

Implementation of Distribution Requirement Planning in the Subsidized Fertilizer Management System

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ABSTRACT

Food security is one of the Indonesian government's strategic programs. In support of the Food Security Program, the Ministry of Agriculture has established a policy on the distribution of subsidized fertilizer needs, especially for food crops, which are six right policies. Subsidized fertilizer distribution planning is very important to support the achievement of the six right policies because proper distribution planning will result in meeting the needs of farmers for fertilizer. Distribution Requirement Planning (DRP) method is used to determine the planning needs and it is expected that with the distribution pattern, good marketing stock, success in meeting the needs of the fertilizer stock inventory will be more optimal. In this paper, the DRP method will be used to optimize the role of subsidized fertilizer management systems. The case study for this paper is the warehouses of PT. Pupuk Sriwidjaja Palembang, namely PPD Sumsel, while the type of subsidized fertilizer that will become the scope is urea fertilizer. From this study can be concluded that the DRP method provides a more coordinated distribution reference for urea subsidized fertilizer. With the distribution schedule, the company can prepare everything so that it can distribute products. Moreover, the implementation of DRP in the subsidized fertilizer data management system is used to optimize existing data collection and reporting functions, by adding feature requirements according to the DRP concept such as fertilizer management of stock, demand and distribution, safety stock and DRP calculation, also fertilizer report for a company manager.

Keywords: *Distribution Requirement Planning, management system, subsidized fertilizer*

Introduction

Food security is one of the Indonesian government's strategic programs. It is illustrated by several regulations and policies governing national food security and the establishment of the Food Security Agency. Several studies have also discussed matters related to food security, including discussing the concept, measurement, and strategy [1], problems and challenges [2], strategies for improving the household [3], and the knowledge management of village granary management [4].

In support of the Food Security Program, the Ministry of Agriculture has established a policy on the distribution of subsidized fertilizer needs, especially for food crops, which are six right policies: right quantity, right time, the right type, right price, right place, and right quality. Subsidized fertilizer distribution planning is very important to support the achievement of the six right policies because proper distribution planning will result in meeting the needs of farmers for fertilizer to achieve food security.

Regarding distribution planning, the concept of Distribution Requirement Planning (DRP) is introduced like a system that determines the demand for supplies for distribution centers, combines historical demand, and as inputs for production and materials [5]. Meanwhile, DRP is a planning approach that is almost the same as MRP that uses demand planning at the point of need to determine

demand forecasting to the center [6]. It is even said that DRP is very important in the global market [7]. From this opinion, it can be concluded that DRP is a system that determines the planning needs to replenish inventory at the distribution center. DRP provides future demand visibility related to the need for shipping from source stocking points to destination stocking points. This will help to take corrective actions taken before undesirable events develop into crises [8].

A computer-based system is needed to optimize information management [13] in supporting food security, in this case, data related to the number of food products [12], stock availability, and other materials that support food availability, such as fertilizer. Fertilizer is one of the important production factors in agricultural cultivation. Various fertilizer distribution policies issued by the government so far generally aim to further improve efficiency in distribution. However, in reality, there are still many cases of fertilizer scarcity, where farmers have difficulty getting fertilizer when they need it [9]. The enhancement of fertilizer subsidies is one of the backbones of agricultural policy since 1969. Along with various problems and negative impacts of these policies, it is noted to continue the policy of fertilizer subsidies by improving planning, monitoring, distribution systems, and empowering extension agents [10].

Therefore, the DRP method is used in determining the planning needs [11] and it is expected that with the distribution pattern, good marketing stock, success in

meeting the needs of the fertilizer stock inventory will be more optimal. In this paper, the DRP method will be used to optimize the role of subsidized fertilizer management information systems. The case study for this paper is the warehouse of PT. Pupuk Sriwidjaja Palembang, namely PPD Sumsel, while the type of subsidized fertilizer that will become the scope is urea fertilizer.

Distribution Requirement Planning Method in The Subsidized Fertilizer

Application of the DRP method in management the subsidized fertilizer for PPD Sumsel is as follows:

1. Demand Forecasting

Demand forecasting is done to estimate the amount of Urea fertilizer demand in the future. This forecast uses urea fertilizer stock data from October 2018 to February 2019 (shown in Table 1. This method will produce forecasting data as well as gross requirements, which will be included in the DRP framework.

Table 1. Subsidized UREA Fertilizer Data for October 2018 to February 2019

Year	Month	GPP Naskah	Tj. Api-api	DS. Komplek Pusri	GPP Martapura	GD. Belitang MP	GD. Lubuk Linggau	GD Lahat	GD. OKI	GD. Prabumulih
2018	October	196	39	675	733	714	-	202	-	-
	November	-	776	-	1077	942	40	160	-	-
	December	-	-	-	455	180	0	4	-	-
2019	January	-	1594	196	1112	275	271	384	-	-
	February	-	274	1455	1313	423	264	441	138	-
	March	-	-	-	-	-	-	-	-	-

Source: Distribution and Marketing Division PPD Sumsel

Based on the data in Table 1, inventory forecasting is done using Single Moving Average (SMA) forecasting method with the following formula:

$$MA = \frac{f_{t-1} + f_{t-2} + f_{t-3} + \dots + f_{t-m}}{M} \quad (1)$$

$$MA = \frac{196 + 0 + 0 + 0 + 0}{5} = 39$$

where:

MA = Moving Average

f_{t-1} = sales data per period

m = number of periods included

The result of demand forecasting with the simple moving average method is 39 for Urea in October 2018, where the results of this forecasting will be used as Gross requirements in the DRP calculation table.

2. Determination of the Lead time

The lead time used is for each warehouse. This determination is based on company policy. PPD Sumsel determined the delivery time is one month in one shipment. The shipment contained two types of fertilizer. One month is the longest period to cover the entire shipping area. This time is when the fertilizer has arrived and is received by the head of the warehouse.

Table 2. Warehouse Lead Time

Warehouse Name	Lead Time
GPP Naskah	1 month
Tj.Api-api	1 month
DS.Komp Pusri	1 month
GPP Martapura	1 month
GD Belitang MP	1 month
GPP LubukLinggau	1 month

Gd Lahat	1 month
GD. OKI	1 month
Gd Prabumulih	1 month

Source: Distribution and Marketing Division PPD Sumsel

3. Determination of Lot Size

The lot Sizing technique used is Lot for Lot (LFL). This LFL technique is the simplest and easiest to understand the lot-sizing technique. Orders are made with consideration of minimizing the cost of saving. In this technique, the fulfillment of the net need (NR) is carried out in each period that needs it, while the size of the order quantity (lot size) is the same as the amount of the net need (NR) that must be met in the relevant period.

This stage shows the lot size when ordering. Order fertilizer from the factory to the warehouse using boxcar transportation. Determination is based on the average delivery that occurs in the company.

4. Calculation of safety stock

To calculate safety stock, standard deviation data is needed which is calculated based on the amount of initial supply of subsidized fertilizer at each warehouse. The amount of initial inventory (Inventory On Hand) for each period at each level of distribution is not the same, depending on the magnitude of fluctuations in demand that occur and the smoothness of order arrivals and the smooth production process that takes place. The initial inventory level of a period is determined based on the end of the previous period.

Table 3. Inventory On Hand for February 2019

PPD Sumsel	Number of Urea Fertilizer (Unit)
GPP Naskah	620
Tj. Api-api	1079
DS Komp Pusri	3158
GP Martapura	3408
GD. Belitang MP	3644
GPP Lubuk Linggau	2314
GD Lahat	1679
GD OKI	2540
GD Prabumulih	600

After obtaining the results of the calculation of gross needs with a Single Moving Average, then a standard deviation is calculated to calculate the safety stock later.

$$STDEV = \frac{\sqrt{\sum(d-d')^2}}{n} \quad (2)$$

$$STDEV = \frac{\sqrt{\sum(196-38')^2}}{5} = 31$$

where:

d: actual request

d': average requirement

n: number of periods included

In this study, it is assumed that the level of service desired by companies and agents is the same, namely 95%. This service level is measured in several ways:

- Percentage of satisfaction of order fulfillment from stock
- Percentage of total requests sent from stock
- Percentage of the number of requests sent on time
- Percentage of time stock availability
- Percentage of stock fulfillment cycle without shortages

Lead Time = 1

SS (Safety Stock) = Z x s x l

$$= 1,64 \times 31 \times 1 = 51,5 \quad (3)$$

where:

Z = service level 95% = 1,64

S = Deviation Standard

l = lead time

From the calculations that have been carried out obtained safety stock is 51.5.

5. Reorder Point (ROP)

Reorder Point is the point where the distributor has to reorder so that the receipt of ordered fertilizer can be on time. Because making a fertilizer order cannot be accepted immediately that day. A large amount of fertilizer available is still available until the distributor places an order again at the calculated ROP.

ROP = Safety Stock + (Lead time x average requirement) (4)

$$= 52 + (1 \times 39) = 91$$

The ROP for urea fertilizer is 91. Then in October 2018, the company will reorder when the inventory reaches the calculated ROP limit for each.

6. Making DRP

The basic logic of DRP calculation is as follows:

a. Gross Requirements/Forecast Demand is obtained from forecasting results. Value for forecasting for 12 months. Gross Requirements shows the number of requests for each

fertilizer based on the results of forecasting that have been done before that can be seen in table 4.

b. From the results of local distribution forecasting, calculate the Time Phased Net Requirements. At this stage, the net requirements show the number of goods needed to meet the shortcomings in the existing demand. Then the

number of products needed by each store will be shown to place an order at the warehouse at a certain time. Previously you need to know the project on hand, that is the number of items in inventory. Then the number of items is the number of each product in each store at the end of each month, in this case, shown in Table 4

Table 4. Projected on hand

PPD Sumsel	Fertilizer stock (Unit)
GPP Naskah	620
Tj. Api-api	1079
DS Komp Pusri	3158
GP Martapura	3408
GD. Belitang MP	3644
GPP Lubuk Linggau	2314
GD Lahat	1679
GD OKI	2540
GD Prabumulih	600

Then by knowing the project on hand, it can be calculated net requirements through reduction with gross requirements. Net requirements indicate the actual amount needed by each warehouse in each period.

For a period in Urea fertilizer:

$$\text{Net Requirement} = (\text{Gross Requirement} + \text{Safety Stock} - \text{Projected On Hand last Period}) \quad (5)$$

$$\text{NR Nov} = (39+91-(561)) = 431$$

The Net Requirement value recorded is positive

c. After that, a Planned order receipt of several Net Requirements was generated during this period. The amount of fertilizer to be ordered is seen from the Net Requirements and adjusted according to the size that has been set.

NR Nov = 470 then POR = 470

d. Determined the day in which the order must be made (Planned Order Release) using the scheduled day Planned Order Receipt with Lead Time

e. Calculated Projected On Hand (POH) for the period:

$$\text{POH} = (\text{POH Previous Period} + \text{Order Receipt}) - (\text{Gross Requirements}) \quad (6)$$

$$\text{Nov POH} = (561 + 431) - 91 = 901$$

f. The amount of the Planned Order Release becomes a Gross Requirement in the same period for the next level of the distribution network

Analysis of DRP Implementation

The DRP method provides a more coordinated distribution reference for each product. With the distribution schedule, the company can prepare everything so that it can distribute products.

Table 5. Calculation Results of Urea fertilizer DRP

<i>On Hand Balance:</i> 31			<i>Lead Time</i> :1					
<i>Safety Stock</i> : 52								
	Past Due	Period						
		1	2	3	5	6	7	8
Gross Requirement		39						
Projected On Hand	620	581						
Net Requirements		0						
Planned Order Receipts		0						
Planned Order Release		0						

Implementation of DRP in the Subsidized Fertilizer Management System

The application of DRP in the subsidized fertilizer data management system is used to optimize existing data collection and reporting functions, by adding feature requirements according to the DRP concept as follows:

1. Fertilizer stock management

The fertilizer stock displays a table of inventory data contents per period where the distributor can see according to the selected year. Besides, distributors can also process inventory data, i.e. amend or delete incompatible data. The system display for the fertilizer stock page is shown in Figure 1.

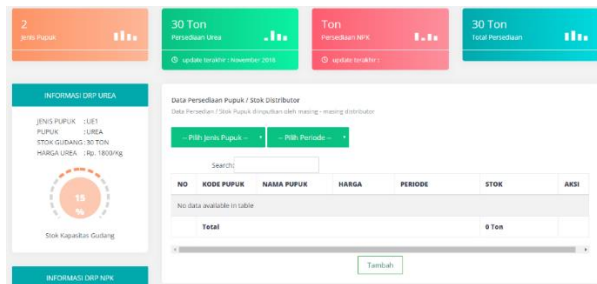


Figure 1. Display of fertilizer stock page

2. Fertilizer demand management

The fertilizer demand page is a page where distributors can enter, view and manage demand data by entering the attached file and the inventory amount shown in Figure 2.

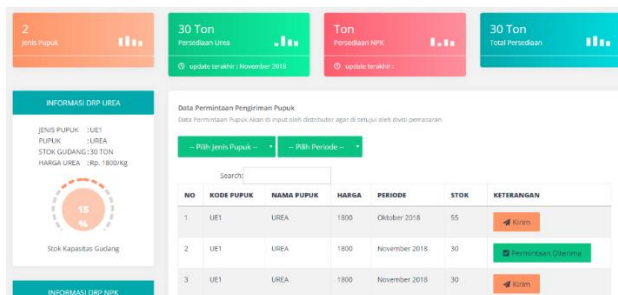


Figure 2. Display of fertilizer demand

3. Fertilizer distribution management

The fertilizer distribution processing page is a page that can display the total fertilizer to be distributed where the marketing staff confirms the distribution on request and the attachment attached by the distributor. The appearance of the fertilizer distribution processing page is shown in Figure 3.



Figure 3. Display of fertilizer stock page

4. Safety Stock Calculation

The safety stock data calculation page is used to determine the amount of safety stock where the safety stock calculation results are obtained from the DRP method, namely the large number of stocks and the average demand for fertilizer stock divided by the number of fertilizer stock periods in the Distribution & Marketing Division of PPD Sumsel. The safety stock calculation page is shown in Figure 4.



Figure 4. Display of Safety stock calculation

5. DRP calculation

DRP calculation page displays a table containing the DRP calculation data per period where the distributor can see the data table displayed according to the period and type of fertilizer selected. The DRP table data page also displays a table that contains an explanation of the amount of Safety stock, Lead time, Past Due, Net Requirements, POH type of fertilizer per period.

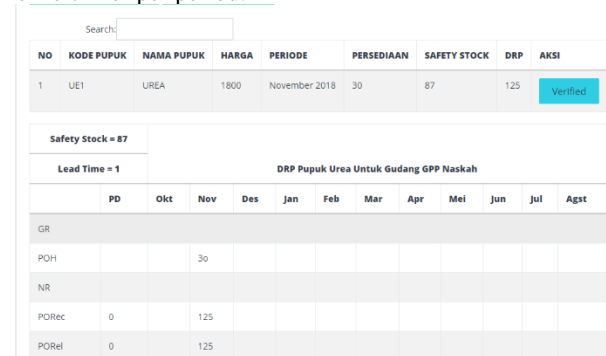


Figure 5. Display of DRP calculation

Besides, this DRP calculation is also used to calculate demand and safety stock data from distributors. If the inputted data has been calculated, then the DRP table calculation results will appear.

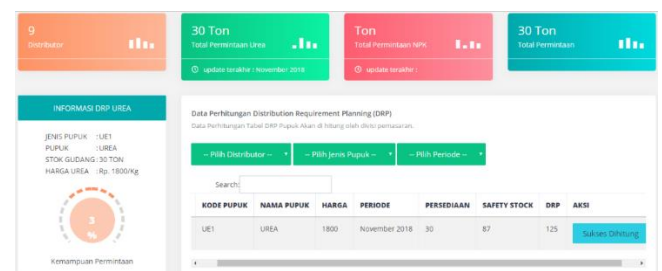


Figure 6. Display of DRP calculation

6. Fertilizer report

The reporting page is used for management related to fertilizer processing, in this case, reports on supply, demand, fertilizer distribution, and DRP results. In the inventory report menu, it displays inventory data where the manager can also print data reports according to the selected period. Display inventory reports are shown in Figure 7.

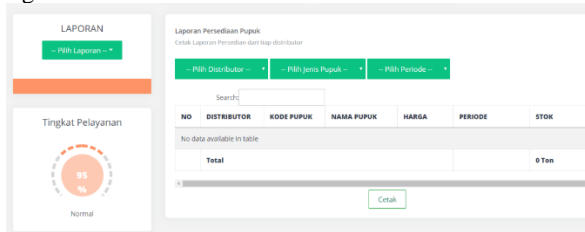


Figure 7. Display of fertilizer report

The query report function displays query data where the manager can also print query data reports according to the selected period (shown in Figure 8).

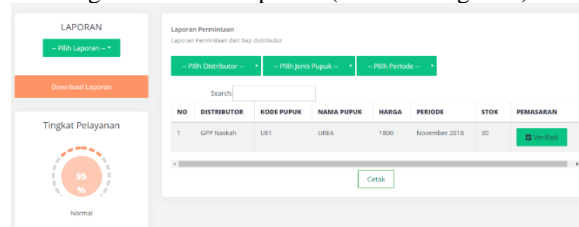


Figure 8. Display of Demand Report

Whereas the DRP report displays the DRP results table where the manager can also print data reports according to the period and type of fertilizer selected as shown in Figure 9.

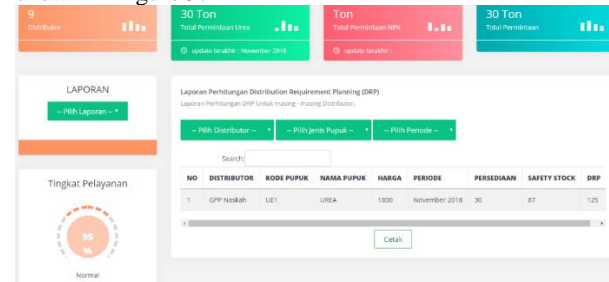


Figure 9. Display of DRP report

Table 6 shows the comparison of subsidized fertilizer management without using DRP, using DRP and using a DRP computerized system. From the table, implementation of DRP in the subsidized fertilizer data management system can optimize existing data collection and reporting functions, by adding feature requirements according to the DRP concept such as fertilizer management of stock, demand and distribution, safety stock and DRP calculation, also fertilizer report for a company manager.

Table 6. Comparison of the implementation of the DRP method in fertilizer management

No	Management process	Without DRP	With non systematic DRP	With systematic DRP
1.	stock data collection	√	√	√
2.	demand data collection	√	√	√
3.	stock data management	√	√	√
4.	demand data management	√	√	√
5.	safety stock calculation	-	√	√
6.	DRP calculation	-	√	√
7.	stock reporting	-	-	√
8.	demand reporting	-	-	√
9.	DRP reporting	-	-	√

CONCLUSION

It can be concluded that from the implementation of the DRP method in subsidized fertilizer management system for PPD Sumsel is as follows:

1. The DRP method provides a more coordinated distribution reference for urea subsidized fertilizer. With the distribution schedule, the company can prepare everything related to product distribution activity.
2. The implementation of DRP in the subsidized fertilizer data management system is used to optimize existing data collection and reporting functions, by adding feature requirements

according to the DRP concept such as fertilizer management of stock, demand and distribution, safety stock and DRP calculation, also fertilizer report for a company manager.

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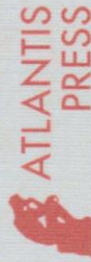


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Improving Customer Service in Dealing with the Vehicle Routing Problem with Time Windows Using Optimization Algorithms

Muhammad Ihsan JAMBAK, Yeshika Kharlina Dranie PUTRI, Bayu Wijaya PUTRA

Vehicle Routing Problem with Time Window (VRPTW) is one of the combinatorial problems faced in serving customers. The Evolution Strategies (ES) and Genetic Algorithm (GA) are part of the artificial intelligence used to solve this problem. Although these techniques are similar, they possess the following...

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Enhancing the Relevance of Searching Result of Songs' Information Using Ontology

Muhammad Ihsan JAMBAK, Indah SURYANI, Dedy KURNIAWAN

The crawler and Machine Learning based search engine are not optimal in determining relevant search results. The aim of this research, therefore, is to increase the relevance of search engine results. This design was carried out on a semantic web, using ontology with RDF due to its knowledge representation,...

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Borrower Sentiment on P2P Lending in Indonesia Based on Google Playstore Reviews

Nur Wulan Adhani POHAN, Indra BUDI, Ryan Randy SURYONO

P2P lending is a part of fintech where the public can request small loans without the common procedures of a conventional bank. There are many issues that arise from the lack of regulations and information on P2P lending which are mostly negative. In this paper, we analyze the public perspective of P2P...

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The Content and Construct Development of CGMs Device Adoption Model

Md Ismail HOSSAIN, Ahmad Fadhil YUSOF, Ab Razak Che HUSSIN, Mohotasim BILLAH, Mohana SHANMUGAM

The authors formed an instrument to facilitate the intention of wearable continuous glucose monitoring device adoption in smart healthcare system. Initial survey items were reviewed by five content experts for construct-fit and readability. Here, seven factors were identified from various researches...

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A Procedural Model for the Design of Informatics Competency Proficiency Assistance Systems Based on Ubiquitous Learning

Rangga FIRDAUS, Basuki WIBAWA, Khaerudin

Many concerns from the world of work that the competence of graduates, especially in the field of informatics, is inadequate and not crucial to the needs of the workforce, because the performance of the learning outcomes of the curriculum is not synchronous between the world of education and the world...

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P2P Lending Sentiment Analysis in Indonesian Online News

Ryan Randy SURYONO, Indra BUDI

Fintech has improved from a few years ago and has put regulators under pressure to find a legal framework that allows fintech to operate in the formal

financial sector and provide appropriate protection for customers. At present, many online news in Indonesia contain articles about Fintech, especially

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The Application of Analytical Hierarchy Process as Supporting Systems of Decision-Making in Individual Tuition Fee of Students of Universitas Sriwijaya

Hardini NOVIANTI, Megah MULYA, Ihsan JAMBAK

Universitas Sriwijaya, as one of public universities in Indonesia, has already been implementing individual tuition fee from the beginning. To date, individual tuition fee in Universitas Sriwijaya has been calculated by using a certain application as a supporting system of decision making.

Unfortunately,...

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The Design of Monitoring System of Smart Farming Based on IoT Technology to Support Operational Management of Tea Plantation

Nadia THEREZA, Iwan Pahendra A. SAPUTRA, Antonius HAMDADI

Indonesia is one of the seventh largest tea producers in the world. Certainly, tea is Indonesia's export commodity that must be maintained. However, some systems of tea plantations, both monitoring and maintenance are also still run with conventional systems so the operational system is still constrained...

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Data Quality Management Evaluation: A Case Study at the BPS-Statistics of Kaur Regency Bengkulu Province

Rela SABIYANA, Indra BUDI, Yova RULDEVIYANI

The BPS-Statistics of Kaur Regency is a work unit under the BPS-Statistics of the Republic of Indonesia which is responsible for carrying out statistical activities in the regency area and contributes a large role in the effort of improving data quality of each survey or census before being published...

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The Development of Indonesian Sentiment Analysis with Negation Handling

Novi YUSLIANI, Mastura Diana MARIESKA, Endang LESTARI, M. Ridho Putra SULFA, Wibi ARIMURTI

The polarity of a text can be seen based on the words used in the text. The use of negation words in a sentiment can change the polarity of the sentiment. One example of a negation word in Indonesian is the word 'tidak'. If a sentiment has a word "tidak" combined with a word "jelek" to form "tidak jelek",...

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The Design of Online Promotion System for Entrepreneur : Palembang City Based on Mobile Application

Abdul Haris DALIMUNTHER, Desi Windi SARI, Puspa KURNIASARI

Online (electronic) promotion system is an alternative media for the entrepreneur in promoting their business. The design of an electronic promotion system based on mobile applications in Palembang city aims to create a special mobile application that can be used by business people in Palembang city...

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Design of Mobile Application as Communication Media and Information Broadcasting for Elementary School Based on Android

Desi Windi SARI, Abdul Haris DALIMUNTHER, Nadia THEREZA

In elementary schools, the delivery of various kinds of information and communication between the school and parents must be very good and intense, that is because elementary school students have not been able to set their learning patterns and study schedule and sometimes they forget to convey messages...

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Design and Implementation of Tourism Information System in Ciletuh-Palabuhanratu Geoparks

Finsa NURPANDI, Siti NAZILAH, Fietri Setiawati SULAEMAN

Ciletuh-Palabuhanratu UNESCO Global Geoparks is a single and unified geographical area the site and landscape are united with international

geological significance managed with the concept of holistic protection, education and sustainable development. There are many sites located in Ciletuh-Palabuhanratu...

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Public Private Partnership E-Government in Improving Service Quality in Community Health

Muhammad Haikal SHAHAB, Darius ANTONI, Muhammad AKBAR

Advances in the use of information technology (ICT) have greatly facilitated the development of electronic government (E-Government) throughout the world. The benefits of this development can improve the quality of services to the community through aspects of user approval, efficiency, openness, and...

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Development of E-Government Trustworthiness to Increase Public Trust

SUTRISNO, Darius ANTONI, Muhammad AKBAR

The development of Electronic Government (e-government) has become a research topic of interest for researchers worldwide. Various government agencies in Indonesia, mostly, have adopted e-government technology in government management. But the tendency of declining public trust in government becomes...

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Modified Email Header Steganography Using LZW Compression Algorithm

Varian CAESAR, Rinaldi MUNIR

Communication by using email has become frequent nowadays and creates a new medium for hiding secret data. Email Header Steganography or HeadStega is a technique in Noiseless Steganography that utilizes the header part of an email such as subject, to, cc, etc. to hide secret messages. HeadStega does...

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Blowfish–RSA Comparison Analysis of the Encrypt Decrypt Process in Android-Based Email Application

Dwi Yuny SYLFANIA, Fransiskus Panca JUNIAWAN, LAURENTINUS, Harrizki Arie PRADANA

Email is a service that used to send text, message, or letter to someone electronically. However, addressing the email at network possibility to be intercepted, read, even modified by another side. As a result, there is no guarantee for confidentiality and accuracy of information. There is a way to deal...

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Fair Network Optimization with the Cellular Network Traffic Management Model Using Lingo 13.0

Fitri Maya PUSPITA, Desta WAHYUNI, INDRAWATI, Evi YULIZA, Oki DWIPURWANI

This study aims to analyze the optimal internet pricing scheme model using the Cloud Radio Access Network (C-RAN) model by involving the Fair Network. C-RAN is a centralized radio access network, where the equipment used is connected to a cellular antenna to process signals and send them to the core...

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Data Integrity Checking for Securing Students Grades Lists Using the Hash Function

Megah MULYA, Hardini NOVIANTI, Des Alwine ZAYANTI, A.S. Syahrul Ramadhan, Rendy WIJAYA, Christofer YEREMIA

Presently, institutions should preserve the quality of teaching, services and resources to ensure the quality of the institutions. All information is presented in full, fast and always in accordance with existing developments. The use of computer technology has an impact on eliciting gaps by irresponsible...

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Cyber Threats Analysis on Jakarta Smart City

Amiruddin AMIRUDDIN, Bio AKRAM, Fitri Hana DINI

Jakarta Smart City (JSC) is the concept of a modern city utilizing the Internet of Things to enhance and guarantee public services that are fast, inexpensive and environmentally friendly. Various programs were designed, offered and integrated to make it easier for citizens to meet their needs. However,...

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Text Steganography on Digital Video Using Discrete Wavelet Transform and Cryptographic Advanced Encryption Standard Algorithm

Megah MULYA, Osvari ARSALAN, Latifah ALHAURA, Rendy WIJAYA, A.S. Syahrul Ramadhan, Christofer YEREMIA

The rapid development of the internet has increased the ease of sharing information to people around the world. However, this advancement also raises a distress about data manipulation when the data are sent by the sender to the recipient. Therefore, information security is a major problem in data communication....

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Information Security: Credit Service Application Analysis at Bank Indonesia

FATHONI, Pacu PUTRA, Yunika H Dinna

This research aims to analyze the procedures and attributes of information system security from the implementation of credit service applications at Bank XYZ using a combination of COBIT Framework 5.0 and ISO 27001:13. The assessment focused on the security element of the information system consisting...

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Performance Measuring Analysis of Customer Relationship Management MyXL Using CRM-Scorecard

Hidayah SYAFITRI, Ali IBRAHIM

The company is aware of the customers' needs which are not fulfilled, and of its CRM's work effectivity (MyXL Application). This research aims at analysing and determining MyXL app's work, and giving solution to develop the programs or attributes which are not yet working well for the next period. Analysing...

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Security Capability Assessment on Network Monitoring Information System Using COBIT 5 for Information Security

Aris PRATIWI, Dwi Rosa INDAH, Jaidan JAUHARI, Mgs. Afriyan FIRDAUS

PT Telekomunikasi Indonesia, Tbk. (Telkom) is a State-Owned Enterprises (SOEs), which provides products and services of information and communication technology services and telecommunications networks in Indonesia. Telkom has implemented a network disturbance monitoring information system which includes...

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Analysis of Factors Affecting User Loyalty in an Online Discussion Forum

Jurnalistika Febra ARIELLA, Indra BUDI, M. Lahandi BASKORO

PT XYZ is an internet company, providing free online discussion forum as the main service with a display of advertisements as a primary source of revenue. Users are one of the most important assets for PT XYZ. Every user

who visits a discussion forum will be exposed with advertisements in the forum which...

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Knowledge Management Maturity Model: A Case Study at Ministry XYZ

Nanik QODARSIH, HANDAYANI, Rela SABIYANA

Knowledge management (KM) has a very potential benefit, especially to deal with unstructured public issues and has no solution at all, requiring a public leadership to work, share, apply and create knowledge in many institutions. The Ministry of XYZ has built a Knowledge management system (KMS) that...

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Knowledge Management Barriers in Higher Education: Strategic Issues at Private University

Faradillah FARADILLAH, Ermatita ERMATITA, Dian Palupi RINI

This study proposes The Knowledge Management Barriers for private universities, data collected in Palembang through an online questionnaire distributed to 131 of ABC University lecturers. The results showed that there were four factors with the same components extracted by Principal Component Analysis...

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Improving the SMS Security and Data Capacity Using Advanced Encryption Standard and Huffman Compression

LAURENTINUS, Harrizki Arie PRADANA, Dwi Yuny SYLFANIA, Fransiskus Panca JUNIAWAN

The development of technology that increasingly rapidly has a significant influence on telecommunications. One feature of cellular telephones is SMS (Short Message Service). Still, this facility in the form of SMS (Short Message Service) has a vulnerability in the way of information leakage. Therefore...

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Multi-Document Text Summarization Based on Semantic Clustering and Selection of Representative Sentences Using Latent Dirichlet Allocation

Oktefvia Aruda LISJANA, Dian Palupi RINI, Novi YUSLIANI

Information in the form of online news texts has become one of the most important in this information age. There is a lot of online news that is produced every day, but this news often provides the same contextual content but with a different narrative. This makes it difficult for readers to get complete...

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Clustering of Food Security Status in South Sumatera Using Fuzzy C-Means Algorithm

Dian Palupi RINI, Endang Lestari RUSKAN

Food security is defined as the condition of food to satisfy every society which reflected in the availability of sufficient food, a good number and

quality, secure, equitable, affordable, and based on the diversity of local resources. According to data from BPS South Sumatera, the percentage of poor...

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Design Depth and Balanced Control System of an Autonomous Underwater Vehicle with Fuzzy logic

Ahmad ZARKASI, Endang Darmawan YUDI, Muhammad Al RAVI, Ilham Junias ANGKOTASAN

Underwater vehicles are the vehicle that can be moved and controlled in water by remotely. Autonomous Underwater Vehicle (AUV) is one type of underwater robot that is being developed lately. Unlike Remotely Operated Vehicle (ROV) which can be controlled manually using the remote. AUV can move automatically...

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Design Heading Control for Steering AUV with fuzzy logic

Ahmad ZARKASI, Ilham Junius ANGKOTASAN, Muhammad Al RAVI, Endang Darmawan YUDI

Autonomous underwater vehicles (AUV) are a type of unmanned submarine robot that has many uses. The navigation system in an autonomous robot becomes an important point to guide the movement of submarine robots from one position to another through determining the position and direction of movement. Due...

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Implementation of Fuzzy Logic Method for Lifting Control System on Autonomous Underwater Vehicles

Ahmad ZARKASI, Rossi PASARELLA, Siti NURMAINI, Muhammad MAULANA, Muhammad FAJAR

The AUV navigation system can move autonomously in water using various methods. the implementation of lifting control system at AUV is needed to maintain the stability of the AUV when lifting under water. In this paper, the lifting process of AUV uses the fuzzy method. The fuzzy method is used for rule-based...

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Navigation System Based on Learning Vector Quantization Method for Robot Inspecting Object

RENDYANSYAH, Siti NURMAINI, M. Dimas FIRMANSYAH, Fikri Aulia Parlindungan LUBIS

One of the tasks given to the robot is to work in unpredictable environments. The physical limitation of human needs a robot to facilitate the work. In this study, the mobile robot has been designed to navigate in inspecting target or suspected objects. The Learning Vector Quantization (LVQ) method was...

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The Sustainable Ecosystem for Censor and Video Alarm System

Ariesta SATRYOKO, David Ronald TAIRAS

The purpose of this Journal is to develop an ecosystem of censorship method at an affordable cost, that censorship can be carried out massively, and children can enjoy shows without inappropriate scenes. As censor used to be done by a department point by the nation, LSF Indonesia (Lembaga Sensor Film...

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Implementation of Fuzzy Logic Control for Navigation System in Mobile Robot Omnidirectional

RENDYANSYAH, Siti NURMAINI, Sartika SARI, Dimas Bagus RAMARTA

Robot omnidirectional is a type of wheeled robot that can move efficiently in various directions. Generally, this robot uses Omni wheels. In this study, the mobile robot omnidirectional was developed to move freely in reaching the target point. The robot uses four Omni wheels, where the direction of...

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Tag Detection in RFID System Based on RSSI Technique for UHF Passive Tag with Slotted Aloha Method Under Interference Environment

Ahmad Fali OKLILAS, Assadiah Athirah

Radio Frequency Identification (RFID) is a wireless technology that uses radio waves as a key for item tracking, localization of movable assets and for

automatic operations. In some cases, it is not possible for the reader to identify all the tags which result in the tag being undetected. One of the..

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RFID Tag Location Determination System in the Parking Area Using K-Nearest Neighbor Algorithm

Ahmad Fali OKLILAS, Elvatyara Rahmadiany PUTERI, SAMSURYADI

This research was conducted to determine the position of the target tag placed in a predetermined position in a parking area. The method applied in this location determination system is the K-Nearest Neighbor algorithm method. There are two scenarios in this research, that are where the target tag is...

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A Proposed Design of Realtime Patient Monitoring System Using Websocket as a Basis of Telemedicine

NEHRU, Andreo YUDERTHA

Telemedicine provides service which can monitoring patient remotely. Some requirements must be provided by telemedicine system, such system is able handling real-time communication, managing account, and medical record. WebSocket is one of the protocols that can we utilize for bidirectional communication....

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Optimization of Underwater Image Objects with Noise Analysis Using a Gaussian Filter Selected Algorithm

Sukemi, Yogi TIARA PRATAMA

Different types of images when testing will give different results. Between still images and moving images requires speed and accuracy in the computation process. This is due to the availability of time in processing which tends to narrow at any time along with environmental changes. Retesting of processors...

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Application of Water Height Puddles Based on Android and Arduino

Ahmad Rifai, Rahmat Izwan Heroza, Sarmayanta Sembiring, Rossi Passarela, Alfarisi

Information about the elevation of water on the road is an essential thing to know. Such information can be a preliminary warning about the resulting negative impact that an application can display that information. The developed application gets input from sensors and Arduino to display the data related...

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GACOBOT Navigation System for Distribution Solid Waste to Temporary Dumpsite

Wahyu GUNAWAN, Aditya P. P. PRASETYO, Siti NURMAINI, RENDYANSY
Sri Desy SISWANTI

Gacobot is garbage collection and deliver the garbage to the temporary dumpsite and a robot which is an integration of mobile robotic systems and non-mobile robot, that robot such as a car robot systems and robotic manipulator as garbage grabber system. GACOBOT system also integrates an ultrasonic sensor...

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E-WS: A Novel Smart Information System Towards Smokers for the Outdoor Canteen Environment

Muhammad Ali BUCHARI, Kemahyanto EXAUDI, Clara Agustina HERAWATI, Huda UBAYA, Sarmayanta SEMBIRING, Osvari ARSALAN, Purwita SARI

The most critical component of the environment for living things is air. Poor air quality influenced by carbon monoxide (CO) gas. Cigarette smoke is one of the best contributors to carbon monoxide today. The habit of smokers does not heed the sign of no smoking in many places, for example, the Canteen...

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Performance Analysis of Parallel Processing on GPU for Simple Mathematical Computations

Mastura Diana MARIESKA, M. Ridho Putra SUFA, Adi WIDIANTO, Novi YUSLIANI, Rahmat Izwan HEROZA

Over time, more and more data being produced. We need high-processing computing to process this big data. One solution to this problem is to implement parallel processing using a Graphical Computing Unit (GPU).

Theoretically, processing mathematical computation on GPU will always be faster than CPU,...

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Implementation K-Nearest Neighbor Algorithm in Searching Location Books in Library Statically Based on RFID

Ahmad Fali OKLILAS, Fajri Aulia RACHMAT, Purwita SARI

Radio Frequency Identification (RFID) is a technology for determining an object using electromagnetic waves (radio waves) through a device called a tag. This identification is carried out using a reader, tag, and antenna. To maximize the performance of RFID technology in a room with a room scale that...

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Latent GLM Tweedie Distribution in Butterflies Species Counts

Rezzy Eko CARAKA, Rung Ching CHEN, Toni TOHARUDIN, Isma Dwi KURNIAWAN, S Asmawati, Doni ROPAWANDI, Muhammad Fijar Rotul AKBAR, INDRA, Muh Fahmi RUSTAN

Background: The diversity of butterflies relies on the accessibility of food plants and the quality of their habitat. Methods: The purpose of this study was to evaluate the diversity butterfly based on latent GLM in 3 different Habitat. At the same time, we perform the step construction of Tweedie Distribution...

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The Comparison of Apriori Algorithm with Preprocessing and FP-Growth Algorithm for Finding Frequent Data Pattern in Association Rule

Deo WICAKSONO, Muhammad Ihsan JAMBAK, Danny Matthew SAPUTRA

Association Rules is a data mining method to find the relation between items called rules. Finding rules in the association method can be divided into two phases. The first phase is finding the frequent pattern which satisfies specified minimum frequent, and the second phase is finding strict rules from...

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Implementation of Business Intelligence for Coal Production and Reserves Division

Anggi Tri Rizki RAMADHANI, Ken Ditha TANIA

In this era of globalization business competitions among the company increased. Companies need knowledge of information technology to support companies to be able to predict the future and help the whole system to improve services. Business Intelligence as a system that can help management by providing...

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Analysis of Transactions 212 Mart Kuto Palembang to Find Frequent Patterns Among Itemset Using Association Rule Mining

Zikri NURZANI, Ken Ditha TANIA

Minimarket 212 Mart Palembang Kuto is a retail market of 212 mart cooperative cooperatives, selling various kinds of goods for daily needs ranging from food, non-food, drinks and frozen food. All transactions carried out in transactions, which are stored in datacenter warmart 212, consist of spreadsheets...

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Sequential Models for Text Classification Using Recurrent Neural Network

Winda Kurnia SARI, Dian Palupi RINI, Reza Firsandaya MALIK, Iman Saladin B. AZHAR

Neural network-based applications are recently shown promising results for text classification. However, it is still challenging for the model to contemplate local features and word contingent on the information of the sentence. This work proposed a deep learning approach to generate a more precise sentence...

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Effect of Distance Metrics in Determining K-Value in K-Means Clustering Using Elbow and Silhouette Method

Danny Matthew SAPUTRA, Daniel SAPUTRA, Liniyanti D. OSWARI

Clustering is one of the main task in datamining. It is useful to group and cluster the data. There are a few ways to cluster the data such as partitional-based, hierarchical-based and density based. Partitional-based clustering is a way to cluster data with non-overlapping subsets. One of the most popular...

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The Effect of Preliminary Centroid Determination Using Particle Swarm Optimization Algorithm in High Dimension Data Clustering

Ardi Wasila CHANDRA, Rifkie PRIMARTHA, Anita Desiani, Adi WIJAYA

K-Means is one of the methods in clustering where the results are strongly influenced by initial centroid positioning. In general the k-means method in determining the initial centroid is generated randomly. Determination of the initial random centroid is what often makes k-means trapped in the optimum...

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Online Retail Marketing Recommendation System Based on Generalized Sequential Pattern Algorithm and FP-Growth Algorithm

Destrilia, Rifkie PRIMARTHA, Sukemi, Adi WIJAYA

Data mining association is a technique to find the relationship between items where the function can help sellers in determining their sales strategy. The algorithm used in this data mining techniques are Generalized Sequential Pattern Algorithm and FP-Growth Algorithm. Generalized Sequential Pattern...

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Comparison of Distance Measurement Methods on K-Nearest Neighbor Algorithm For Classification

Taca ROSA, Rifkie PRIMARTHA, Adi WIJAYA

K-Nearest Neighbor is a non-parametric classification algorithm that does not use training data and initial assumptions or models in the calculation process. The quality of the k-Nearest Neighbor classification results is very dependent on distance between object and value of k specified, so the selection...

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Optimization Naive Bayes Algorithm Using Particle Swarm Optimization in the Classification of Breast Cancer

Vira MELINDA, Rifkie PRIMARTHA, Adi WIJAYA, Muhammad Ihsan JAMBAK

Methods of data mining classification are used in various fields of research. Naive Bayes is one of the most used algorithms of data mining classification, especially in the medical science because Naive Bayes is considered good method for the data concerned with a statistical diagnosis. Optimization...

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Prediction Graduate Student Use Naive Bayes Classifier

Allsela Meiriza, Endang Lestari, Pacu Putra, Ayu Monaputri, Dini Ayu Lestari

Student graduation is important in the accreditation assessment process. Because student graduation there are standards that must be Achieved by the Study Program items, namely a four-year study period and a 3.0 GPA.

Therefore we need a prediction that can Anticipate from the beginning o graduation...

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Introducing SOMA-DEF: An IT Service Requirement Engineering Model

Nabila Rizky OKTADINI, Putri Eka SEVTIYUNI, Muhammad Ali BUCHARI

To provide IT services according to the needs of users, the services provided should ideally go through a mature design process. Several studies that have been done previously explain the life cycle of a service. But until now there has been no research that explains how to identify the needs of IT services...

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Implementation of Quick Response to Customer Relationship Management System Based on Mobile Application

Ali Ibrahim, Akbar Alzaini, Akbar Wiranata, A.J Hanum Sabrina, Ikamartha Dwazar, Reza Rio Saputra

Service improvement is crucial in companies, organizations or business that implement CRM which will increase the number of customers/visitors and form loyalty to the company. In restaurant context, many only focus on the food taste to convince customers to return to the restaurants, but pay a little...

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Social Media Monitoring Twitter: Mobile Brand Awareness Using the Selection Sort

Ali IBRAHIM, YUSMANIARTI, Zikri NURZANI, Alif GINA, Indah Irawati PARDEDE, Novia RISKY, Atik HUSNIA

Social media platforms not only a tool to share content and opinions, they represent a company can create business opportunities and value-added business. In fact, today people move all the real life they are present in social media. Social media or social networking sites involved in our daily lives...

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Enhancing Customer Loyalty Through Service-Based Customer Relationship Management at Financing Company

Nabila Rizky OKTADINI, Annisa TURRAHMA

Service Oriented Architecture is powerful method to synthesis service from line of interaction that happen in organization. Company X was a company engaged in financing and services that often got any problem in customer acquisition due to the delivery information to customers could not be evenly distributed....

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Text Classification of Cancer Clinical Trials Documents Using Deep Neural Network and Fine Grained Document Clustering

Jasmir JASMIR, Siti NURMAINI, Reza Firsandaya MALIK, Dodo Zaenal ABIDIN

Clinical trials are any research studies involve human participation with health safety outcomes. In clinical trials, there is the most important term

called the eligibility criteria (eligible and not eligible). The eligibility criteria for clinical trials are usually written in free text, it requires...

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Decision Support System for Performance Appraisal Using Elimination Method and Translation Reality Choices (ELECTRE)

Vita Adria SAFITRI, Ali IBRAHIM

The development of a company can be seen and greatly influenced by the number of employees owned by the company. The big number of employees and the difference of each performance, making the company more difficult to see the performance of good employees and have high productivity that will affect the...

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Accelerating Convolutional Neural Network Training for Colon Histopathology Images by Customizing Deep Learning Framework

Toto HARYANTO, Heru SUHARTANTO, Aniaty MURNI ARYMURTHY, Kusmardi KUSMARDI

Cancer diagnose based on the histopathology images is still have some challenges. Convolutional Neural Network (CNN) is one of deep learning architecture that has widely used in medical image processing especially for cancer detection. The high resolution of images and complexity of CNN architecture...

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Information Extraction from Web as Knowledge Resources for Indonesian Question Answering System

Abdiansah ABDIANSAH, Alvi Syahrini UTAMI

Research in the field of Open Domain Question Answering System (OD-QAS) generally involves external knowledge which are dynamic and require high-level representation. Strong external knowledge is one of the key success of QAS. Therefore, intensive research is needed in this area. Web is one of the big...

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Evaluation Performance Neural Network Genetic Algorithm

Hetty ROHAYANI, Tuga MAURITSIUS, Leslie H Spit Warnars Harco, Edi ABDURRACHMAN

Hybrid models of the precipitation spillover process that are embedded with high unpredictability, non-stationarity, and non-linearity in both spatial and worldly scales can give significant results in rainfall forecasting. Considering this, various neural network models have been applied to reproduce...

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MBRTE: Modified BLEU Algorithm for Recognition Textual Entailment

Abdiansah ABDIANSAH, Alvi Syahrini UTAMI

The BLEU algorithm has become a standard evaluation tool for Machine Translation (e.g Google Translate). The advantages of this algorithm are simple and fast. This algorithm is quite widely applied in fields other than MT, including in the Recognition Textual Entailment (RTE). The implementation of BLEU...

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Analyzing the Improvement Process of Table Tennis Using the Game Refinement Theory

Li JIANGZHOU, Anggina PRIMANITA, Mohd Nor Akmal KHALID, Hiroyuki IIDA

Table tennis is one of the most popular sports in the world. With a history of just over 100 years, table tennis has slowly become the seventh-largest sport in the world. However, it is unclear whether the improvement actually makes the game better or worst. As such, a consistent quantification approach...

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Population-Based Ant Colony Optimization with New Hierarchical Pheromone Updating Mechanism for DNA Sequence Design Problem

MISINEM, ERMATITA, Dian Palupi RINI, Reza Firsandaya MALIK, Tri Basuki KURNIAWAN

DNA computing research in the last 20 years has attracted the attention of many researchers from various scientific disciplines. Many researchers have succeeded in demonstrating the ability of bio-molecules DNA computing to

be used as storage media and biochemical tools as information processing operators....

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Implementation of Fuzzy Logic in Determining the Value of Uncertainty Factors on Expert System

Rusdi EFENDI, YUNITA, M. Ihsan JAMBAK, Leny MARLINA

An intelligent system is a system that was built by imitating the ability of an expert in solving problems encountered. To adopt the ability of an expert in the system set forth in the form of rules that are usually in the form of IF.. Then rules. Each rule usually has a uncertainty value to declare...

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Mathematical Implementation of Circle Hough Transformation Theorem Model Using C# For Calculation Attribute of Circle

SUTARNO, ABDURAHMAN, Rossi PASSARELLA, Yosef PRIHANTO, Rudy A.G GULTOM

Hough transformation is a method or theorem is used in searching primitive object forms, such as lines and circles. Circular Hough transformation detection has high accuracy rate in the form of the circular object. There are several stages in performing the application of the mathematical model for circular...

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System Design of Iris Ring Detection Using Circular Hough Algorithm for Iris Localization

ABDURAHMAN, SUTARNO, Rossi PASSARELLA, Yosef PRIHANTO, Rudy A.G GULTOM

Iris is the part of the eye that can expand and shrink depending on the intensity of light entering the eye. Iris can be used as a feature or parameter that can be studied in terms of both health and information technology. Detecting the iris in this paper, are separated into two main stages: preprocessing...

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Handling Numerical Features on Dataset Using Gauss Density Formula and Data Discretization Toward Naïve Bayes Algorithm

Mochammad YUSA, Ernawati ERNAWATI, Yudi SETIAWAN, Desi ADRESWARI

Naïve Bayes is one of best classifiers in data mining. Naïve Bayes Algorithm either is used in some research areas. Besides having good performances, the algorithm can also handle numerical and categorical data values. This paper presents two ways of treating numerical features as a pre-process before...

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Author Matching Using String Similarities and Deep Neural Networks

Zaqqi YAMANI, Siti NURMAINI, FIRDAUS, M Naufal R, Winda Kurnia SARI

Author Name Disambiguation (AND) is one of the problems in the process of classification of publication data, where the introduction of the characteristics of each author is difficult to recognize because of the frequent changes in patterns in writing author names. In the world of publications, author...

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Face Recognition Using Hyper Sausage Neuron Networks

Shaffan MADANNY, SAMSURYADI, Novi YUSLIANI

Biometric authentication systems are generally utilized in different manners. One of the most generally utilized biometric systems is the face. The face is one path for every person to know one another and has their very own attributes or is extraordinary to every individual. The face recognition system...

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Nature of Probability-Based Proof Number Search

Anggina PRIMANITA, Hiroyuki IIDA

Probability-based Proof Number Search (PPN-Search) is a best-first search algorithm that possesses a unique nature. It combines two kinds of information from a tree structure, namely, information from visited nodes and yet to be visited nodes. Information coming from visited nodes is determined based...

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A Key Factor to Maintain Engagement: Case Study Using 'Login System'

Gao NAYING, Anggina PRIMANITA, Mohd Nor Akmal KHALID, Hiroyuki IIDA

The game refinement (GR) theory has been applied to many different games for quantifying their entertaining impacts. It is assumed that when playing any type of game, the game information progress is encoded and transported in our mind, and it is likely that the acceleration of that information is subject...

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GIS Software Based on Android Mobile to Search Tourism Objects Using Technology Acceptance Model with Rasch Model Measurement

M. Rudi SJY, Dedy KURNIAWAN, Arianysah SAPUTRA, Novita SARI, Rahma DESTRIANI

Android is a mobile operating system used for touch screen based smart phones. The software is built using Java Android Programming language and using eclipse as the development tool. The purpose of this research is to produce a Geographic Application for tourism guidance in Palembang city consisting...

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Software Design Android (GIS) for Tourist Destination Seekers in Palembang City Using Rasch Model Measurements

M. Rudi SANJAYA, Dedy KURNIAWAN, Arianysah SAPUTRA, Novita SAR
Rahma DESTRIANI

Rapid change and growth of technology such as automatization and computerization in many types of business according to information technology communities and practitioners are demanding us to be well-prepared in facing the evolution like mobile devices especially android. Android is a mobile operating...

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Implementation of Technique for Order Preference by Similarity to Ideal Solution Method in the Selection of Integrated Islamic Elementary School

Allsela MEIRIZA, Dini Ayu LESTARI

The process of selecting IIES is not a simple thing, parents must choose wisely and precisely which IIES will be a place for their children to get knowledge given that the learning routines and interactions carried out by children in the school will take place in no short time. At present, almost all...

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Enabling Collaboration of CodeIgniter Framework and RESTful API for Utilize Web Mobile Interface Implemented on Final Project Management System

Bayu Wijaya PUTRA, Ariansyah SAPUTRA, M. Rudi SANJAYA, Dedy KURNIAWAN

The PHP framework is often used on medium and large scales but is also often used in the development of small-scale information systems. The

selection of frameworks and database access methods became an important factor in developing information systems. CodeIgniter is a PHP framework that offers speed...

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Implementation of Exponential Comparison Method in Performance Evaluation of Temporary Employees in District Court of Prabumulih

St Dhiah Raniah NAPIAN, Allsela MEIRIZA

As an effort of the District Court of Prabumulih in maintaining the quality of its employees, the District Court of Prabumulih routinely evaluates the performance of temporary employees each year. The process of evaluating the performance of temporary employees at the District Court of Prabumulih is...

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Implementation of Distribution Requirement Planning in the Subsidized Fertilizer Management System

Alvina DAYANTI, Mgs. Afriyan FIRDAUS, Allsela MEIRIZA, Dwi Rosa INDAH, Ahmad HERYANTO

Food security is one of the Indonesian government's strategic programs. In support of the Food Security Program, the Ministry of Agriculture has established a policy on the distribution of subsidized fertilizer needs, especially for food crops, which are six right policies. Subsidized fertilizer distribution...

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Application of Theory of Planned Behavior for Knowledge Sharing System Among Nurses

Annisa SEPTIANI, Rahmat Izwan HEROZA, Dwi Rosa INDAH, Rizki Dwi CAHYANI, Niffari Meirina BERNOVA

Nurses play an important role in the hospital because they give services and care to the patients. The world of health is increasingly developed, demanding nurses to keep adding and equalizing their knowledge, while they are still doing their job. So, it is necessary to share knowledge between nurses...

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E-Marketplace Printing Services Using Mobile-Based Application with Customer Relationship Management Approach

Ali IBRAHIM, Hedi YUNUS, Dedi RAMADHAN, Ifan SETIAWAN, Agil Furqaan Nur RAYYAN, Gusti BARATA, YUSMANIARTI

CetakCetak.id is an E-Marketplace application of mobile-based printing services that implements up-selling and cross-selling strategies with the purpose of increasing printing sales. This research used descriptive qualitative method that described the level of relationship between Customer Relationship...

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Implementation of Social Customer Relationship Management Using Instagram and Facebook as Songket Marketing Media

Ali IBRAHIM, Rizqy ZURRIYATI, Mira Afriana UTAMI, Siti Larista OCTARIA, Tri WAHYUNI, Luh SIADNYANI, YUSMANIARTI

Social Customer Relationship Management (SCRM) is a strategy used by a company or organization to be able to create and maintain a good relationship with its customers and reduce the possibility of its customers moving to other products. By using social media applications. Mawar Songket Palembang is...

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Effect of Social Media "Instagram" as a Tool of Distributor Promotion of Oriflame Masayu Aliyah

Ainun MARDLIYYAH, Arindia UTAMI, Elly KURNIATI, Meilina, Novri YANTI, Ali IBRAHIM

Social media provides a place for people around the world to communicate with, share, comment, and also influence each other. In addition to facilitating communication, social media also can be used as a business tool such as utilizing social media for CRM, so that a new term appears in CRM, namely Social...

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Organizational Knowledge Representation Using Flowcharts with POS Tagger Techniques for Bahasa

Rizki Dwi CAHYANI, Rahmat Izwan HEROZA, Dwi Rosa INDAH, Annisa SEPTIANI, Niffari Meirina BERNOVA

PT. Pupuk Sriwidjaja Palembang is one of the State-Owned Enterprises companies as a pioneer of national fertilizer producers in Indonesia. This company has done a lot of employee turnover, knowledge based on experience that contains information about how to use and maintain the machines while producing...

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Theory of Reasoned Action Implementation on Knowledge Sharing Process Between Alumni and College Students

Niffari Meirina BERNOVA, Dwi Rosa INDAH, Rahmat Izwan HEROZA, Tri Ayu RACHMADITA, Annisa SEPTIANI, Rizki Dwi CAHYANI

This study aims to identify user requirements based on the results of hypothesis to find out the features needed with the framework of Theory of Reasoned Action as the basic theory of reference to find out the factors someone's wants to share their knowledge. This study uses the quantitative method of...

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The Effect of Implementing Web Push Notification and Customer Relationship Management in E-Commerce of Silver Craft MSME

Heni SULASTRI, Putri Eka SEVTIYUNI, Alam RAHMATULLOH, Ni Made Karuni SANJIWANI

Kameswara Silver is a micro small and medium enterprises (MSME) in the silver handicraft industry. During its operation, Kameswara Silver only accepts purchases from abroad through colleagues from the company's owners with products manually, not regulated by the system, or computerized, and the company...

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Enterprise Architecture Planning with TOGAF ADM for Balikpapan College of Economics

Yuyun Tri WIRANTI, Nabila KHAERUNNISA, Lovinta Happy ATRINAWATI, Vinda DANINGRUM

The information system architecture is a standard reference that later can be used by organizations to develop an integrated information systems. One of the benefits of implementing enterprise architecture is creating harmony between business and information technology for the needs of the organization,...

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Enterprise Architecture Planning for Balikpapan Environmental Services Using TOGAF ADM

Lovinta Happy ATRINAWATI, Muhammad Aqil MAULANA, Tegar Palyus FIQAR, Soleh ARDIANSYAH

Implementation of Enterprise Architecture (EA) is an integral part to ensure IT investments deliver values aligned with business strategy. The Balikpapan Environmental Services (Dinas Lingkungan Hidup - DLH) main task is compiling and implementing government affairs in terms of environmental field. Although...

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Motivation Measurement of an Augmented Reality Traditional Musical Instruments System

Fransiskus Panca JUNIAWAN, Dwi Yuny SYLFANIA, Harrizki Arie PRADANA, Laurentinus LAURENTINUS

The popularity of traditional musical instruments in the eyes of children today has declined. That is due to the development of technology, gadgets, and the internet, which makes them spend more time on it. For this reason, an application that uses Augmented Reality is built to introduce traditional...

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Decision Support System of Advisability Assessment of Partnership Funding Recipient Using Simple Additive Weighting Method

Yadi UTAMA, FATHONI, Ali IBRAHIM

Pupuk Sriwidjaja Palembang usually distributes its assistance in a form of goods, and foods, or credit loans for an event or activity. But, the most thing that this company distributes to people around it is loan funding for those who are poor. Furthermore, choosing a candidate to fulfill requirements...

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Implementation of Augmented Reality in Multiplayer Games

Andi Nur RACHMAN, Muhammad Adi Khairul ANSHARY, Nazmi RIDWA

This research develops augmented reality games by applying multiplayer features. Some previous research on augmented reality games has suggestions for features similar to multiplayer. And the weaknesses of some previous studies also exist in augmented reality which still requires technology-based tracking...

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Information Risk Assessment Model of Accuracy and Timeliness Dimensions

Putri Eka SEVTIYUNI, Nabila Rizki OKTADINI, Ali BARDADI

The low quality of data and information held by the organization can encourage the emergence of information risk. Accuracy is an important dimension for the quality of the information but would lose its benefits if it is delivered at the wrong time, so it needs a risk assessment that able to assesses...

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Image Processing of Hand Gesture for Augmented Reality Systems

Sri Desy SISWANTI, Robbyansyah ASMIR

Advances in HCI technology have an effect on user interaction with AR system. The hands are the limbs that are often used for interaction. In this research make hand detection system for Human Computer Interaction (HCI) on system between user and object. In this study focused on image processing for...

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Usability Testing to Measure Real Perception Generation Level in Introduction of Bengkulu University Building Based on Virtual Tour with 360° Object Modelling

Yudi SETIAWAN, Aan ERLANSHARI, FAKHRUREZI, Mochammad YUSA, Endina Putri PURWANDARI

The development of photography technology creates a 360 ° camera that carries an ultra-wide twin1-lens folded optical lens (a small double lens with a folding design). This technology can produce spherical panoramic images. Spherical panoramas are borderless and seamless image objects used to create...

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Usability, User Experience, Learning Motivation, and Learning Rate Characteristic of Learning Programming Using Game Making on Users with Different Computer Experience

Danny Matthew SAPUTRA, Liniyanti D OSWARI

Encouraging young children is an important activity for Sriwijaya University. One way to do this is by training aimed at increasing young children knowledge, skills and awareness. The activities in this training involved students and teachers from the Seventh day Adventist Junior High School in Palembang....

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Analysis of Moodle Features to Build Moodle-Lite

Abdiansah ABDIANSAH, Alvi Syahrini UTAMI

Moodle is one of the LMS (Learning Management System) applications used to build E-Learning. Moodle is quite popular compared to other LMS because it provides several main advantages, namely free, feature rich and large community support. Even so, Moodle has some problems that are still being improved,...

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Implementation of Trend Moment Method in Egg Forecasting System in Sukamulia Farm

Pacu PUTRA, VINOLIA, Hardini NOVIANTY

The needs of the egg become a problem at certain times. Sukamulia Farm is one of farms that produces an egg in South Sumatra. By implementing Trend Moment Method in forecasting system, Sukamulia farm can predict how many of egg that is needed by the customer in a certain time. The trend moment method...

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