PORTOFOLIO



FREDYANDU ROMBELAYUK

ICT EDUCATOR | DATA ANALYST



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ABOUT ME

Educational Learning Analyst

Hello, my is name Fredyandu Rombelayuk. As an IT professional, I have combine solid technical skills with a deep understanding of the dynamics of education. With a degree in Information Technology and experience as a web programmer and ICT teacher, I have expertise in data processing, database management, as well as compiling teaching materials and student evaluations.

I combine graphic design skills with a deep understanding of data to create effective and informative visualizations. The goal is to make it easier for the audience to understand and provide strategic recommendations that support corporate decision making.

Currently, I am deepening my data analysis skills through the Full Stack Data Analyst program at RevoU, mastering tools such as Google Spreadsheet, SQL, Python, and Tableau.

The combination of teaching experience and technical skills is ready for me to make a significant contribution as an Educational Data Analyst



EDUCATION



Revol Academy

Full-Stack Data Analysis | 2024-2025

Project: Customer Segmentation and Behavior Analysis:

"Optimizing Rental Courts and Customer" at ESM Internationale KL



Maranatha Christian University

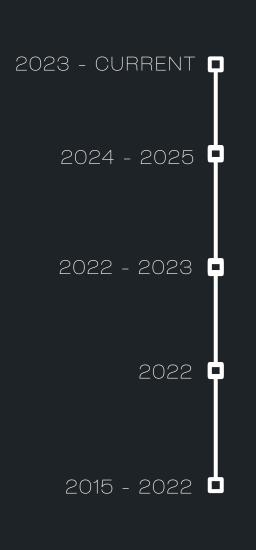
Information Technology | 2008-2014

Thesis: Hotel Booking Reservation with CRM Implementation at Toraja Prince Hotel



WORK EXPERIENCE







Sekolah Notre Dame Jakarta

<u>ICT</u> Teacher



Revol Associate

Data Analyst



Ignatius Global School Palembang

ICT and Coding Teacher



Glints Expert Class

Graphic Design Expert



Sekolah Kristen Bina Bakti Bandung

ICT Teacher Web Programmer



TECHNICAL SKILL







Tools : Google Spreadsheet XLMiner







Tools: Phyton by Google Colab SQL by Google BigQuery



Data Visualization

Tools: Tableau, Power Bl



Web Design

Tools: HTML, CSS







Graphic Design

Tools: Adobe Illustrator

Gravit Designer by Corel

SOFTSKILLS



Leadership

Provide directions and job descriptions for each task to be performed.



Social Network

Able to establish good relations with all divisions and personnel



Communication

Able to communicate well and two-way



Computational Thinking

Think systematically step by step and technically



Project Management

Search and develop strategies according to the goals you want to achieve



Detailed-Oriented

Systematic and directed to minimize errors

THE POWER OF DATA: TRANSFORMING HOTEL SERVICES AND FACILITIES FOR INCREASED CUSTOMER SATISFICATION AT OVERU HOTEL LTD.

Project Background

The hotel has conducted an NPS survey and some data that needs to be known for improving the quality and standard of the hotel are as follows:

- Survey objective: to determine the level of customer satisfaction with the performance, service and quality of the hotel
- Total respondents: 482 person
- Average age : 53 yearsAverage cost : £119.62

Objective

To improve the performance of hotel services and facilities so that it can increase the average score from 3.2 to 4.2 and the hotel service assessment aspect score above 3.2 on a scale of 5, in 5 countries within a period of 12 months, and can maintain customer loyalty.

Methodology

Business Background

DARCI

Problem Statement

Objective

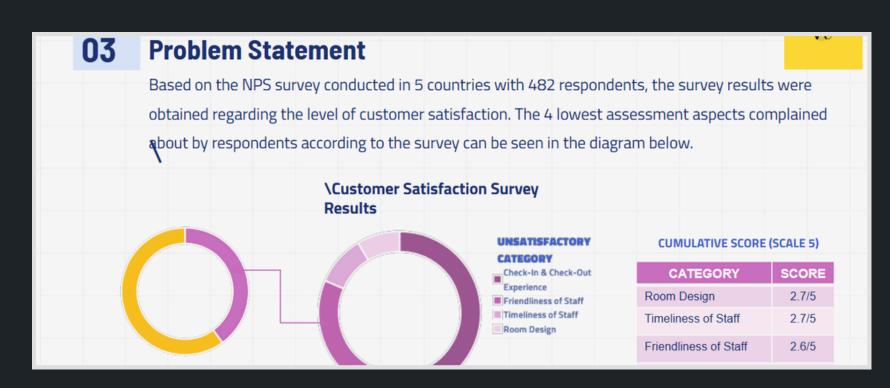
Root Cause

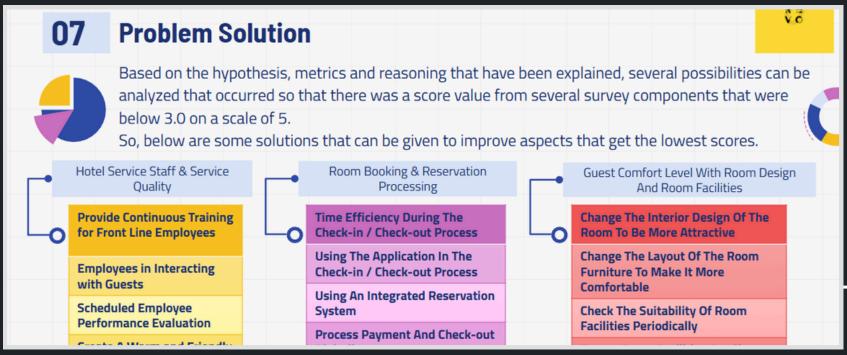
Hypothesis and Metrics

Conclusion

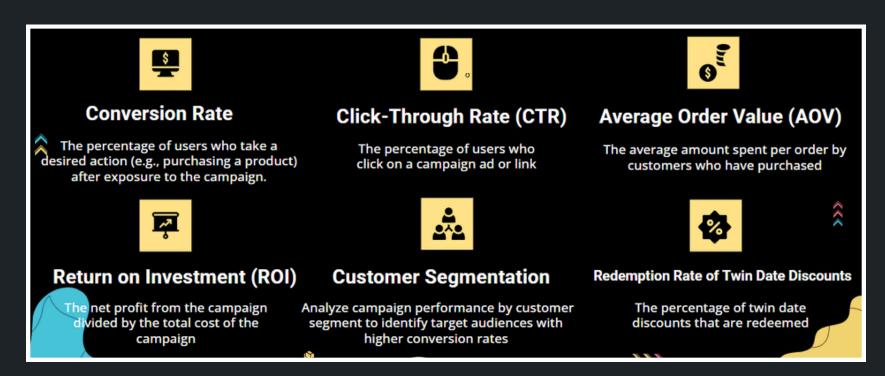
TOOLS: GOOGLE SPREADSHEET, XLMINER

VIEW PROJECT





SMART SPENDING, MAXIMUM SALES: DATA ANALYSIS FOR A COST-EFFECTIVE "TWIN DATE" CAMPAIGN ON TOKOBLI



Recommendation We can use Scenario B by implement on 11/11 Campaign, to be implemented during future twin date events, because: Most of Quantity of goods sold when using this scenario More dan 16 million Total Revenue obtained by implementing this scenario. It's mean Total Revenue when 11/11 Campaign is most higher than the other Campaign Total accumulated amount of discounts most used during the 11/11 Campaign Some things that can be applied to the category type that still has a total revenue, total discount usage and total quantity that is very low compared to other categories Do product bundling between categories that are correlated with each other in terms of product type or usage. For example: school & education category products with books category products Provide vouchers or attractive promos for product categories that are still lacking in buying interest. For example: school & education category products provide a 30% voucher promo when purchasing books and stationery with a minimum Do product bundling between products with the highest sales and products with lower sales but still have a relationship between categories. For example: mobiles & tablets category products and computing category products See consumer behavior as a benchmark for offering products with low selling value. For example: health & sport category, by providing special prices when purchasing entertainment category products (vouchers or discounts for gym facilities A, waterboom B, etc.) Provide discounts or vouchers during Twindate events related to an activity, religious day, and the like in that month. For example: book discounts on national education day, teacher's day, international education day, kartini day, and the like

Project Background

On every twin date, such us October 10 (10.10), TokoBli have a campaign to always held with a big flash sale promo and free shipping for all transactions. twin date event applies in all regions in Indonesia. During this campaign period, the number of transactions will increase up to 10 times compared to normal days. During the last 3 campaign periods, the team has tried 3 types of campaign scenarios

Objective

To choosing an effective twin date program campaign scenario to increase product sales and monthly revenue but with low promotion costs

Contents in This Project

Business Background, Business Understanding, Business Metrics

Data Cleaning

Descriptive Statistics

EDA

Hypothesis Testing

Recommendation

TOOLS: PHYTON BY GOOGLE COLAB



TARGET STRATEGY AND PRODUCT MARKETING BASED ON REVOBANK CREDIT CARD DATA

Project Background

Analyze historical transaction data from RevoBank customers about credit card usage and can identify trends and customer usage patterns for credit card products. So as to create detailed customer personas to be able to create segmentation, needs, and preferences for credit card product customers.

Objective

To increase the usage of RevoBank credit card products among existing customers

Contents in This Project

Analytical Objective

Data Cleaning, Preparation and Communication

Descriptive Statistics

Cluster Analysis

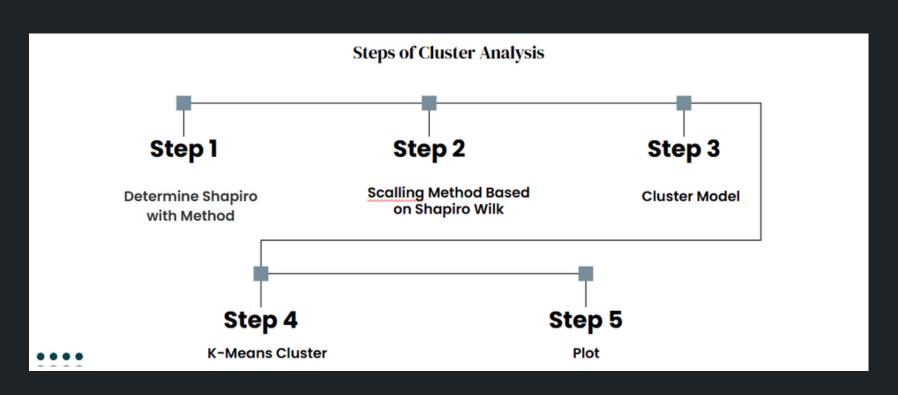
Cluster Interpretation

Conclusion

Recommendation

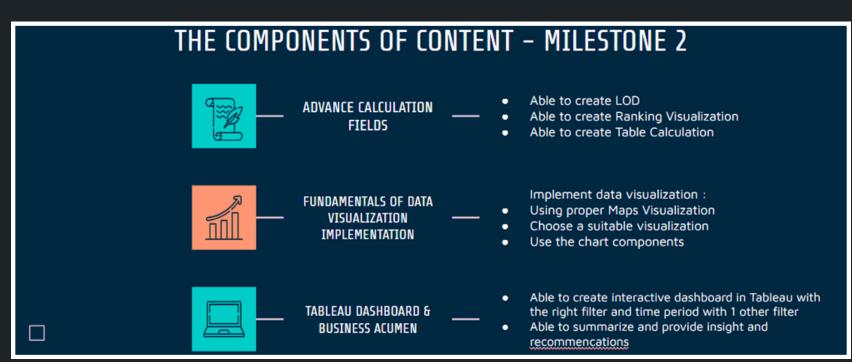
TOOLS: PHYTON BY GOOGLE COLAB

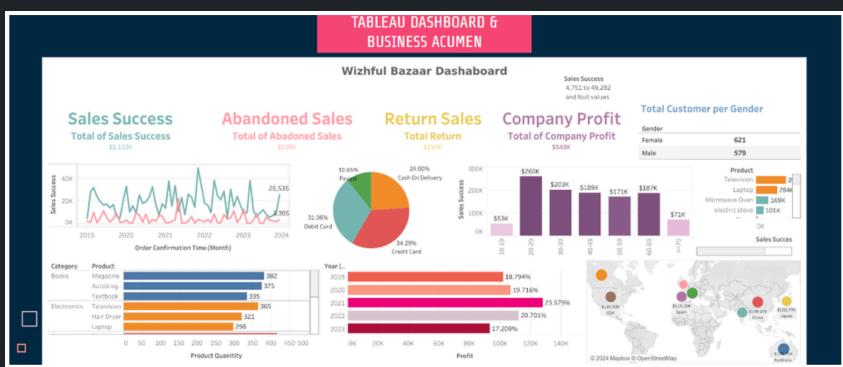
VIEW PROJECT



Recommendation **Based on Relationship Between Direct** Based on Proportion of Total Sales by Based on Relationship Between **Promotions and Sales** Gender **Promos and Total Sales** Gender Equality in Sales 1. Promotion Effectiveness 1. Positive Relationship Customers of both genders are almost Promotions seem to be effective at There appears to be a positive equal in terms of sales contribution, increasing sales up to a certain point relationship between the number of (perhaps around 6 promotions). with a difference of only about 6%. direct promos sent and the average Marketing strategies that address the After this point, sending more total sales. The higher the number of needs of both genders are likely to yield promotions has no significant effect on direct promos, the higher the total sales. optimal results. 2. Sales Enhancement Strategies 2. Promotion Optimization Look at products or services that are To optimize the budget, the number of However, there are some outliers that more in demand by women, as they promotions should be limited to a may need further analysis, such as the have a higher contribution to sales. certain level (e.g. below 10), as their value of 13 promos effectiveness decreases at higher Gender segmentation can be used to design more specific promotions. levels.

PRODUCT AND CAMPAIGN SYNERGY: OPTIMIZING WISHFUL BAZAAR'S MARKETING STRATEGY





Project Background

The company wants to monitor the development of stores in several locations to find out the value of successful sales transactions, segmentation of sales data based on customer gender, customer segmentation based on store location demographics, company profits, product transactions based on product categories, and analysis of payment methods from customer transactions.

Objective

To maximize the use of data to support WishfulBazaar's business growth

Contents in This Project

Worksheet Objective

Data Source Preparation and Communication

Basic Visualization

Advance Calculation Fields

Fundamentals of Data Visualitation

Tableau Dashboard

Business Acumen

TOOLS: TABLEAU



PICKLEBALL CUSTOMER SEGMENTATION AND BEHAVIOR ANALYSIS: "OPTIMIZING RENTAL COURTS & CUSTOMER"

Project Background

The primary goal of this project is to provide in-depth insights into ESM Sport's pickleball sports customers. The project key aspects:

- Customer Segmentation: Identify customer groups based on demographics, behaviors, and transaction patterns for pickleball court rentals.
- Court Rental Time Analysis: Understand court rental trends based on time of day (e.g., daily, weekly, or seasonal).

Objective

To Increase Pickleball Court Rental Transactions at ESM Internationale, by 25% for all status category and each gender in Semester 1 of 2025 Based on Customer Segmentation and Behavior in Kuala Lumpur?

Contents in This Project

Problem Understanding
Data Preparation and Cleaning
Exploratory Data Analysis

Data Analysis

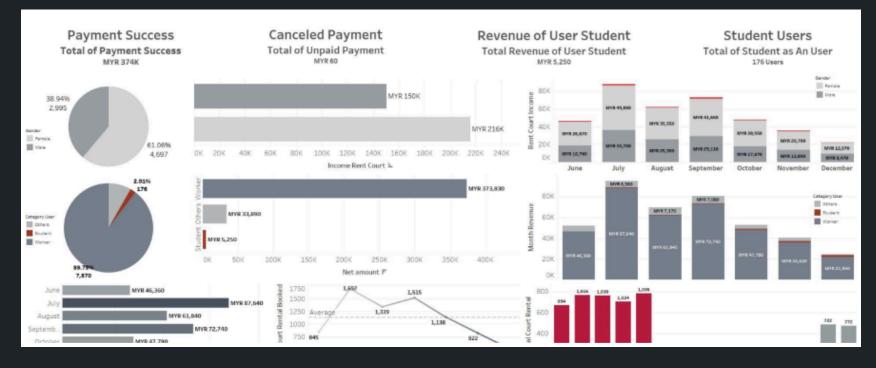
Data Visualization

Insight and Recommendation

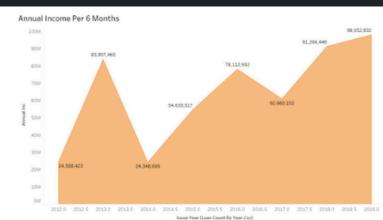
TOOLS: SPREADSHEET, PHYTON BY GOOGLE COLAB, TABLEAU

VIEW PROJECT





REVOFIN: TRANSFORMING LENDING STRATEGY WITH ACTIONABLE DATA INSIGHTS



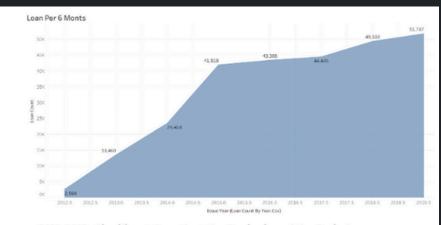
2012 - 2013: Significant Initial Growth

There was a very significant spike in revenue from around 24.5 million to over 83.9 million. This indicates a major expansion or surge in demand for financial products in the first half of 2013.

2013 - 2014.0 : Sharp Decline

After the spike, revenue dropped drastically back to around 24.3 million in the first half of 2014. This could be an indication of changes in regulations, marketing strategies, or economic conditions at that time.

2014 - 2010 - More Stable Crouth Trand



2012–2015: Significant Growth at the Beginning of the Period

- Starting from 5,934 loans in the first semester of 2012.
- Increasing consistently to reach 41,939 loans in the first semester of 2015.
- This growth indicates high market adoption of loan products, as well as the possibility of expanding access to loan services.

2015-2017: Consolidation Phase

- The number of loans experienced slow growth, stable at around 43,000–44,000 loans.
- This could indicate a period of strategy evaluation or product

RevoFin's Lending Strategy Transformation with Data Insights



RevoFin Lending Strategy

Optimize lending, grow your business with data, and create loan products that meet customer needs

RevoFin Growth

Analyze trends and make informed decisions, including market expansion opportunities and retaining customers with special offers

RevoFin Loan Performance

Provide results and recommendations that can be used immediately to change lending strategies, with the goal of maximizing profits and minimizing risks, with a focus on loan performance and customer insights

Project Background

RevoFin, as a company in the loan portfolio sector, has a great opportunity to improve operational efficiency and strategic decision-making through the use of data. The analysis will cover key dimensions such as:

- Customer financial health indicators.
- Loan risk assessment.
- Customer behavioral dynamics.

Objective

To improve lending practices and optimize loan offerings by identifying customer and loan data patterns and trends, thereby measurably reducing credit risk and improving portfolio performance in the next 6 months

Contents in This Project

Data Cleaning and Preprocessing
Hypthesis and Metrics
Exploratory Data Analysis
Cohort Analysis
Data Visualization
Insight and Recommendation

TOOLS: GOOGLE SHEETS, SQL BY BIGQUERY, AI MECHINE LEARNING

<u>VIEW PROJECT</u>

OPTIMIZING STOCK PREPARATION: 'STRATEGIC DEMAND FORECASTING FOR NEW HUB EFFICIENCY & CUSTOMER SATISFACTION'

Project Background

The data analyzed includes information on the number of products shipped (Shipped Qty), demand trends from January to July, and predictions of product needs in the following month. The analyzed dataset consists of several variables related to transactions and shipping of goods, including:

- Shipping Date (datetime)
- Quantity of Goods Shipped (Shipped Qty)
- Goods Category (Category Name)
- Distribution Location (HUB: A, B, C, D, E)

Objective

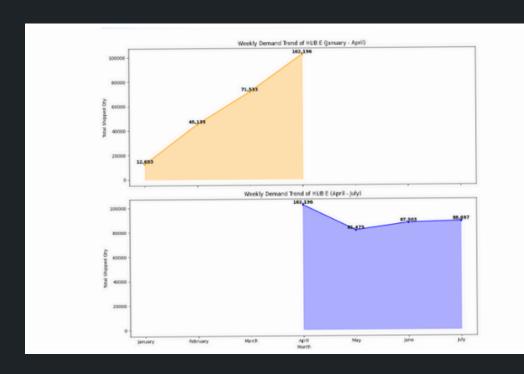
To improve the accuracy of demand forecasts and distribution of goods with data-driven analysis to optimize stock management, improve logistics efficiency, and ensure the availability of the right products at each HUB according to customer needs, especially in the face of a 23% increase in demand in August

Contents in This Project

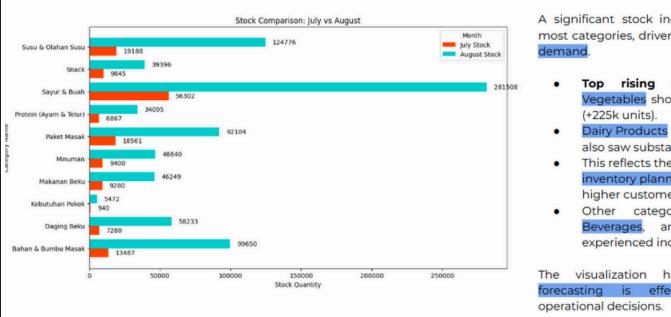
Problem Understanding
Data Cleaning and Preprocessing
Exploratory Data Analysis
Forecasting Data
Data Visualization
Insight and Recommendation

TOOLS: GOOGLE SHEETS, PHYTON BY GOOGLE COLAB, AI MECHINE LEARNING

VIEW PROJECT



- Deliveries increased significantly from 12,653 units (January) to 102,196 units (April). This shows a consistent and increasing demand surge every month.
- April was the highest point with 102,196 units. However, there was a decrease in May to 81,475 units, which may be due to reduced demand after the peak period.
- After the decrease in May, deliveries increased again in June (87,503 units) and July (88,697 units), indicating that demand is recovering.

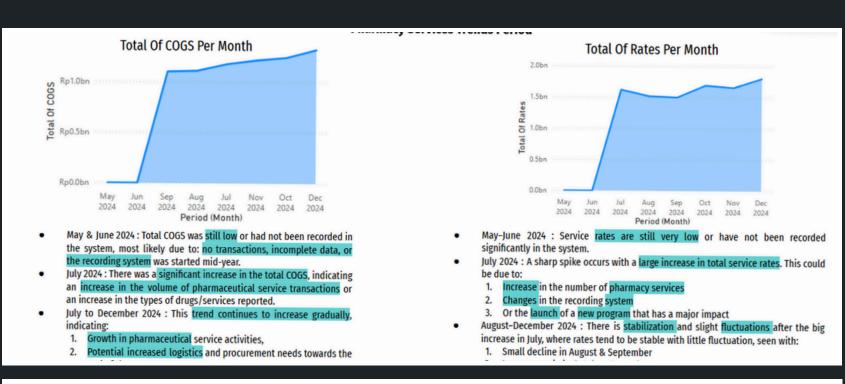


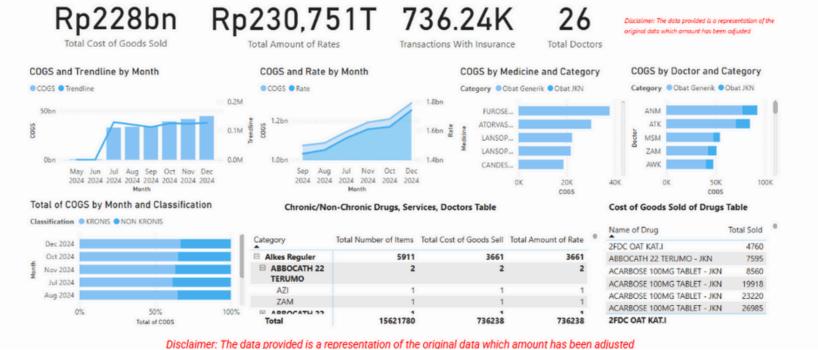
A significant stock increase is observed across most categories, driven by a projected 23% rise in demand.

- Top rising categories: Fruits & Vegetables show the highest stock jump (+225k units).
- Dairy Products and Cooking Ingredients also saw substantial stock adjustments.
- This reflects the company's proactive inventory planning in anticipation of higher customer demand in August.
- Other categories such as Snacks, Beverages, and Frozen Meats also experienced increased stock levels.

The visualization highlights how demand forecasting is effectively integrated into operational decisions.

DRIVING PHARMACY EXCELLENCE: COGS, RATES, AND SERVICE UTILIZATION ANALYSIS AT HASNA MEDIKA HOSPITAL





Project Background

This analysis project focuses on the pharmacy service data of Hasna Medika Hospital with the aim of gaining insights that can support strategic decision making. Through effective data visualization in the Medical Services Monitoring Dashboard, it is hoped that relevant information can be presented clearly and easily understood by the Medical Services Department and hospital leaders. With a better understanding of the dynamics of pharmacy services, Harsa Medikal Hospital is expected to be able to identify opportunities for cost optimization, increased operational efficiency, and ultimately, improved quality of service to patients

Objective

To identify the key factors contributing to the increase in Cost of Goods Sold (COGS) and create effective strategies in the operational cost efficiency of pharmacy services without sacrificing the availability of drugs needed by patients in the next 6 months

Contents in This Project

Problem Understanding
Data Cleaning & Preprocessing
Exploratory Data Analysis
Dashboard Visualization
Insight & Recommendation

TOOLS: SPREADSHEETS, EXCEL, SQL BY BIGQUERY, POWER BI



HUMAN CAPITAL INSIGHTS: ANALYSIS OF HR DYNAMICS AT HASNA MEDIKA HOSPITAL

Project Background

Through interactive data visualization, this dashboard is expected to provide added value in:

- Monitoring HR efficiency and productivity.
- Identifying patterns and trends related to employee behavior.
- Supporting the formulation of short-term and long-term HR management strategies.

Objective

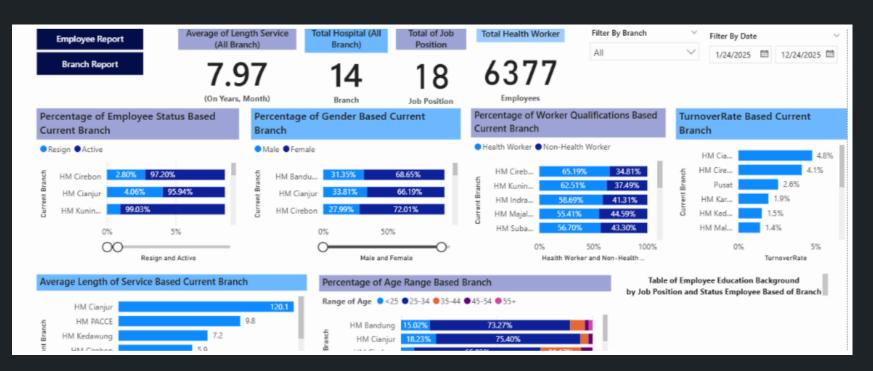
To enhance and develop employee status monitoring—such as tracking monthly active and resigned staff trends—to support more responsive HR management over the past six months at Hasna Medika Hospital

Contents in This Project

Problem Understanding
Data Cleaning & Preprocessing
Exploratory Data Analysis
Dashboard Visualization
Insight & Recommendation

TOOLS: TOOLS: SPREADSHEETS, EXCEL, SQL BY BIGQUERY, POWER BI

VIEW PROJECT

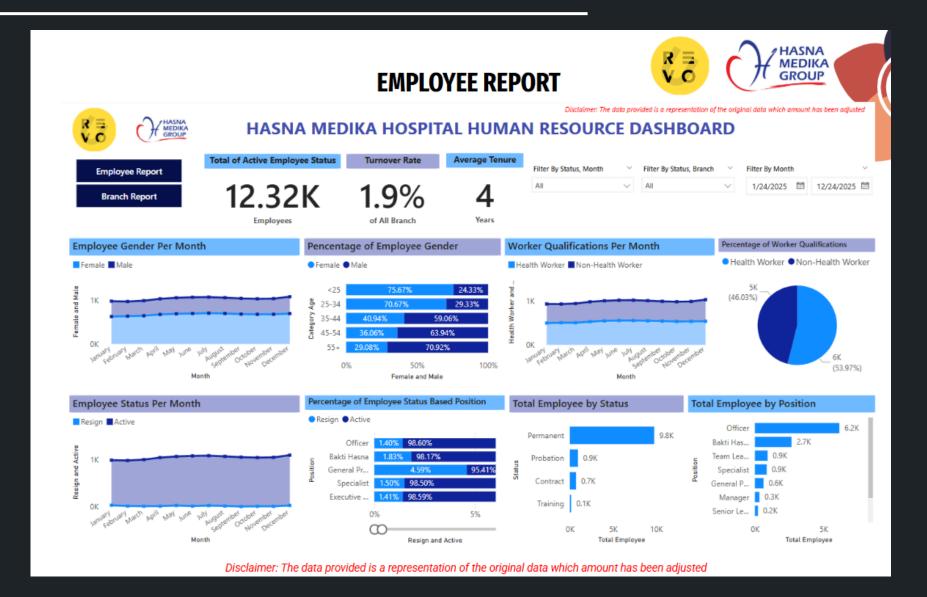




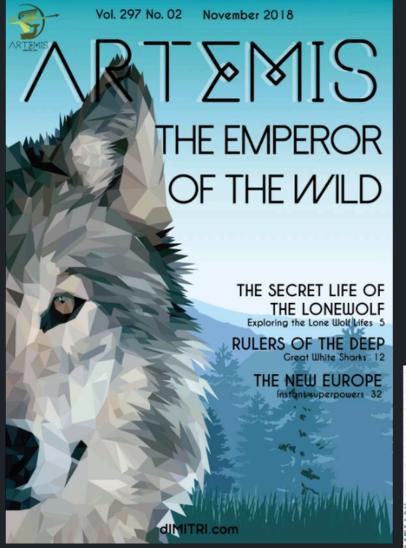
MY WORK

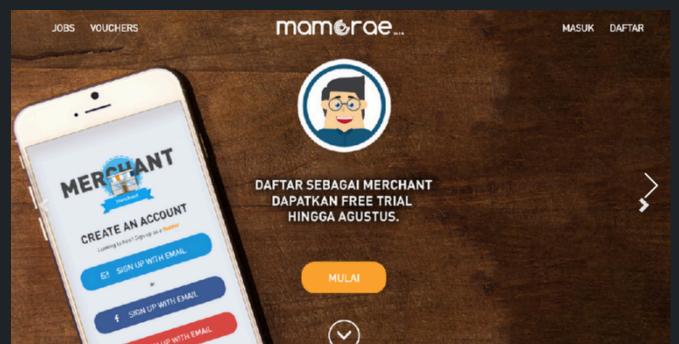
As someone who has experience as a web programmer and ICT teacher with graphic design skills, I combine technical and visual skills to create engaging and effective digital experiences. This portfolio showcases my creative journey in designing and developing web solutions that are not only functional, but also aesthetic.

DATA ANALYSIS



GRAPHIC DESIGN







CONTACT ME









Fredyandu Rombelayuk here! My combination of IT skills, graphic design, and teaching experience, coupled with my data analyst education at RevoU, makes me an ideal candidate for the Educational Data Analyst role. I am ready to make a positive impact!