CUSTOMER SEGMENTATION BASED ON RFM ANALYSIS AS THE BASIS OF MARKETING STRATEGY CASE STUDY OF PT PERTIWI AGUNG PHARMACEUTICAL INDUSTRY (LANDSON)

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ABSTRACT

The Pharmaceutical Company is a company that has quite large raw material import activities and has many benefits for society and institutions such as hospitals. Pharmaceutical companies play an important role in improving the quality of life of the human population in modern times because, in the field of marketing, pharmaceutical companies face increasing sales performance and profits, as well as maintaining customer loyalty. Pharmacy retail customers usually make drug purchases influenced by the selling price and suitability factors (suggestions) for certain drug brands. Based on these conditions, drug purchasing patterns for the Indonesian people become unpredictable, and it is difficult to increase sales and profits. One effort that pharmaceutical business players can make is to carry out sales promotions based on customer segmentation. Customer segmentation in pharmaceutical companies can be done using clustered data mining analysis methods, such as modified Recency Frequency Monetary (RFM). This method allows companies to group customers based on purchasing patterns of pharmaceutical products, thereby allowing companies to prioritize energy and resources to different segments. After the scoring and data processing process, the number of customers for each RFM Score is obtained, then the Monetary group is segmented which is divided into 4 (four) parts, namely Best Customers by quantity (36), Loyal Customers by quantity (188), Potential Customers by quantity (34) and Lost Customers by quantity (61). Then we continue to map it into only 3 (three) parts, namely Best Customers, Loyal Customers, and Potential Customers using blue as a sign to see the score range. From the results of dividing the 3 (three) group segmentations, the Loyal Customer Score segmentation is greater in quantity (188) so the blue color is darker than the others, which shows that the more customers spend their money. Of the 3 (three) customer segmentation sections, we put all of them into the Best Customer category, because they have introduced new products or products they have not purchased. By using RFM analysis, you can quickly find out customer targets that will be prioritized in carrying out marketing, campaigns, promotions, and rewards using digital channels and direct customer relations.
***Keywords:*** *Farmasi Company, Recency Frequency Monetary (RFM), group segmentation.*

INTRODUCTION

PT Pertiwi Agung Pharmaceutical Industry (Landson) is part of the Mensa Group which is expanding its product range in the form of syn medicines and herbal medicines.

Through a comprehensive marketing strategy supported by more than 500 fully dedicated sales forces covering more than 5000 pharmacies, 1000 hospitals, and 15,000 doctors, throughout Indonesia, Landson has achieved a significant market share and established itself as one of the growing pharmaceutical companies in the world. Indonesia. Business competition, especially in the pharmaceutical industry, is increasing, so the business people in this field must have the right strategy to take steps forward. In this case, Landson continues to improve the quality of human life through pharmaceutical products, quality human resources, and technology. One of the big strategies is to develop a soft capsule production line with complete facilities and an effervescent powder production line sachet with complete facilities and technology. Landson makes full efforts to continuously improve human resources through training and knowledge. To ensure performance with excellence, Landson implements modern management in all segments of the company. Currently, modern companies not only focus on strategies that prioritize products (product/service-oriented), but they also implement strategies that prioritize customers (customer-oriented). This is important for the company's development by creating good relationships between the company and customers. The economic situation in society is increasingly changing, with increasingly fierce competition in the food industry, marked by an increase in the number of similar products offered to customers. Information technology has become very influential in the progress of an industry. Information technology helps provide better services or products to customers.

In 2023, based on information from transaction data, the sales that have been made are quite stable, but when compared with the sales figures, it turns out that they are not evenly distributed in each month, as follows in the comparison table.
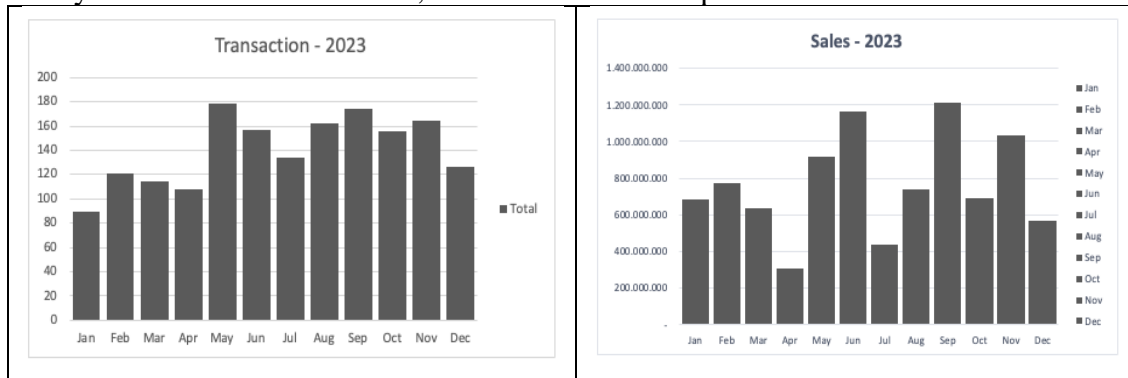
One way to find out and analyze the increase in sales of products being sold is by utilizing data from existing sales transactions. Transaction data can be processed further to obtain new information from existing data sets. Landson must maintain its existence in the marketing era. The company's focus is customers because customers are individuals, groups, agencies, institutions, or organizations who buy company products regularly and pay full attention to the products produced by the company.

RESEARCH METHOD

In conducting customer segmentation, several previous studies have been developed which state that the model that is widely used and has a high level of accuracy is Recency, Frequency, and Monetary (RFM). This model groups customers based on the time interval of the customer's last visit, the frequency of visits, and the amount of value issued as company royalties (Aggelis et al., 2005 and Cheng et al., 2009). By studying records of past customer interactions and transactions, companies

can assess these 3 (three) dimensional aspects. The RFM model is widely applied to marketing databases and is a commonly used tool for building marketing strategies. Based on customer segmentation using the Recency, Frequency, Monetary (RFM) model, it can produce segmentation capabilities between 75% and 85%. In this research, customer segmentation was carried out from the sales dataset based on the characteristics of each customer in the company and analyzed the segmentation to identify profitable customers and vice versa.

The Recency Frequency Monetary (RFM) model is an old method that has been used for a long time and is very popular in its application to measure the relationship built with customers by making estimates using a database. RFM is an internal model that can be implemented in the field of marketing because there is a history of purchases and consmer browsing. The purpose of using the RFM Score is to predict customer behavior in the future

RFM segmentation allows businesses to identify customer groups for special treatment, such as loyal customers, repeat customers, and new customers. This allows the creation of targeted marketing campaigns that meet the specific needs and preferences of various customer segments. By gaining valuable insights into customer behavior through RFM analysis, businesses can implement more targeted and effective marketing strategies, such as personalized campaigns and product recommendations. Ensuring the accuracy and completeness of customer data is critical to RFM analysis. Incomplete or incorrect data can lead to incorrect segmentation and marketing strategies, resulting in ineffective campaigns. Because data is an asset, businesses must ensure that they comply with data privacy regulations and protect customer data from unauthorized access or breach. This can be a challenge, especially when dealing with large amounts of customer data. RFM analysis involves categorizing customers based on three main factors (recency, frequency, and monetary value), which can be complicated and time-consuming. Additionally, businesses may face difficulties in determining appropriate cut-off values for each factor, thereby leading to inconsistencies in customer segmentation. RFM analysis is based on past customer behavior, which may not accurately predict future activity, preferences, and responses. These limitations can make it difficult for businesses to adapt their marketing strategies to changing customer dynamics. Implementing RFM analysis and segmentation requires a good understanding of statistical techniques and data analysis tools. Businesses may face challenges in recruiting and retaining skilled personnel with the necessary expertise or may struggle to integrate RFM analysis into their existing marketing technology stack. It is hoped that this research can help companies to group customers and help increase product sales based on customer segmentation.

The software used is MS Excel to process the data, the Python interpreter is used to speed up the pre-processing of sorting the data ready for use, and IBM SPSS for the RFM scoring process with a binding value of 3.

Customer segmentation in this research is based on the RFM (recency, frequency, monetary) model, so the data selection from the RFM model is the last time the customer made a transaction using the analysis method, the number of frequencies (how often) transactions made by customers during the research period, and the number transaction nominal for each customer during the research period, namely from January to December 2023.

RESULT AND DISCUSSION

The data that will be analyzed comes from data from PT Pertiwi Agung Pharmaceutical Industry (Landson), with transactions from January to December 2023. The number of customers is 319 customers consisting of hospitals, clinics, and pharmacies spread throughout Indonesia, and the number of transactions is 1,685 records.

The data received is still in the form of raw data which needs to be pre-processed before the transaction data can be used for research by sorting it into per-customer transaction data with target dataset attributes namely customer_id, customer_group, product_name, transaction_nominal, and transaction_date.

After we processed the data using SPSS and examined the results of the RFM analysis, we came up with results with several distinct customer segments indicated. As a result of this analysis, we can develop a more focused marketing strategy to improve customer retention and maximize the value of each segment. The following is an overview of each segmentation based on the RFM score.

R F		M 1	2	3	Grand Total
1		28	36	31	95
	1	12	17	14	43
	2	5	7	6	18
	3	11	12	11	34
2		39	39	40	118
	1	15	14	16	45
	2	12	12	12	36
	3	12	13	12	37
3		34	36	36	106
	1	12	12	12	36
	2	10	11	11	32
	3	12	13	13	38
Grand Total		101	111	107	319

With a description of each dimension below

Recency :
1. Long Standing Customers
2. Relatively recent customers
3. Recent Customers

Frequency:
1. Purchase rarely (single orders)
2. Purchase Infrequently
3. Purchase Often

Monetary Value
1. Low Value Of Purchase
2. Average Value of Purchases
3. High Value Of Purchases

Analyzing RFM Segmentation

Best Customers: existing or repeat customers who have a higher average order value and a higher chance of conversion than new customers. Additionally, consumers

tend to switch brands to ones that suit their needs, and personalized content and customer experience mapping are considered the best ways to optimize customer retention. Therefore, focusing on nurturing existing customers and providing personalized experiences can be an effective digital marketing strategy.

Loyal Customers: customers who have purchased products or used services from a business and continue to return for future purchases or use. These loyal customers are very important to a business because they can make a significant contribution to the business's revenue and can become free advertisers through their recommendations and positive experiences. Digital marketing can help businesses maintain customer loyalty by providing personalized and relevant experiences, as well as by providing incentives through loyalty programs and special promotions.

Potential Customers: part of the audience who needs a product or service and can pay for the product but has not tried or consumed a particular product. Potential customers have great potential to become old customers and can help business growth. How to reach potential customers by getting to know competitors, using targeted advertising, taking advantage of social media, and easily adapting to new trends.

Lost Customers: customers who have previously purchased products or used services from a business, but then no longer make purchases or use in the future. These lost customers can be a challenge for businesses as they can affect business reputation and reduce revenue. Digital marketing can help businesses recover lost customers by sending emails or messages offering special incentives or promotions, as well as by improving the customer experience and fixing problems that may be causing customers to leave the business. Customer data analysis can also help businesses understand why customers leave the business and take necessary actions to fix the problem.

Mapping table from RFM Score to Segmentation:

RFM Score	Segmentation	Customer
111	Lost Customers	12
112	Lost Customers	17
113	Lost Customers	14
121	Lost Customers	5
122	Lost Customers	7
123	Lost Customers	6
131	Potential Customers	11
132	Potential Customers	12
133	Potential Customers	11
211	Loyal Customers	15
212	Loyal Customers	14
213	Loyal Customers	16
221	Loyal Customers	12
222	Loyal Customers	12
223	Loyal Customers	12
231	Loyal Customers	12
232	Loyal Customers	13
233	Loyal Customers	12

311	Loyal Customers	12
312	Loyal Customers	12
313	Best Customers	12
321	Loyal Customers	10
322	Loyal Customers	11
323	Best Customers	11
331	Loyal Customers	12
332	Loyal Customers	13
333	Best Customers	13

Summary

Row Labels	Count of id_pelanggan
Loyal Customers	188
Lost Customers	61
Potential Customers	34
Best Customers	36
Grand Total	**319**

From the data above, RFM scores are grouped into 3 categories. With this categorization, more comprehensive analysis results will be obtained according to the habits of customers in terms of recency, frequency, and monetary. Thus, understanding these three dimensions can provide greater overall business value.

Thus a strategy for digital marketing can be created, as below:
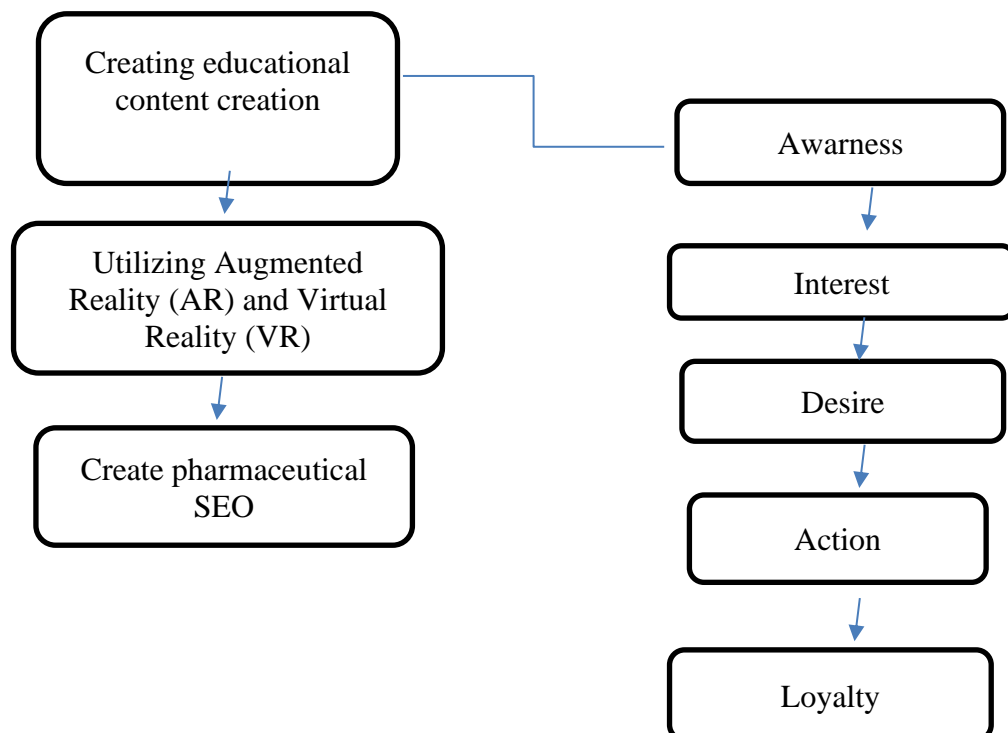
Creating educational content creation

Create marketing content that focuses on educational goals. By sharing short articles related to medical and pharmaceutical sciences, or e-books that have a much deeper discussion. Then, to get high views, share the content on several platforms with an attractive appearance. For example, making short videos on TikTok discussing certain pharmacy tips, the life of pharmacy staff in pharmacies, or uploading illustrative images on Instagram. When creating this content, it will display the most accurate information compared to other similar content. One of these marketing strategies is good for increasing sales for pharmaceutical sales marketers, making it easier for sales to promote their medicines, because the public can know the quality of branding and build audience trust effectively. If possible, create a website that is most searched for when someone needs information about pharmacy.

Utilizing Augmented Reality (AR) and Virtual Reality (VR)

Educational tourism for customers, which will also increase sales. Its implementation requires a lot of money and expert staff, but this digital marketing strategy for pharmaceuticals is considered the most effective for achieving the targeted conversion rate.

Create pharmaceutical SEO

The goal of pharmaceutical SEO is to achieve organic growth by adhering to some basic principles. As more and more scientists who often work for large organizations use the internet to research a variety of topics, there may be particular potential for pharmaceutical businesses.

CONCLUSION AND RECOMENDATION
Conclusion

By using RFM analysis, it can be quickly identified which customer targets will be prioritized by placing customers in their segmentation in conducting marketing, campaigns, promotion, and rewards using digital channels and direct relations to customers, where brand recognition is needed for medicines, vitamins, and others produced by PT Pertiwi Agung Pharmaceutical Industry (Landson) is needed by the wider community.

Applying the right strategies, such as strong product research, effective marketing, partnerships with healthcare professionals, and continuous innovation, pharmaceutical health businesses can increase turnover, expand market share, and gain a competitive advantage by paying attention to the values of product quality, superior service, and analyzing customer data to understand consumer needs and preferences.

Recomendation

By using RFM analysis, it can be quickly identified which customer targets will be prioritized by placing customers in their segmentation in conducting marketing, campaigns, promotion, and rewards using digital channels and direct relations to customers, where brand recognition is needed for medicines, vitamins, and others produced by PT Pertiwi Agung Pharmaceutical Industry (Landson) is needed by the wider community.

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health businesses can increase turnover, expand market share, and gain a competitive advantage by paying attention to the values of product quality, superior service, and analyzing customer data to understand consumer needs and preferences.

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