

CUSTOMER SEGMENTATION OF PABUARAN STORE ON SHOPEE E-COMMERCE USING RFM MODEL ANALYSIS (CASE STUDY OF H&M BRAND SALES PRODUCTS)

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ABSTRACT

E-Commerce creates business activities that make it easier for people to be more effective because business transactions between sellers and buyers are not limited by space and time. Pabuaran store is one of the personal shopper service providers which started its business in 2019, the marketplace phenomenon in that year has increased massively and online business players in one of the marketplaces have also reached 7 (seven) million in 2019. Product graph seen in the Pabuaran Store's Services business tends to decline, this requires business actors to take strategic steps to maintain their existence in the business world. This is used encouraged service business owners to gain profits in the midst of the phenomenon that is occurring. In determining the variables, the general model used to group customers is the RFM (Recency, Frequency, Monetary) Model, which groups customers based on the time interval of the customer's last visit, frequency of visits, and the amount of value issued as company royalties(1). The recency value can determine the time span since the customer's last transaction. The frequency value can indicate how many transactions each customer conducts with the company. Additionally, the monetary value can reveal the amount of expenditure made by each customer in each transaction with Pabuaran Store on Shopee. The three segments have different campaign strategies. For Segment 1, a reactivation campaign is implemented, such as conducting live videos on Shopee. In Segment 2, a broadcast retention message is delivered to customers who have previously purchased products from Pabuaran Store. As for Segment 3, where loyal customers are identified, a loyalty point system is introduced to keep these customers engaged.

Keywords: E-Commerce, Frequency, Monetary, Personal shopper, Recency.

ABSTRAK

E-Commerce menciptakan kegiatan bisnis yang memudahkan masyarakat menjadi lebih efektif karena transaksi bisnis antara penjual dan pembeli tidak dibatasi oleh ruang dan waktu. Toko Pabuaran merupakan salah satu penyedia layanan personal shopper yang memulai usahanya pada tahun 2019, fenomena marketplace pada tahun tersebut meningkat pesat dan pelaku bisnis online di salah satu marketplace juga telah mencapai 7 (tujuh) juta pada tahun 2019. Grafik produk terlihat pada Usaha Jasa Toko Pabuaran cenderung mengalami penurunan, hal ini menuntut para pelaku usaha untuk mengambil langkah-langkah strategis untuk mempertahankan eksistensinya dalam dunia usaha. Hal ini dimanfaatkan untuk mendorong para pemilik usaha jasa untuk memperoleh keuntungan di tengah fenomena yang sedang terjadi. Dalam menentukan variabel, model

umum yang digunakan untuk mengelompokkan pelanggan adalah Model RFM (*Recency, Frekuensi, Monetary*), yaitu mengelompokkan pelanggan berdasarkan interval waktu kunjungan terakhir pelanggan, frekuensi kunjungan, dan besarnya nilai yang dikeluarkan perusahaan. royalti(1). Nilai *recency* dapat menentukan rentang waktu sejak transaksi terakhir pelanggan. Nilai *frekuensi* dapat menunjukkan berapa banyak transaksi yang dilakukan setiap pelanggan dengan perusahaan. Selain itu, nilai *moneter* dapat mengungkapkan jumlah pengeluaran yang dilakukan oleh setiap pelanggan dalam setiap transaksi dengan Toko Pabuaran di Shopee. Ketiga segmen tersebut memiliki strategi kampanye yang berbeda. Untuk Segmen 1 dilaksanakan kampanye reaktivasi seperti melakukan live video di Shopee. Pada Segmen 2, pesan retensi siaran disampaikan kepada pelanggan yang sebelumnya telah membeli produk dari Toko Pabuaran. Sedangkan untuk Segmen 3, di mana pelanggan setia diidentifikasi, sistem poin loyalitas diperkenalkan untuk menjaga pelanggan tetap terlibat.

Kata Kunci: *E-Commerce, Frekuensi, Moneter, Kekinian, Personal Shopper.*

INTRODUCTION

Business activities were originally carried out conventionally, but as technology developed, business activities began to use the internet as a facility to support business activities or could be referred to as electronic commerce or E-Commerce(2). E-Commerce creates business activities that make it easier for people to be more effective because business transactions between sellers and buyers are not limited by space and time. Business actors who conduct online business now use social media applications to run their business or use market provider applications to bring together sellers and buyers/ marketplaces. Social media is often used to make it easier for people to advertise their products, this application also supports it as a facility for carrying out buying and selling activities online. The online shopping system that is now widespread is very popular with the public and one of them is the start of online delivery services.

Personal shopper services are an activity where the business actor becomes an intermediary between the seller or owner of the goods and the buyer in accordance with the order for the service. The way this entrustment service works is simply by taking pictures of goods being sold in shopping centers and then uploading them via an Instagram or marketplace account, then adding a fee for the personal shopper service according to the preferences of each business person. Modern people tend to enjoy shopping using courier services because they can save time and energy by still getting genuine quality goods and are relatively cheap because there are no travel costs involved in getting the desired goods.

Trading via electronic systems is regulated through Law number 19 of 2016 concerning Information and Electronic Transactions and also Government Regulation number 82 of 2012 concerning Implementation of Electronic Systems and Transactions. With both parties agreeing to the transaction, it is said that an electronic contract transaction has begun. Based on article 47 paragraph (2) Government Regulations for the Implementation of Electronic Systems and Transactions are considered valid if:

- 1) There is an agreement between the parties.
- 2) Carried out by competent legal subjects or those authorized to represent them in accordance with statutory regulations.
- 3) The object of the transaction must not conflict with statutory regulations, decency and general approval.

The risks that arise for users of entrusted services are related to the level of damage

to goods or defects in goods received through the entrusted service. Often the entrustment service provider does not allow goods that have been ordered to be exchanged for the goods on the grounds that they are in accordance with the order at the time of purchase.

Pabuaran store is one of the personal shopper services providers which started its business in 2019, the marketplace phenomenon in that year has increased massively and online business players in one of the marketplaces have also reached 7 (seven) million in 2019. This is being taken advantage of by entrustment service business owners to make a profit in the midst of the phenomenon that is occurring.

Customer data owned by Pabuaran store personal shopper services businesses is increasing in number, this will be useful to make maximum use of. This data can be used to produce information that is useful for strategies in improving service quality so that store retailers are able to compete with other entrusted service businesses. Having a good understanding of customers can be used by business actors to invest in potential customers. The problem that is often faced is the difficulty in analyzing customer value as per the research that has been carried out.(3)

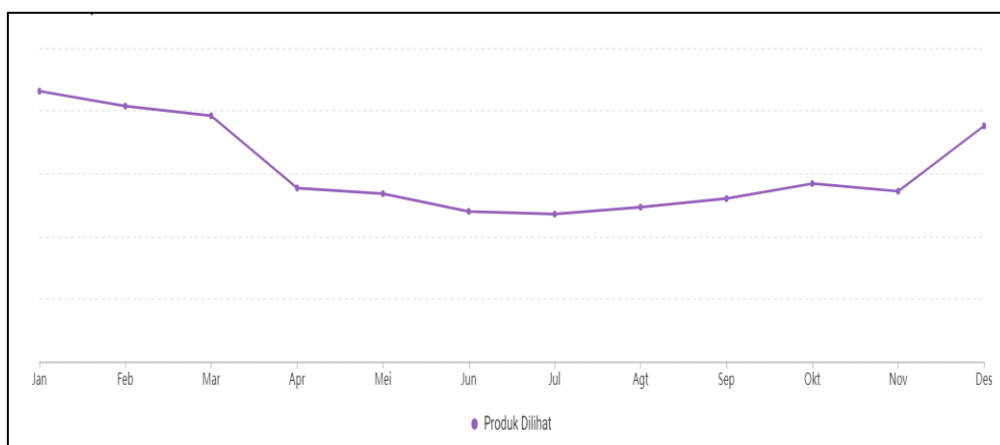


Figure 1. Product View Pabuaran Store Period 2022
Source: Data processed (2023)

In 2022, it can be seen that the product graph seen in the Pabuaran Store's Services business tends to decline, this requires business actors to take strategic steps to maintain their existence in the business world. The steps taken by business actors in the future will determine the profits generated in the future. In this case, business actors want to determine sales patterns by looking at consumer purchasing tendencies. If analyzed and processed well, it can help find out which products are selling and which are not selling well, so that inventory stock control can be carried out, and can be used as input for companies/organizations in developing marketing strategies.

The increasingly modern era certainly requires media to help humans become more productive, moreover, the technology can assist in providing customer satisfaction so as to generate loyalty. diagrams, conversions in flowcharts are included in the SEM equation, there is a choice of input matrices and estimation techniques, assessing problems that have been identified, evaluating models, making model changes and interpretations.(4)

The benefits obtained from the use of SEM are: relationships such as causality, validity, and rehabilitation can be tested, between direct and indirect variable effects can be seen, dependent and independent variables can be tested at the same time, measured

indicator variables can affect the next variable office and also variables can measure directly will be through the variables in its indicators.(5). A computer is a technological machine with an algorithm that can calculate customer transaction data. Recency Frequency Monetary (RFM), is a method used by marketing in recording or surveying customer activities in carrying out the time of the initial and last transaction (recency) the last time the customer made a transaction (recency), how often the customer made a transaction with the nominal amount of the transaction issued by the customer when making transactions (monetary).(6)

RESEARCH METHOD

In this research, several stages were carried out. The following is a table of the flow of the research process based on the methodology carried out:

1. Data Preparation Sample Determination	
2. Collect Sales Data From Shopee Apps	Data Collection
3. Input data to excel	Pre Process Data
4. Recency, Frequency and Monetary data using SPSS	Preprocessing data
5.	Clustering Result
6.	Analysis of RFM Results
7.	Conslusion

RESULT AND DISCUSSION

The RFM (Recency, Frequency, Monetary) analysis process seeks to determine customer value based on the desired product parameters. The system will search for customer transactions involving the specified product in the database, considering recency, frequency, and monetary aspects. Recency is determined by the time since the customer's last transaction, frequency is derived from the total number of transactions, and monetary value is obtained from the total transaction amount. The results of the calculation are then displayed in tabular form.

Figure 2. RFM Segmentation

	Recency	Frequency	Monetary		
			1	2	3
Reactivation campaign (live shoppee) ←	1 (Churn)	1	0	0	0
		2	127	130	125
		3	18	19	19
Broadcast retention message ←	2 (Risk)	1	0	0	0
		2	124	129	123
		3	17	18	17
Loyalty point campaign ←	3 (Active)	1	0	0	0
		2	124	118	126
		3	21	22	22

Source: Data Processed (2023)

From the table above, it can be observed that for each Recency, the frequency of 2 is greater than the frequency of 3. The results of RFM segmentation of Pabuaran Store on Shopee customers shows the customer population in accordance with its RFM score from highest to lowest score.

The business strategy that Pabuaran Store on Shopee can implement for Recency 1 is a reactivation campaign, Reactivation campaign, in this case the store is carrying out a reactivation campaign using marketplace facilities, reactivation campaigning in this case is carried out by conducting live broadcasts to explain product characteristics, types of products that consumers want and also creating new advertisements to increase the attractiveness of target customers on the target segmentation. For Recency 2, a marketing strategy will be devised through broadcasting retention messages. Broadcasting retention program, the process of using a broadcasting retention program is by utilizing marketplace facilities that are targeted at customers who have placed orders, customers who already have activities with store sellers. In this case, the broadcast retention program is intended to remind target customers in this segmentation to continue the process of ordering goods at the store. Meanwhile, for Recency 3, where existing customers are loyal, Pabuaran Store will introduce a loyalty point campaign for these loyal customers as part of the marketing strategy. Loyalty program, loyalty program is used with target consumers who have a transaction history at the store. Customers who have already made transactions will receive a special reward that can be used on their next purchase with the intention that buyers continue to make transactions and get exclusive benefits.

CONCLUSION AND RECOMENDATION

Conclusion

After conducting the research, the researcher arrived at several conclusions. The results from the recency, frequency, and monetary models can describe the characteristics of each customer who engages in transactions with Pabuaran Store on Shopee. This is evident through the calculations from each model. The recency value can determine the time span since the customer's last transaction. The frequency value can indicate how many transactions each customer conducts with the company. Additionally, the monetary value can reveal the amount of expenditure made by each customer in each transaction with Pabuaran Store on Shopee.

The result of this RFM score then becomes reference for Pabuaran Store strategy to conduct campaign activity to increase sales. The three segments have different campaign strategies. For Segment 1, a reactivation campaign is implemented, such as conducting live videos on Shopee. In Segment 2, a broadcast retention message is delivered to customers who have previously purchased products from Pabuaran Store. As for Segment 3, where loyal customers are identified, a loyalty point system is introduced to keep these customers engaged.

Recomendation

After completing the research, the researcher drew several conclusions regarding customer behavior at Pabuaran Store on Shopee. The recency, frequency, and monetary models were instrumental in characterizing each customer based on their transaction history. The recency value indicated the time elapsed since the last transaction, while frequency represented the number of transactions, and the monetary value revealed the expenditure in each transaction. Using the RFM score derived from these models, Pabuaran Store can now devise targeted campaign strategies for different customer

segments. For customers in Segment 1, a reactivation campaign is recommended, incorporating tactics like live videos on Shopee. Segment 2 customers, who have previously made purchases, can benefit from broadcast retention messages showcasing new products or promotions. In Segment 3, identified as loyal customers, a loyalty point system is introduced to foster continued engagement and strengthen brand loyalty. To ensure ongoing success, the store should continually refine the RFM models, monitor campaign effectiveness, personalize communication, explore new platforms, gather customer feedback, and invest in team training and development.

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