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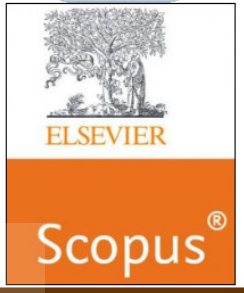
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Communal Brand: The Development Of Geographical Economics Dawuhan Mangli

M Zulianto, B Aprianto, T Kartini, Y F Akbar, Tiara

This paper discusses the complex relationships between the formation of communal brand geography and economic growth. We are investigating ways in which communal brand geography may be the issue directly to the growth, controlling for economic policies and institutions, as well as the effect of geography on the policy choices and institutions. We find that the location and climate have a major impact on the level of revenue and earnings growth. In addition, geography seems to be a factor in the choice of the formation of communal brand itself. When we identify a geographic area that is not conducive to the growth of the modern economy, we find that much of this area has a density and fast population increase. In addition, much of the revenue increase may take place this upcoming community in this area are not benefitting geographically.

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1-4

The Effect Of Price, Service Quality, Customer Value, And Brand Image On Customers Satisfaction Of Telkomsel Cellular Operators In East Java Indonesia

Diah Yulisetiarni, Yongky Ade Prahasta

The purpose of this study is to determine the effect of price, service quality, customer value, and brand image on customer satisfaction. The sampling method uses purposive sampling. The sample of this study amounted to 200 respondents. The analysis method used multiple linear regression with SPSS (Statistical Product and Service Solution). The results of this study price have a significant positive effect on customer satisfaction. By with the benefits obtained by customers. Service quality has a positive effect on customer satisfaction. Quality of service provided can to meet the needs and desires of consumers as well as customer complaints, criticism, suggestions, or just asking for help responded quickly with a solution by the customer care. Customer value has a positive effect on customer satisfaction. Benefits received can increase consumer trust. Consumers will be satisfied with the services provided. Brand image has a positive effect on customer satisfaction. The image of the Telkomsel cellular operator brand can be said to be good, well-known, easy to remember, and able to create consumer interest in the products offered.

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5-9

National Strength On Construction Of International Freight Terminal In Entikong Indonesia

Elyta, Hasan Almutahar, Zubair Saing

This study aims to analyze social strength elements in supporting the construction of an international freight terminal in Entikong, Indonesia. Data collection obtained from interviews and literature studies that are relevant to the discussion in this paper. The results of the study are analyzed into two elements of national strength based on Jablonsky's theory (2008: 148); (1) the determinants of natural forces include (a) geography that creates opportunities based on proximity to the Malaysian state, (b) natural resources in the border area of Entikong can support potential new development in the industrial sector that supports the construction of international freight terminals; and (2) Determinants of Social Strength among others the economy by opening access to economic sector development along the border area of Entikong and Tebedu Malaysia.

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10-15

Methodology For Course Outcomes Attainment Analysis For An Engineering Course

Pravin G. Kulkarni, Ami R. Barot

Accreditation is a quality assurance and improvement process that determines whether the set educational objectives meet a general standard of quality. It is an endorsement of how good these expectations are satisfied. Outcome based education system (OBE) emphasizes on quantifying what the students are capable of doing. Program outcomes represent the knowledge, skills and attitudes the students should have at the end of program. Program outcomes can be directly measured through Course Outcomes which are broad statements indicating knowledge and skills the student acquires at the end of a course. The outcome based education model is based on defining various parameters called as Graduates Attributes. Assessment of learning outcomes is one of the key aspects of OBE model. This is done through assessment of course outcomes for each course in a program. In this paper, an approach based on assigning two step weights for assessment of course outcomes is presented. The method proposed provides the result of course outcome attainment. The results are obtained through a program in MS Excel.

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16-19

Mapping Of Regional Inequality In East Java Province

Duwi Yunitasari, Jejeet Zakaria Firmansyah

The research objective was to map the inequality between regions in 5 (five) Regional Coordination Areas (Bakorwil) of East Java Province. The research data uses secondary data obtained from the Central Bureau of Statistics and related institutions in each region of the Regional Office in East Java Province. The analysis used in this study is the Klassen Typology using time series data for 2010-2016. The results of the analysis show that: a. based on Typology Klassen Bakorwil I from ten districts / cities there are eight districts / cities that are in relatively disadvantaged areas; b. based on the typology of Klassen Bakorwil II from eight districts / cities there are four districts / cities that are in relatively disadvantaged areas; c. based on the typology of Klassen Bakorwil III from nine districts / cities there are three districts / cities that are in relatively lagging regions; d. based on the Typology of Klassen Bakorwil IV from 4 districts / cities there are three districts / cities that are in relatively lagging regions; and e. based on the Typology of Klassen Bakorwil V from seven districts / cities there are five districts / cities that are in relatively disadvantaged areas.

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20-27

Development Rotating Bending Test For Learning Testing On Course Strength Of Material

Riski Elpari Siregar, Nizwardi Jalinus, Syahril

This study aims to expand the fatigue strength test material for rotating loading material, with the modified the existing fatigue test equipment and can be used appropriately, so that students understand performing material testing procedures that will improve students' skills in testing. The development of test equipment is carried out by the method of literature study, and the design of tools through the calculation and drawing of project images. Then proceed with the manufacturing process, and then test the tools. The designed test equipment issued a variable time and number of rotations. The results of the study were obtained by the material fatigue strength test equipment, with the specifications of the test shaft rotational speed of 2850 rpm and the maximum load that can be given 100 kg.

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28-30

Improving Communication Ability And Mathematical Self Efficacy Of Elementary School Students

Through The Realistic Mathematics Learning Approach

Sakinah Ubudiyah Siregar, Eva Julyanti, Jainir Efendi Siregar, Ronal Watrianthos

The research activity was focused on improving communication skills and mathematical self-efficacy of students who obtained realistic mathematics learning approaches in elementary schools. The purpose of the study was to determine the improvement of communication skills and mathematical self efficacy of students who obtained realistic mathematics learning approaches better than students' mathematical communication skills who obtained a conventional approach. Improvement of communication skills and mathematical self efficacy of students who get a realistic mathematics learning approach will be conducted through a study of



action studies on the subject of research namely elementary students in several schools around Kantauprat City. Therefore the research that would be used was following a series of quasi-experimental studies. The results of the calculation of the two-way ANOVA calculation of the post-test minimum self-efficacy scores of students in the class given a realistic approach were 58.0 better than students in the class given conventional learning 43.0, as well as the maximum self-efficacy scores of students in the class given a realistic approach 69.0 is better than students who were given conventional learning 58.0, thus with a posttest self-efficacy score for the class given a realistic approach 62.633 higher than the posttest average of students for the class given conventional learning 49.667 and a significant level of 0.000. In order that significant 0,000 <0,05 means H0 is rejected so it could be concluded that the increase in mathematical communication skills of students with realistic approaches is higher than students given conventional learning.

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31-33

Achieving Self-Sufficiency Through Sugar Supply And Demand Policies (Dynamics System Approach)

Duwi Yunitasari

In 2010 to 2016, Indonesia imported white crystal sugar (WCS) to fulfill the household consumption. The objectives of this research are to: 1) examine the possibility of achieving self-sufficiency of WCS without the policy of National Sugar Industry Revitalization (NSIR), 2) analyze the impact of NSIR policy on the achievement of national sugar self-sufficiency, and 3) formulate an alternative policy of WCS production. This study used primary and secondary data. The primary data collection was conducted by interviewing the respondents, including sugar cane farmers, representatives from the Center for Sugar Research and Development (P3GI), National Plantation Company (PTPN) XI, Indonesian Ministry of Agriculture, as well as from the sugar factory representatives. Secondary data were taken from related institutions, i.e., Indonesia's Central Bureau of Statistics (BPS), sugar factory, and Indonesian Ministry of Agriculture. The modeling simulation is conducted using Powersim studio software to analyze national sugar industry from 2010 to 2025. The analysis period is based on the implementation year of the NSIR policy. The model behavior in actual condition indicates that national self-sufficiency is not achieved without the implementation of NSIR policy as indicated by the negative supply of WCS during the simulation period. Therefore, a joint NSIR policy is required to achieve national self-sufficiency. Applying 8 (eight) policy scenarios, results of the research show that: 1) in partial, the scenario of NSIR policy fails to support the achievement of national sugar self-sufficiency, 2) policy simulation of scenario 5 (demand side), i.e., the reduction of WCS consumption can make Indonesia achieves national sugar self-sufficiency, and 3) simultaneous NSIR policy on scenario 4 (supply side), i.e., the land expansion, productivity, and sugar yield, can make Indonesia achieves national sugar self-sufficiency.

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34-40

Motives Influencing Facebook Usage By Students And Its Relationship With Facebook Addiction Disorder

Ronal Watrionthos, Ibnu Rasyid Munthe, Rahma MutiCah

Along with the rapid development of Social Networking Sites (SNS), social media, recently, has become a lifestyle for many people around the world, including in Indonesia. The data in January 2018 showed that in Indonesia out of 132.7 million internet users, almost all (131 million), or up 23% from the data in 2017, were Facebook users with the dominance of 18-24 years old, 35% of whom were the highest active users. The rapid growth of Facebook users annually in Indonesia, especially in the age of students and college students, encourages researchers to conduct many empirical studies of Facebook use among students. There is a tendency for using Facebook continuously to create FAD effects (Facebook Addiction Disorder) among students and can affect the spirit of learning. This study also discusses what is the motivation for using Facebook and seeing the potential for FAD to occur. In this study, an online survey over 375 respondents from several students in Labuhanbatu District was conducted. To explore respondents' motives in using Facebook, respondents were given questions that were divided into the following five motives: social interaction, leisure time, entertainment, friends, and communication. While to look for potential addiction, respondents were given questions using the Bergen Facebook Addiction (BFAD) scale. In getting a connection between the motives for using Facebook and Facebook Addiction, the data was tested by analysis of variants (ANOVA) and partial tests using SPSS software. The results obtained were 65.8% of participants were at a moderate level, while 20.3% were at a low level, and only 13.9% of participants were at a high level. While the most significant motive affecting respondents in using Facebook is the motive to fill the time and motives for communicating.

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41-44

Need Of Carbon Foot Printing Reduction By Utilization Of Renewable Energy Sources - A Brief Research Review

Manjusha Sham Patil

Energy performs the critical part within the improvement of the area. Growing addiction upon fossil energy sources offers triggered severe issues in the nearby as well as worldwide amounts. Cropping associated with energy depends upon the actual accessibility to assets in addition to the financial viability as well as specialized feasibility associated with conference the actual need. Nevertheless, energy usage within non-urban Indian is basically determined by non-conventional energy resources because of the accessibility, chance of quick removal, as well as suitable systems. Globalization as well as major opening associated with Indian native marketplaces offers resulted in urbanization using the improved energy need within the commercial as well as national infrastructure industries. Hybrid renewable energy systems have become the well-liked because stand-alone energy systems with regard to supplying electrical power within remote control places because of improvements within renewable energy systems as well as following increase within costs associated with oil items. The Hybrid energy program, or even Hybrid energy, generally includes several renewable energy resources utilized collectively to supply elevated program efficiency in addition to a higher stability within energy supply. Hence, hybrid renewable energy generation is the futuristic solution for carbon foot printing

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45-47

Empirical Review Of Progressive Research For Fuel Cell And Parametric Evolution

Manasi P. Deore

Environment change is amongst the greatest ecological issues that individuals have confronted, and also the key trigger driving it is the reliance on fossil powers. Burning up fossil fuel, oil as well as other fossil energy sources is the major means through which many of us generate electrical power, it also contributes to major levels of air-borne pollutants within our atmosphere and water. By making use of green energy resources, we likewise decrease our reliance on fossil energy resource gasoline and also oil supplies, so that we are able to prevent the growing cost of energy expenses and enhance our power stability. A microbial fuel cell (MFC) is a bio-electrochemical system that makes use of the ability of respiring microorganisms to transform natural and organic substrates straight into electrical power. At its key, the MFC is a fuel cell, which in turn converts chemical substance vitality into energy employing oxidation lowering responses. This paper presents focus on the global development overview of MFC.

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48-50

Effects Of Rainfall Patterns On The Stability Of Upper Stack Of Open Pit Slopes

Wang Yiming, Trevor Slame, Victor Mwango Bowa

Since mining started in 2008, Lumwana (Malundwe) Open Pit has experienced slope failures in the saprolite formation in the upper stacks of the pit's slope, during rain seasons. Comprehensive integrated studies have been performed to investigate parameters controlling the stability of the upper stack of Lumwana (Malundwe) open pit due to rainfall pattern. The study results reveal that the saprolite soils' matric suction increases with the decrease in rainwater content in the saprolite soil, leading to an increase in shear strength of the slope for the upper stacks. Once shear strength is sufficiently increased, the saprolite soil slope become sufficiently stable in dry season. During rain season, the negative pore pressure tend to reduce towards zero and even become positive with rising water table. Such a change in pore water pressure causes a decrease in the shear strength. Once the shear strength is sufficiently decreased, the upper slope becomes instable that slope failure may occur. Generally, the events of rainfall gives an impact on the degradations of the safety factor of upper stack of Lumwana (Malundwe) open pit.

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51-60

Song And Typography: Expressing The Lyrics Visually Through Lyrical Typography

Agung Zainal Muttakin Raden, Muhammad Iqbal Qeis

A song is one of the media used to express emotions or convey messages. Aside of music and rhythm, the lyrics also plays an important role to convey these messages. However, song lyrics are usually written in the form of rigid text with a monotonous form, so that it only served as a pointer without any expression and emotional value. This article will discuss the way the text of the lyrics can help express the emotion and message within the song by using lyrical typography. This article discussed an experimental research method done with the approach of typography, semantics, and illustration to create a visual experience in writing the song lyrics. The result compiles the illustrations from the said experiments and show that lyrical typography can help

express the song so that the audience can see the visualization created and gain a new experience of the song through the use of this lyrical typography.

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61-64

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Green Cloud Computing: Carbon Emission Impact And Energy Efficiency

Navin Agarwal

This paper compares between cloud computing and GCC. It points out the various pros and cons between the two and provide survey for the energy efficiency methods. This paper focuses on the use of the recently developed green cloud computing (GCC) in reducing the carbon emission induced in the environment by the ever-increasing usage of data centers and their increasing numbers. This paper also introduces the variety of the energy efficient methods that are made possible via GCC.

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65-67

Determinants Of Commitment From Women's Cooperatives Through Relationship Values

M. Farid Afandi, Armanu Thoyib, Eka Afnan Troena, M. Misbahul Amri

Relationship marketing is important for marketers and researchers. The objective of this study is to analyze the causal effects and relations of the four constructs, i.e., customer satisfaction, relational values, trust and commitment applied in the context of services marketing. The research sample consisted of 200 respondents i.e., the members of women's cooperative in East Java Province, collected by applying the simple random sampling method. Data were analyzed by using Structural Equation Modelling (SEM) with AMOS program. The results showed that to create a strong bonding in the form of commitment with the customer, the initial strategy must be built to strengthen members' trust by creating customer satisfaction. The process must be supported continuously by the creation of advantageous values for customers. Customers perceived with relational values will have a strong impact on the customer to maintain a long-term relationship.

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68-73

Improving Customer Loyalty Based On Relationship And Service Quality On Networked Store Customer

Mohamad Dimiyati, N. Ari Subagio

The research objectives of this study is to examine: (i) the influence of service quality on relationship quality and customer loyalty; (ii) the influence of relationship quality on customer loyalty; and (iii) the intermediate effect of service quality on customer loyalty mediated by relationship quality in networked mini-markets. We collected the data from 140 customers based on a purposive sampling, using a structured questionnaire distributed at seven Indonesian cities. The research results of the study show that the increase in service quality directly improves relationship quality. However, we could not prove that the increase in service quality directly increases customer loyalty. Finally, we find that there is an intermediate effect of service quality on customer loyalty mediated by relationship quality in networked mini-markets.

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74-79

Analysis Of Difficulty Learning Calculus Subject For Mathematical Education Students

Siti Fatimah, Yerizon

The low result of student learning for calculus subjects are the background of this study. This study aims to analyze student learning difficulties with calculus subjects. This study uses a descriptive method with the qualitative approach. The technique of data analysis uses the Miles and Huberman models with the type of data presentation. The subject of this study is IAIN Bukittinggi students of the 2018 Mathematics Education Study Program which consists of 1 class which amounts to 37 people. The results of the study stated: 1) student difficulties in general, namely drawing the function graphs and doing trigonometric manipulations, 2) student difficulties specifically obtained for material functions (determining domain and range), limit material (mastering rules in determining the values of limit function), derivative material (determining the maximum and minimum values in the story matter), and integral material (errors using integral rules that are often used derivative rules, differentiating using substitution and partial integral techniques and also error in the final completion of the volume of rotary objects).

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80-84

Influence Of Brand Image, Price And Promotion On Consumer's Buying Decision Of Fast Moving Consumer's Goods With Culture As A Moderating Variable In Basmallah Retail Store In Indonesia

Sudaryanto Sudaryanto, N. Ari Subagio, Intan Nurul Awaliyah, Deasy Wulandari, Anifatul Hanim

This research aimed to investigate the behavior of consumers buying decision in modern moslem stores in Indonesia. The high and low context culture would be the intermediating factor on influencing the decision. With 100 samples the data was collected through out multy stage sampling procedures with Banyuwangi being selected region. The validity and reliability questionnaire were tested. Normality data was also tested using skewness and kurtosis before regression is employed. The population in this study are customer of the Basmallah in a specific teenager in Banyuwangi . The measurement scale in this study uses semantic differential. The method of analysis used is Moderated Regression Analysis. The results showed that: 1) Brand image effect on purchasing decision; 2) Price affects purchasing decisions; 3) Promotion affects purchasing decisions; 4) culture moderates the influence of brand image on purchasing decisions; 5) culture moderates the influence of prices on purchasing decisions; 6) Culture moderates the influence of promotion on purchasing decisions of Basmallah FMCG.

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85-92

Some Natural Antioxidants Sources From Foods And Tree Barks

Ahmed M A Hamad

Oxidation is a common reaction that takes place during preparation of different foods. It takes place through transferring electrons from a chemical compound to other/s. Researchers believe that oxidation has negative impact on human health. Moreover, existence of anti-oxidants in any food means existence of substances, which can delay or stop the oxidation process, as oxidation not only affects health but also deteriorates the natural flavor of any food. Some anti-oxidants are natural but others are synthetic. Natural anti-oxidants, commonly denoted as NAOs, are preferential choice of doctors and customers. They exist in multiple food sources including vegetables, fruits, and other plant-based and animal-based diets. In this article, we have described only those oxidants, which can be obtained through natural sources

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93-98

Potential Use Of Bamboo To Support Village Independence

Weka Gusmiarty Abdullah, Usman Rianse, Zulfikar, Annas Ma'ruf, Ilma Sarimustaqiyma Rianse, Weka Widayati, Wa Kuasa Baka, Weko Indira Romantiaulia

Bamboo has become an important part of the life of the Indonesian people, from an perspective of economic, social and cultural. It is especially seen in rural communities. The potential for bamboo use needs to be explored from various aspects (availability of resources, social and economic) so that its role can be increased to support village independence. This research aims to examine the potential of resources, social and economic of bamboo use. The study showed that bamboo has a very wide distribution, especially in the Southeast Asian region. Availability of bamboo is abundant, especially in rural areas. Bamboo also has high adaptability and ecological value, and has superior physical and nutritional properties. Socially, human resources could further enhance their local wisdom for sustainable use of bamboo, as well as the value and social status of bamboo for the community. Economically, bamboo has great potential for increasing economic value through the use of all parts of the plant into various products for meeting community needs. The use of bamboo was sources of livelihood for rural communities that were financially feasible.

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99-105

Analysis Of Profit Performance And Asset Management To Financial Distress Bakrie Group Company Listing In Indonesia Stock Exchange

Andi Ratna Sari Dewi, Eka Wahyuliana

Financial distress is a condition where the company's finances are in an unhealthy or a crisis that can lead to bankruptcy. This study aims to analyze the return on asset (ROA), return on equity (ROE), receivable turnover (RT), and inventory turnover (IT) to financial distress. By taking samples using purposive sampling, the sample of this research is five Bakrie Group companies that meet the criteria of ten population of Bakrie Group companies listing in Indonesia Stock Exchange. The research data are quarterly financial reports from 2012 to 2016 as many as 100 financial statement data. Financial distress analysis technique in this study using Altman Z-score method with the formula $Z = 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4$. The Z-score indicator for determining financial distress is grouped into categories, non-financial distress ($Z > 2.99$), gray area (1.81

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106-110

Information System Security: Human Aspects

Zaied Shouran, Tri kuntoro Priyambodo, Ahmad Ashari

Numerous organizations recognize that their workers, who are usually thought of the weakest link in information security, also can be great assets in the effort to reduce risk associated with data security. Information security has not been given enough consideration among the writing as far as the human issue impact; researchers have involved a lot of examination throughout this area. Human factors assume a noteworthy in computer security. all through this paper, we target the relationship of the human factor in information security showing the human weaknesses which can cause unintentional harm to the organization and discuss, be that as it may, information security awareness may be a major tool in overcoming these weaknesses.

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111-115

Effect Of Soil And Water Conservation Methods On Maize Performance And Soil Water Retention In Northern Region Of Ghana

Eliasu Salifu, Wilson Agyei Agyare, Asamoah Larbi

Farmers in the Northern Region of Ghana are mostly smallholder farmers. They are continuously confronted with erratic rainfall and land degradation as a result of poor agronomic practices. Soil and Water Conservation (SWC) methods are interventions that can be put in place to limit soil loss and sustain soil moisture in areas where there is inadequate moisture and the risk of losing the valuable topsoil. In the 2014 cropping season, an on-farm experiment was conducted in the Region to assess the effect of SWC methods [Contour Farming (CF), Half Moon (HM), Contour Ridges (CR) and Flat Land (FL)] on soil moisture content at the root zone, growth components and yield of maize. There was a significant effect of the SWC methods on soil moisture at the root zone of maize at a probability (P) value of 0.00181. The CF retained the most soil moisture at the root zone with an average volumetric soil moisture of 18.4%. This was followed in decreasing order by CR (18.1%), HM (17.8%) and the FL (16.8%). The SWC methods significantly affected maize height (P = 0.0112), stem (P = 0.0174), root biomass (P = 0.035) and grain yield (P = 0.00578). Considering the higher soil moisture retention and yield under CF, it is recommended as the best option among the studied methods for SWC in Northern Region of Ghana.

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116-120

The Negative Impacts Of Poverty In Urban And Rural Architecture In Nigeria

Obiadi Bors N. Onochie, A. O.

Bad governments in Nigeria and most Third World countries are resulting in poverty of the people as a result, negatively impacting their built environment and especially, architecture. A lot of poor people are reverting to the use of prehistoric building materials including, clay/laterite soil (in mud buildings), plant leaves and recycled products, used hundred years ago. This paper aims at, identifying how bad governments promoted poverty in both their urban and rural communities and proffered solutions to the negative impacts of poverty in their architecture. It adopted qualitative research method that embraced information from secondary data sources. The invention of bottled water in Nigeria resulted in abundance of empty plastic containers (wastes) in the communities with architectural values. They are used by the poor in building their houses and fences. The governments' current bad and unsustainable policies are reversing the assumed improved standards of living and lifestyles of the poor, to nomadic living and pushing the poor into impoverished lifestyles. This paper recommends for the players to start discussing today's environment for tomorrow's generation, develop and implement documents that would guide and promote development and growth plan of the communities leading to unprecedented indoor-outdoor standardized growth, human and economic empowerment.

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121-131

The Effect Competence And Motivation To Satisfaction And Performance

Fikri Adam, Jeny Kamase

This research aims to find out and analyze the influence of the competence, motivation towards job satisfaction. To know and analyze the competence and motivation towards the performance of employees. To know and analyze to find out and analyze the influence of the competence and motivation on performance through job satisfaction. The method of this research is quantitative descriptive using observation, interview and kuasioner in analyzing data to explain the phenomenon. Analysis tools used are SEM to explain all the hypotheses put forward in this study through the application of AMOS. The population in this study as many as 150 employees and a sample of this research using a multistage sampling, where the method is done by stages as follows using the sampling or judgement based on criteria and both use proportional stratified random sampling. The results of this research are positive effect not significant competencies against job satisfaction, motivation and positive effect significantly to job satisfaction, the positive effect of competence and not significantly to the performance of the employees. A positive and significant effect of motivation against the performance of employees. Job satisfaction the positive and significant effect against the performance of employees. Competence of influential positive and insignificant against the performance of employees through job satisfaction. Significant motivation and a positive influence on performance that is mediated by job satisfaction.

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132-140

Economic Aspects Comparison Of Using Juhar Organic Fertilizer And Npk Fertilizer In Palm Oil Plantation

Mitra Musika Lubis, Abdul Rahman, Zulkarnain Lubis

The aim of the research is to find out the comparison level of production, production costs, reception and the income on the agricultural of palm oil pnenurship and to analyze the level of economic efficiency. This research is conducted with a purposive sampling method. The research result shows that the production is using the juice of Juhar is 70.792 kg. With the use of NPK that is 604 kg. But from the data above can be found that the production of the palm oil is higher using the Juhar fertilizer than NPK fertilizer. The cultivation of the palm oil which using Juhar fertilizer is better than using the NPK fertilizer

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Bioethanol Production From Cassava Peel By Ultrasonic Assisted Using HCl As Catalyst

Sirajuddin, Bandi Soepratono, Edy Budiarto, Wiwin Suwinarti

Cassava peel is lignocellulose material that has the potential to be processed into alternative fuels is bioethanol. This study aims to determine the concentration of HCl as catalyst, hydrolysis time optimum use of ultrasonic waves to the yield of glucose and determine the optimum fermentation time to convert glucose into ethanol. Hydrolysis process 25 grams of sample was added 150 ml of HCl as catalyst with concentration variations HCl 0.75 N, 1.00 N and 1.25 N, hydrolysis time variation 6, 15, 30, 60 and 90 minutes using an ultrasonic wave frequency at 35 KHz and a temperature of 30°C. The resulting hydrolyzate was analyzed using methods luff schrool. The highest yield of fermentable glucose 150 ml using 5 g of yeast and 2 grams of NPK with time variations of 2, 4, 7, 10, 12 days. Distilled dan fermented then analyzed using Chromatography Gas (GC). The highest glucose yield hydrolysis process is a catalyst concentration of 1.2 N HCl and 30 minutes of 34.59%. While the highest bioethanol yield in the fermentation process is 4 days at 20.77%.

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Clarithromycin Resistance And Genetic Pattern Of Helicobacter Pylori In A Group Of Patients With Peptic Ulcer Disease In Alexandria, Egypt

Mohamed A Alhammad, Hadir EL-Kady, Yaman Hamed

Clarithromycin resistance is one of the main predictors of eradication treatment failure in Helicobacter pylori (H. pylori) infections. Clarithromycin-based regimens were commonly used as a first-line therapy for H. pylori-positive patients. Lately, cure rates of H.

clarithromycin based regimens were commonly used as first-line therapy for H. pylori positive patients. Lately, cure rates of H. pylori infection are decreasing to as low as 60% and are inversely correlated with antibiotic resistance rates that have crossed the 15-20% threshold. Monitoring of antibiotic susceptibility of H. pylori can be achieved through molecular methods; which stand out as an attractive alternative to conventional culture-based methods. The 23S rRNA Real-time PCR has several advantages in detection of H. pylori resistance to antibiotics; such as short working time, a high specificity up to 100% and low risk of contamination. This study aimed to detect clarithromycin resistance and genetic pattern of H. pylori in a group of 50 patients suffering from symptoms suggestive of gastrointestinal diseases. Gastric biopsy specimens were taken by endoscopy at the Gastroenterology Department of Alexandria Main University Hospital. Genotyping of H. pylori strains using multiplex PCR to detect CagA and VacA genes and detection of point mutations conferring clarithromycin resistance using a 23 S rRNA real time PCR was carried out. The majority (98%) of H. pylori strains detected in patients were CagA positive while only 28/50 (56%) were VacA positive. Most of the strains (67.86%) expressed the s2 (non toxigenic) allele and the most common genotype was VacA s2m1; expressed by 39.3% of strains. All H. pylori strains of the control group were sensitive to clarithromycin while resistance was detected in 26% of strains recovered from cases. The majority (77%) of point mutations responsible for resistance to clarithromycin were due to A-G transition at position 2143 while only 23% of which were due to A-C transition at position 2142.

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Investigation Of Entrepreneurship Development Barriers In The Field Of Renewable Energies Technologies In Developing Countries: A Case Of Iran

Sahar Cheraghi, Shahla Choochain, Enayat Abbasi

With respect to the importance of the development of entrepreneurship and employment in renewable energies technologies, the present research investigated the obstacles of developing entrepreneurship in renewable energies in Iran. The methodology utilized in this paper involved two complementary methods: 1) a series of semi-structured interviews with 15 renewable energy entrepreneurs and 2) a questionnaire survey. The participants were identified via SATBA. Through the use of a simple random sampling method, 97 people were selected as sample. The results indicated that the most important barrier of entrepreneurship development in the field of renewable energies was inadequate access to institutional finance, inadequate government or policy support and the power of incumbents which were into the first, second and third ranks, respectively. According to the findings, sociocultural and individual barriers explain about 30% of the obstacles entrepreneurs are faced with, that have been neglected in previous studies. Entrepreneurship in the field of renewable energies is considered to be one of the most exclusive solutions for unemployment. In order to solve the problems faced by renewable energies entrepreneurs, the barriers which exist in the way of these activities should be identified and removed. Therefore, this study will take a useful upward step in order to identify these barriers and, eventually, provide the best functional suggestions.

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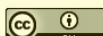
160-170

Development Of Instant Granules Containing Sappan Wood (Caesalpinia Sappan L) And Temu Mangga (Curcuma Mangga Valeton & Zipp) Extract Combination As Antimotility

Trisna Permadi, Swasono R. Tamat, Kartiningsih

Indonesia is one of countries which as plants that have medicinal properties. Sappan wood (Caesalpinia sappan L) and temu mangga (Curcuma mangga Valeton & zipp) are native plants to Indonesia, which have antimotility property. Sappan wood and temu mangga contains flavonoids, saponins, tannins, steroids / triterpenoids and volatile oil which considered provide antimotility activity. This study begins with the maseration using ethanol 70% then evaporated and spray dried. The various ratio of extract combination were formulated into instant granules. The granules were tested for physicochemical properties and hedonic score, and the antimotility activity using colonic transit time method. All the granules complied with the physicochemical properties of granules and the hedonic score. The best antimotility activity obtained in granules containing sappan wood and temu mangga extract 21:9, with intestinal transit percentage (60,07%) did not significantly different from the normal control (ANOVA one-way unstacked at $\alpha = 0,05$).

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Improving Customer Loyalty Based On Relationship And Service Quality On Networked Store Customer

Mohamad Dimiyati, N. Ari Subagio

Abstract: The research objectives of this study is to examine: (i) the influence of service quality on relationship quality and customer loyalty; (ii) the influence of relationship quality on customer loyalty; and (iii) the intermediate effect of service quality on customer loyalty mediated by relationship quality in networked mini-markets. We collected the data from 140 customers based on a purposive sampling, using a structured questionnaire distributed at seven Indonesian cities. The research results of the study show that the increase in service quality directly improves relationship quality. However, we could not prove that the increase in service quality directly increases customer loyalty. Finally, we find that there is an intermediate effect of service quality on customer loyalty mediated by relationship quality in networked mini-markets.

Index Terms: customer loyalty, networked store, relationship quality, service quality

1 INTRODUCTION

THE globalization era that characterized by technological advances and it is getting more difficult to gain customer loyalty led to an increasingly tight business competition. Therefore, the companies should be competent in arranging a good marketing strategy to keep their existence in the market. The company's marketing activities are the most important activities to win the competition in the market. The system that formed in marketing activities should be directed to introduce the brand or the product, to make the customers familiar with the product and then become loyal to the product offered. One example of the fast-growing businesses in Indonesia is the modern retail of the convenience store in the form of networked mini-market. The evolution of networked mini-market business in Indonesia is driven by the tight competition in the end consumer market as stated by Berman and Evans (2001) that the competition occurs because of the nature of the retail business that it is very difficult to differentiate the product and service offered with the very low entry barrier. The competition is no longer among the retailers with the same retail format, but also among the retailers with a different retail format, e.g., a supermarket is not only competing with other supermarkets, but also competing with mini-markets, hypermarkets, department stores, superstore, and wholesale stores. One strategy to win the competition in the networked mini-market business is by improving service quality. Service quality provided to the customers will affect their behavior that will finally affect company's profitability. The level of service quality cannot be assessed from the company's perspective, but should be viewed from the customer's perspective.

Therefore, the formulation of strategies and service programs should be oriented towards the customer by focusing on service quality components. Applying service quality improvement program will increase customer loyalty. The implementation of a relationship marketing strategy is an important factor for the success of the modern retail business (Meerzorg, 2003). Relationship marketing strategy plays a vital role in increasing consumer demand in order to build a harmonious relationship between the customer and the retailer (Utami, 2006). This is because by performing the communication activities the company can perform preferential treatment, personalization, and rewarding (Levy and Weitz, 2004). Consumer behavior is the activities of individuals who are directly involved in obtaining, consuming, and spending the goods or services, including the decision process that precedes and follows those activities (Engel, 1993). Consumers are willing to buy a product based on both rational and irrational impulses. This impulse encourages them to satisfy their needs and desires by the action of purchasing the goods or services. Responding to this situation, the companies should focus its attention on delivering best service quality to increase customer loyalty. Empirical studies conducted by Utami (2006); Dabholker, Thorpe, and Rentz (1996); shows that physical environment, pricing policy and product return guarantee are closely related to the operational aspects of retail business. Brady and Cronin (2001) also stated that a wide variety of merchandise, layout, and the employee's were important attributes for retail business to serve their customer. In addition, the company must also improve the relationship quality to improve its customer loyalty. Service quality in services marketing is important as it will affect the relationship quality and the level of customer loyalty. The better the quality of the existing services, the better the relationship quality and customer loyalty. A key component to maintaining a company's sustainability in the long term is customer loyalty (Aydin and Ozer, 2004). Research by Naki (2009) shows that the relationship quality is directly affected by service quality and eventually will have a direct effect on customer loyalty, but, on the other hand, service quality has no direct effect on customer loyalty. This finding is supported by studies of Caruana (2002) and Aryani and Rosita (2010) stating that service quality does not directly affect customer loyalty. However, studies by Akbar and Pavez (2009), Dimiyati (2011), and Dimiyati (2016) find different results and concluding that

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service quality directly influences customer loyalty. Therefore, the differences in the empirical findings require further research to examine the effect of service quality on customer loyalty. The current rapid development of the networked mini-market business is supported by the early change in the business environment that creates fierce competition in the market. This competition forces the company management to think about the best strategies to make their customers remain loyal. It is critical for the company management to understand better what influences their customer loyalty. This is because most of the customers today are the discerning customers and it is easy for them to change their purchasing behavior and switch to another company offering better service (Beckett et al., 2000). Therefore, companies must have the ability to satisfy the preferences and expectations of its customers to make sure that the customer will not switch to other competitors. The networked mini-market business has the low market entry barrier that makes it easy to enter so that many new companies joining the competition. This situation is also happening in East Java Province, Indonesia, especially in Tapal Kuda region. Tapal Kuda area is located at the eastern end of Java Island. Its shape on the map looks similar to the shape of a Horseshoe or known as Tapal Kuda in Indonesian Language. The region covers the seven cities or regencies of: Pasuruan (the eastern part), Probolinggo, Lumajang, Jember, Situbondo, Bondowoso and Banyuwangi with the population consisted of Pendalungann ethnic group or the mix of Java and Madura ethnic groups (Anwar, 2014). Tapal Kuda region is an area that often be used as the barometer of the development of networked mini-markets in East Java Province. This region is currently a preferable areas for developing the networked mini-market businesses in East Java. This condition indicates that the competition between the networked mini-markets is unavoidable that every company joining the business should take reasonable efforts to win the market. The primary purpose of the entrepreneurs in entering the networked mini-market business is not only to gain the economic benefits in the form of profit, but the more important is to provide the best service quality to its customers. Being able to provide the best service quality to the customer will lead to customer satisfaction that will finally create customer loyalty. Customer loyalty is very crucial to make the customers loyal to the products or services, and it can be created from the effective services provided by the company. Referring to the previous argumentations, the first aims of this study is to examine the direct effect of service quality on relationship quality and customer loyalty. The second is to reveal the direct effect of relationship quality on customer loyalty. The third is to find whether any indirect effect of service quality on customer loyalty mediated by relationship quality in the networked mini-markets in Tapal Kuda area. Results of the study are expected to offer more insights into the development of the knowledge about how to build customer loyalty by providing best management of service quality and relationship quality. This study proposes three hypotheses, i.e., the increase in service quality will directly improve relationship quality, the increase in service quality will directly increase customer loyalty, and the increase in relationship quality will directly increase customer loyalty.

2 LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Service Quality

Service is a tangible or intangible activity to serve the consumers by providing goods or services with or without the transfer of ownership of particular goods or services (Savitri and Halim, 2003: 41). Service quality is defined as a comprehensive assessment or attitude related to the superiority of a service (Parasuraman, Zeithaml, and Berry, 1985). Dimiyati (2011) suggests that service quality can also be interpreted as a company's care towards its customers. Understanding the concept of quality with the appropriate dimensions and attributes in the networked mini-markets business requires a comprehensive review of the studies related to service quality in retail business. Brady and Cronin (2001) use three dimensions of service quality: (1) personal interaction, (2) physical environment quality, and (3) quality outcome. Dabholker et al. (1996) measures service quality using five indicators, including: (1) physical aspect, (2) reliability, (3) personal interaction, (4) problem-solving, and (5) policy. This study adopts previous dimension to measure service quality: (1) quality of interaction, (2) quality of outcomes, (3) output of environment, and (4) retailer policy. Cronin and Taylor (1992) propose an alternative measure of service quality known as SERVPERF (service performance). This measurement includes the question of service quality performance. This study uses a SERVPERF measurement scale because it measures the perception or assessment of the customer to the service quality they received from the company. It is considered more appropriate to use SERVPERF scale to measure service quality based on the performance of service quality compared to SERVQUAL (service quality measurement offered by Parasuraman et al., 1985) that measures service quality based on the gap between expectation and performance.

2.2 Relationship Quality

Relationship quality is related to conflict, trust, commitment, and sustainability of future relations between the company and its customers. Good relationship quality will reduce the level of conflict and will increase trust, commitment, continuous long-term relationship, and investment. Roberts et al., in Naki (2009) states that there are four dimensions that can be used to measure relationship quality. Trust in a partner's honesty, which is customers' trust that company's words and promises are trustworthy, that the company will realize them, and the company will be more active in convincing its customer by showing a good performance. Trust in a partner's benevolence, which is customers' perception that they believe the company will pay attention to customers needs and welfare. Affective commitment, which is customers commitment to keep in touch and to keep interacting with the company because they enjoy the relationship created by the company. The last dimension is satisfaction, which is the feeling of happy or disappointment because of the comparison between the perceived and expected services or products.

2.3 Customer Loyalty

Customer loyalty is a deeply held commitment to repurchase or resubscribe a preferred product or service consistently in the future, despite situational influences and marketing effort of having the potential to cause switching behavior (Oliver

(1997). Meanwhile, Caruana (2002) states that customer loyalty is a final effect of repeat purchases made by the customer that is important in constructing a marketing strategy. Furthermore, Roberts et al., in Naki (2009) suggests six indicators that support customer loyalty. Sharing information, which is a form of behavior loyalty by providing information to others related to the products or services as a form of the pride to the products or services. Saying positive things, which is always telling positive things about a product or company's service to others. Giving recommendation to friends, the condition where the loyal customers tend to suggest or recommend the products or services that they have consumed to other persons. Continuing in purchasing the product, which is keep purchasing or consuming the products or services with the greater possibility to increase the frequency of consumption of the products or services. Purchasing additional service, which is to consume or to purchase additional products and services offered by the company. The six indikator is testing new services, which is the condition when measuring loyalty is not only by purchasing the products or services continuously in large numbers, but also from purchasing the new products and trying the new services offered by the company. A service company should not only focusing its attention on the existing customers, but also the more important is how to make these customers as the loyalists, those who defend the image of the products or services and spread the positive values of the company to others. It is a success for the company's marketing team if they can establish customer loyalty for the long term.

3 METHODOLOGY

This research is a confirmatory research with the population of the customers of networked mini-markets located in seven cities in Tapal Kuda region. The sampling method used is purposive sampling with the sample consisted of the customers of the networked mini-markets in Probolinggo, Lumajang, Jember, Situbondo, Bondowoso, Banyuwangi, and Pasuruan (the eastern part). The sample consists of 140 respondents determined from the sum of all indicators of latent variables multiplied by 10. The sample amount is based on Roscoe (in Sekaran 2003); Ghazali (2005); and Ferdinand (2005). Sample allocation uses disproportionate distribution with the sample of 20 respondents in each city. The research variables are grouped into three, namely: exogenous variable which is the service quality (X1) measured by four indicators; intervening endogenous variable which is the relationship quality (Y1) measured by four indicators, and dependent endogenous variable which is the customer loyalty (Y) measured by six indicators. The variable measurement scale used is Likert scale with five alternative answers. Research data are sourced from primary data collected from the questionnaires distribution.

Table 1. Results of Validity and Reliability Test for the Indicators of Research Variables

Variable	Validity Test					Construct Reliability
	Indicators	Loading Factor	P	Remarks	GFI	
Service Quality	Interaction Quality (X1.1)	0.603	***	Valid	0.930	0.851 (Reliable)
	Output Quality (X1.2)	0.715	***	Valid		
	Environment Output (X1.3)	0.742	***	Valid		
	Retailer's Policy (X1.4)	0.668	***	Valid		
Relationship Quality	Trust in Partner's Honesty (Y1.1)	0.574	***	Valid	0.930	0.815 (Reliable)
	Trust in Partner's Benevolence (Y1.2)	0.693	***	Valid		
	Affective Commitment (Y1.3)	0.592	***	Valid		
	Satisfaction (Y1.4)	0.436	***	Valid		
Customer Loyalty	Sharing information (Y2.1)	0.658	***	Valid	0.990	0.646 (Reliable)
	Saying positive things (Y2.2)	0.748	***	Valid		
	Recommending friends to purchase (Y2.3)	0.617	***	Valid		
	Continue purchasing (Y2.4)	0.614	***	Valid		
	Purchasing additional service (Y2.5)	0.673	***	Valid		
	Testing new service (Y2.6)	0.555	***	Valid		

Source: results of analysis run with AMOS program.

4 RESULTS AND DISCUSSION

The results of validity and reliability test of the instrument (Table 1) show that all variable indicators are valid and reliable, with the loading factor value of latent variables above 0.4 with significant probability at the α of 5%, and the value of construct reliability above 0.6.

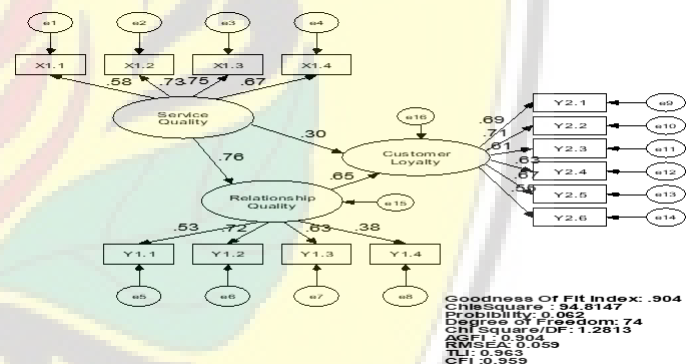


Figure 1. SEM model, the mediating role of relationship quality on the effect of service quality on customer loyalty in the networked mini-markets in Tapal Kuda area.

The SEM model (Figure 1) test is comply with the requirement of normal multivariate assumption. The CR value is 1.271 (between -1.96 up to 1.96), there is no multicollinearity between the exogenous variables. No multicollinearity condition happens because the exogenous variable is only one and no outlier on the data as indicated by the value of Mahalanobis distance. All value of Mahalanobis distance are under 23.684 (χ^2 df: 14, the number of indicators). The SEM model also complies with the requirements of model fit (Table 2) so that the model can be accepted because of the conformity with the data.

Table 2. SEM Conformity Indices

Criteria	Cutoff Value	Results of Calculation	Remarks
Chi-square	Should be smaller than the value of the Table-Chi Square: $\chi^2_{\alpha=0.05, df=74} (95.0815)$	94.8147	Achieved
DF	Should be positive	74	Achieved
Si ₀ Probability	≥ 0.05	0.062	Achieved
RMSEA	≤ 0.08	0.059	Achieved
GFI	≥ 0.90	0.904	Achieved
AGFI	≥ 0.90	0.904	Achieved
Chi-square /DF	≤ 2 or 3	1.2813	Achieved
TLI	≥ 0.95	0.963	Achieved
CFI	≥ 0.95	0.959	Achieved

Source: results of analysis run with AMOS program.

Table 3 provides the results of causality test of the hypothesis of the research showing that hypotheses 1 and 3 are supported, but hypothesis 2 is not supported.

4.1 Hypothesis 1

Hypothesis 1: the increase in service quality will directly increase relationship quality in the networked mini-markets in Tapal Kuda area.

Hypothesis 1 of this study is supported which is indicated by the positive path coefficient 0.513 with the CR value 3.362 and significant probability (p) *** which is smaller than α 0.05. From these findings, it can be stated that if the company provides a good and satisfactory service to its customers, then the customers will put great trust to the company. By creating a good relationship quality will lead to a good relation between the company and its customers. This condition is supported by the characteristic of the majority of respondents. Most of them were students and housewives with the educational background of high school and university graduates. They represent the customers with selective and intellectual attitude in choosing and deciding the places to go shopping. Also they have the knowledge about what kinds of benefit they would like to get from the mini-markets that will finally affect the way they make the assessment about the relationship quality offered by the company. Findings of the study also mean that the customers have experienced the performance of good service quality of the networked mini-markets that can encourage their trust towards the positive reputation of the company, encourage their intention and commitment to keep on purchasing the product, and also the happy feeling resulted from the service given by the enterprise. In other words, real customers' assessments of the service quality that they have received will lead to the establishment of a good relationship quality between the networked mini-markets and its customers. Findings of this study support the research by Ratnasari (2007) stating that service quality significantly affects relationship quality. The higher the level of service quality provided by the company, the higher the level of relationship quality that exists between the enterprise and its customers. Findings of the study also support the research by Naki (2009) stating that better service quality received by the customers will positively improve the relationship quality between the customer and the company.

Table 3. Results of Causality Test

Variable	Path Coefficient	CR	Probability	Remarks
X1—Y1	0.513	3.362	***	Significant (supported)
X1—Y2	0.013	1.680	0.093	Not Significant (not supported)
Y1—Y2	0.529	2.789	0.005	Significant (supported)

Source: results of the analysis with AMOS program.

4.2 Hypothesis 2

Hypothesis 2: the increase in service quality will directly increase customer loyalty in the networked mini-markets in Tapal Kuda region.

Hypothesis 2 of this study is not supported as indicated by the value of positive coefficient path 0.013 with the CR value 1.680 and significant probability (p) 0.093 which is greater than the α , so that service quality has no significant direct effect on customer loyalty. It means that service quality provided by the networked mini-markets in the Tapal Kuda area cannot directly create customer loyalty. This condition indicates that customers have not enjoyed the service quality provided by the networked mini-markets that will impact to their emotional satisfaction if the service is exceeding their expectations. The customers perceive that the service quality they receive from the networked mini-markets is equal to their expectations that make them merely satisfied. This feeling has not been able to create customer loyalty as reflected in customer's intention to share information. Loyal customer usually tell a positive thing about the product or service, to recommend others to purchase the product or service. This finding also indicate that consumer will not continue to buy the product in the future. Regarding this result, it will lowering the customer intention to consume the new service and the additional services offered by the networked mini-markets in Tapal Kuda area. This condition is caused by the relatively same level of service quality provided by the networked mini-markets so that the customer can easily switch from one mini-market to other mini-markets in Tapal Kuda region. In other words, customers have many choices of the mini-markets as the place to shop for their needs. Results of this research support the studies by Ratnasari (2007) and Naki (2009) stating that service quality does not directly affect customer loyalty, but, it indirectly affects customer loyalty through the relationship quality. However, findings of this research are different from the study by Novel (2006) which states that service quality has positive effect on customer loyalty. Research by Akbar and Parvez (2009) indicates that the better the service quality received by the customers, the more the customers become loyal to the company.

4.3 Hypothesis 3

Hypothesis 3: the increase in relationship quality will directly increase customer loyalty in the networked mini-markets in Tapal Kuda region.

Hypothesis 3 of the research is supported as indicated by the value of positive path coefficient 0.529 with CR value 2.789 and significant probability (p) 0.005 which is smaller than the α . It means that the relationship quality has a direct, positive, and significant effect on customer loyalty in the networked mini-markets in Tapal Kuda region. These results prove the

important effect of relationship quality on customer loyalty which means that the company has created a good relationship quality with its customers. Good relationship quality will encourage customer's intention to share the information about the existence of the networked mini-markets to others. Customer will spread the positive things about the products and services offered by the networked mini-markets, to recommend others to purchase the products offered by the networked mini-markets, to continue using the products and services of the networked mini-markets in the future. Also, increase the customer intention to use new products and additional services offered by networked mini-markets. In other words, good assessment from the customers regarding relationship quality will lead to customer loyalty. Relationship quality is the result of the efforts of both employees and management of the networked mini-markets in providing a better attention to its customers. The findings of this study support a study by Ratnasari (2007) which states that the relationship quality significantly influences customer loyalty. Naki (2009) states that the better the relationship quality, the more customers become loyal to the company. The mediating role of relationship quality in the effect of service quality on customer loyalty in the networked mini-markets in Tapal Kuda region. The mediating effect can be determined by analyzing the direct and indirect effects of service quality on customer loyalty through relationship quality. The analysis results of the effects between variables are presented in Table 4.

Table 4. The Effects of Variables

Direct Effect	Exogenous Variables		
	Service Quality	Relationship Quality	
Endogenous Variables	Relationship Quality	0.758	0.000
	Customer Loyalty	0.296	0.653
Indirect Effect	Service Quality		
	Relationship Quality	Customer Loyalty	
Endogenous Variables	Relationship Quality	0.000	0.000
	Customer Loyalty	0.496	0.000

Source: results of SEM analysis with AMOS program.

The analysis results of the direct and indirect effects between variables show that service quality has no significant effect on customer loyalty which the value is smaller compared to its indirect effect, i.e., the effect of service quality on relationship quality. Thus, it can be concluded that relationship quality has an important and significant role in mediating the effect of service quality on customer loyalty in the networked mini-markets in Tapal Kuda region. The research results of the study indicate that relationship quality should be treated as the primary focus and that the improvement should be performed continuously by the management of the networked mini-markets in Tapal Kuda region as the efforts to build and to maintain its customer loyalty. Customer loyalty is the final objective of every company's marketing activity because a loyal customer is the solid basis for the buying and selling process of the products or services produced by the company for a long term and ongoing basis. The research results also in line with research by Naki (2009) as previously mentioned.

5 CONCLUSION

The first research hypothesis is accepted which means that a proper assessment of the customer regarding service quality offered by the company will lead to a good relationship quality between the networked mini-markets and its customers. In the other hand, hypothesis 2 is rejected, which means that service quality provided by the networked mini-markets in Tapal Kuda

area does not directly support the creation of customer loyalty. The rejected result might happen due to the relatively same level of the service quality provided by all networked mini-markets located in Tapal Kuda area so that customers can switch quickly from one mini-market to the other mini-market. Hypothesis 3 of the research is accepted which proves that relationship quality has a direct, positive, and significant effect on customer loyalty in the networked mini-markets in Tapal Kuda region. Research results consistently prove the significant effect of relationship quality on customer loyalty which means that customers assessment on relationship quality performed by the networked mini-market will directly create customer loyalty. Relationship quality has an important and significant role in mediating the effect of service quality on customer loyalty in the networked mini-markets in Tapal Kuda region. Therefore, the management of networked mini-markets should prioritize their strategy on the continuous improvement of the relationship quality to build and maintain customer loyalty.

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