% rumen content and 60% rice straw. Eight standing reactors with a capacity of 120 L were used in this study. Each reactor is equipped with leachate outlets at the bottom, gaps for aeration, and sampling. Parameters are measured by the C / N ratio, macro nutrients (phosphorus and potassium), temperature, and pH value. The results showed the composition of optimum rumen content waste with the addition of 40%: 60% rice straw. In this reactor, the C / N ratio decreased by 15.91 to 13.25, the P concentration increased by 4.27 to 6.12, the K concentration increased by 5.46 to 7.55, the temperature range was 29.80°C-33.70°C, and the pH value slightly fluctuating, 6.71 to 6.93.

Keywords: aerobic, carbon, composting, rice straw, rumen content waste, nitrogen.
Abstract. The implementation of Sports and Health Physical Education (PESH) learning in schools is often found that many teachers have learning difficulties because they use a thematic approach, in the previous curriculum in PESH as a single subject. The research objective measures the implementation of learning in the PESH through a thematic approach. PESH teacher subject in Surabaya at the primary level. Instrument development techniques are carried out in three stages. (1) Literature review, Nominal Group Technique (NGT) by 15 PESH teachers, as the final result of the first phase was Draft Instrument. (2) Validation, instrument revision that is ready to be tested (3) factor analysis. Factor analysis begins with the initial test results of the KMO Bartlett test of 0.672> 0.05, meaning that it can proceed to the analysis factor, after that the value of the Anti-Size Sampling Adequacy (MSA) matrix is 19 points> 0.05, while 77 items <0.05 continued while 19 items were deleted. The results showed that 77 matrix components were rotated to 27 items after the instruments and analysis instruments were ready for use.

Keywords: Developing instrument, PESH, Elementary School
SMART PEOPLE AS A PARTICIPATION MODEL FOR INFRASTRUCTURE DEVELOPMENT

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Abstract: The research objective is to identify the coastal community participation model for the development of infrastructure that has been built with a slum-free city program (KOTAKU). The participation model smart city indicator is smart people. Research location Coastal village two areas in Sedati. Both villages have received the KOTAKU program in order to improve infrastructure. Qualitative and quantitative descriptive research methods with questionnaire and interview techniques. The analysis technique use Arnstein typology percentage and scoring. The results, seven indicators of the KOTAKU program that was built with the level of development achievement of 100% drainage, 100% installation of drinking water in the village Banjar Kemuning and 88% in the village Gisik Cemandi, waste treatment program and 100% fire disaster mitigation, 100% toilet construction in Banjar Kemuning and 87% in Gisik Cemandi, repairs to uninhabitable houses and paving 100% environmental roads. The participation model was developed with an indicator of smart people in the form of the contribution of labor and the ability to provide snack foods included in step 6 for Banjar Kemuning, which means that the community has been able to become a partner, and step 5 for Gisik Cemandi which means that the community is still used as a reference.

Keyword: Arnstein typology, Coastal area, Infrastructure, KOTAKU, Smart people
Using Contextual-Based Questions To Improve Students' Problem Solving Skill In Mechanical Vocational Schools

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Abstract. The study was aimed to improve students’ problem solving skill in mechanical vocational school. This study was conducted at SMKN 1 Jetis Mojokerto East Java, Indonesia. The result showed that students’ learning outcomes improved from 18% to 85% in their problem solving skill. The students who have skill in solving contextual-based problem will be able to solve problem well or understand overall and deep concepts of mathematics as the basis for other subjects in mechanical vocational school that will also increase. Therefore, it is also expected that the better use of mathematics will help them to think critically and logically in solving problems in daily life, especially students from mechanical vocational school to prepare them for the working world.

Keywords: contextual-based problem, mechanical vocational school
Influence of Protein Pili and Filtrat of *Escherichia coli* Culture Medium on Motility and Vitality of Human Spermatozoa: In Vitro Study

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**Abstract.** This study aims to determine the effect of *E. coli* pili protein, filtrate media culture of *E. coli* and mixture of *E. coli* pili protein and *E. coli* filtrate on the motility and vitality of human sperm in an in vitro. The method, obtaining *E. coli* pili protein is *E. coli* prepared by do culture on TCG media, then cutting Pili *E. coli* using omnimixer. Pili has been dialysis, electrophoresis and electroelution. *E. coli* filtrate was obtained by the method of culturing *E. coli* on Mc Conkey and BHI media. *E. coli* culture on BHI media was then centrifuged. The supernatant produced from centrifugation was filtered using a 0.22µm milipore filter. 10 samples of normal sperm, in preparation using Percoll method. Spermatozoa were incubated with *E. coli* pili protein, *E. coli* filtrate and a mixture both of them on U-base microplate. Incubation was performed for 1 hour. Observations by a light microscope. The results is Protein pili *E. coli*, *E. coli* filtrate and a mixture of *E. coli* pili proteins and *E. coli* filtrate significant effect on sperm motility (p = 0.000) and on sperm vitality (p = 0.000). The conclusion is *E. coli* pili protein and *E. coli* filtrate are potentially used for spermicidal materials.

**Keywords:** Motility, Vitality, Protein Pili *E. coli*, Filtrat Of *E. coli* Culture Medium, Human Sperm
Abstract. Shape of columns that have been often used in the construction of the structure is a square-shaped column with a system of confinement in the shape of square (conventional) and circle-shaped columns with a circular spiral system of confinement. However, the shape that is often used in planning and execution is a square-shaped column with conventional confinements. Some examples of structural failure begin from the failure of the column to ensure its ductility due to the lack of attention to the confinements system so as not to meet the design concept of “strong beam column”. Several suggestions have been made by previous researchers to improve the ductility of the columns, some utilizing fine mesh, reinforcement, shape of confinement, confinement with even reinforcement that utilize configuring and confining systems. Therefore, the authors analyzed the potential of these proposals to find out the advantages, lacks and opportunities to obtain the shape and configuration of the confining system is estimated to be better than the existing confining system before. The result of the potential analysis that have been carried out obtained a preliminary hypothesis that the increase in strength and ductility of column depends on increasing the area of the concrete core by creating an adaptable and compatible with shape of the column to obtain an effective concrete core area, a compact shape of reinforcement, avoiding the point of connection to the confinement in the corner area, minimize the curve of the concrete core and even more so by utilizing the interlocking system to maintain the cohesiveness or compactness of the reinforcement system.

Keyword: confinement, square spiral, interlocking, square column
ABSTRACT. The ASEAN Economic Community (MEA) is a free market in the ASEAN region that will impact on economic performance in the territory of Indonesia. The impact can be market opportunities and negative effects of lower competitiveness. Farmers are farmers with their products. Farmers have to produce with low prices and good quality, then the solution existence of the Trading house is expected. In Sidoarjo there is a Trading house to provide efficient and effective marketing solutions like farmers, but how the performance of the trading house, then in this study readiness Trading house in helping farmers, local governments as regulators.

Keyword: Trading house, Agriculture, Marketing, MEA
COUNTERPRODUCTIVE WORK BEHAVIOR AS AN INTERVENING VARIABLE IN EMPLOYEE ENGAGEMENT AND COMMITMENT RELATIONSHIP TO EMPLOYEES PERFORMANCE

Study on Regional Financial and Asset Management District Government Malang

By Yupono Bagyo and Annastasya Lilla Savitri

Human Capital have long been interested in the role of performance appraisal on how employees think and feel about their performance, as well as what employees are willing to dedicate to the organization. This study tested the employee engagement and organizational commitment were able to reduce counterproductive work behavior (CWB) and be able to improve employee performance, and whether counterproductive work behavior was able to mediate the influence of whether employee engagement and organizational commitment towards employee performance. The author administered 89 employees of BPKAD Malang Regency were examined, using purposive sampling method. Re used to evaluated the qustionnaire contents, the result indicatd a significant between variables. The results of this study indicate that employee engagement and commitment have a negative influence on CWB and have a positive influence on employee performance, because employee engagement can increase the influence of commitment to employee performance. Meanwhile, counterproductive work behavior negatively affects employee performance. The results of research on commitment and employee engagement have conflicting results on employee performance if through counterproductive work behavior. Because the decline in counterproductive work behavior has little effect on increasing commitment and employee engagement on employee performance.

Keywords: Commitment, Employee Engagement, Counterproductive Work Behavior, Employee Performance
Banking is an important element in the development of a country. This is reflected in the understanding of banking in a juridical manner, namely as a business entity that collects funds from the public in the form of deposits and distributes it to the public in the form of credit and other forms in order to improve the lives of many people. In addition, the function of the bank as a financial intermediary institution is crucial for the success or failure of the country's development. The existence of the bank itself is highly dependent on the trust of the community. The principle of trust is the spirit of banking activities (Umam, 2011: 1). Continuously developing fast Islamic banking is a positive thing. But on the other hand, competition between Islamic banks will become increasingly difficult. This is what must be anticipated by Islamic banks in order to survive in the competition so that they do not experience business failure (bankruptcy). Strategic steps that can be taken by banks in winning the competition, one of which is by improving financial performance. Improved financial performance has a tremendous impact in the effort to maintain the trust of customers to remain faithful to their services. Indonesia as a country with the largest Muslim population in the world, apparently does not promise sharia banking in Indonesia to be number one, this is very unfortunate given the potential of Indonesia is actually quite large. Already 23 years of Islamic banking began to emerge to compete with a system that had been the only player in the banking realm, namely the conventional system. This study aims to find out the management process of other Southeast Asian Islamic banking systems, its growth and development, and analyze the comparison between Islamic banking in Indonesia and other Southeast Asian countries. So it is expected to be able to find answers to the researchers' questions about "why Indonesia as the country with the largest Muslim population in the world lost in the development of the Sharia Banking Industry compared to other Southeast Asian countries, especially Malasya and Brunei Darussalam".

Key Words : Shariah Banking, management process, analyze the comparison
The Effect Of Regional Real Revenue, General Allocation Fund And Revenue Sharing Fund With Moderation Of Economic Growth In Capital Expenditure.

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ABSTRACT

This research aimed to examine the effect of regional real revenue, general allocation fund and revenue sharing fund on capital expenditures, as well as the effect of regional real revenue, general allocation fund and revenue sharing fund with moderation of economic growth in capital expenditure. This research was conducted at the district/city in the province of east java. The sampling technique used was purposive sampling, and there are 36 district/city in province of East Java into the sample. This research used the realization of budget reports and PDRB tables from 2013-2015 as the sample. The method of analysis used to test the hypothesis of Moderated Regression Analysis (MRA). The results of this study indicate that the effect of regional real revenue and general allocation fund has effect on capital expenditures, whereas revenue sharing fund have not an on capital expenditures. Moderating variables (economic growth) capable of moderating variable revenue sharing fund, but not able to moderate variable regional real revenue and general allocation fund on capital expenditure.

Keywords: Capital Expenditure, Regional Real Revenue, General Allocation Fund, Revenue Sharing Fund, Economic Growth.