



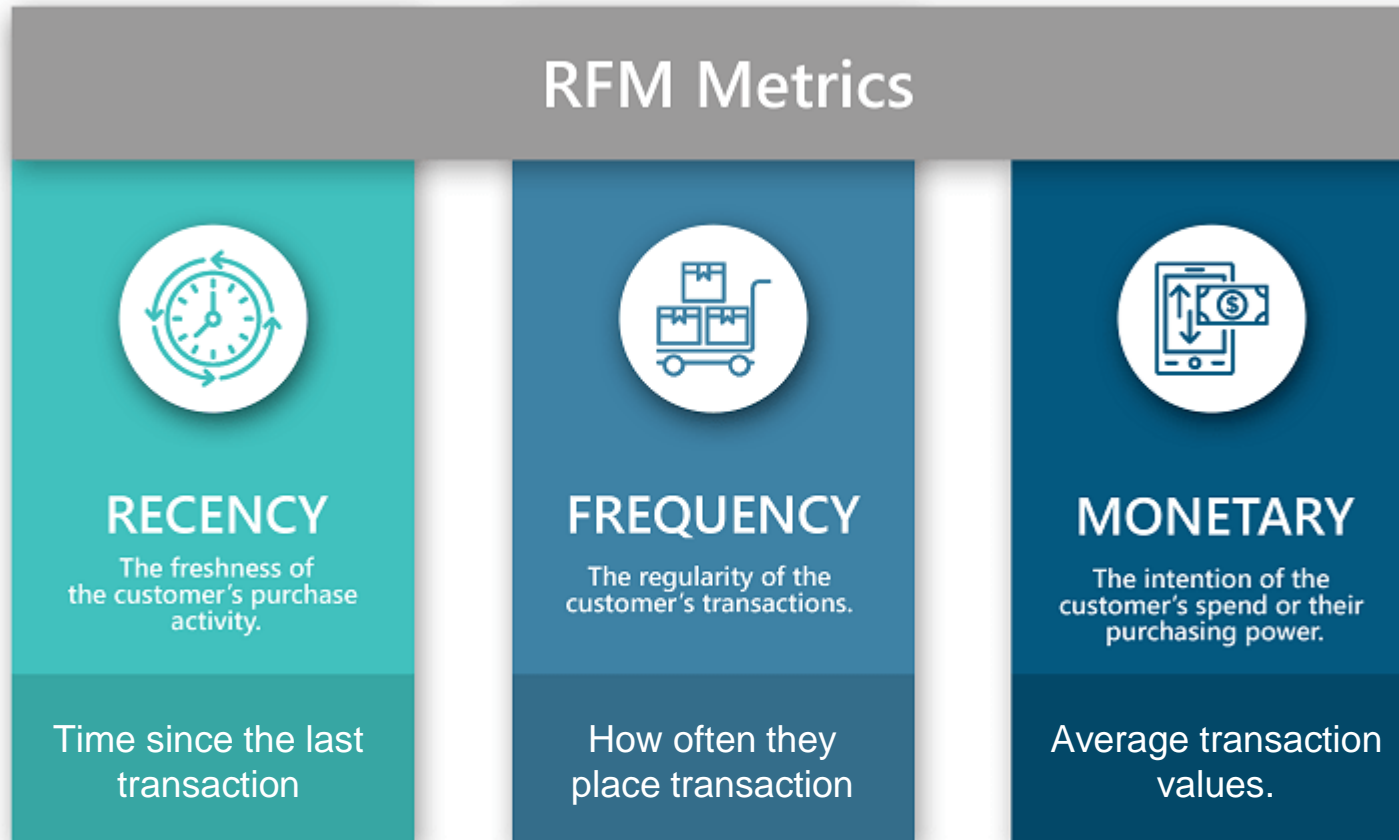
RFM CUSTOMER SEGMENTATION

PHÒNG VHDVTT - PTDL

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Position: Data Scientist

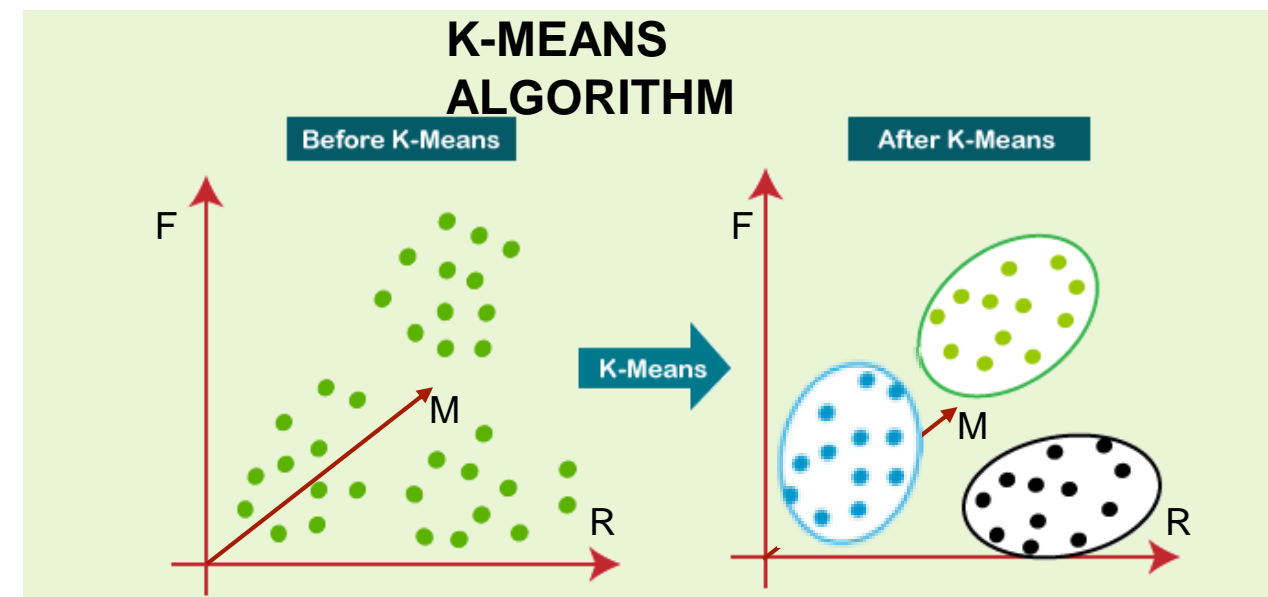
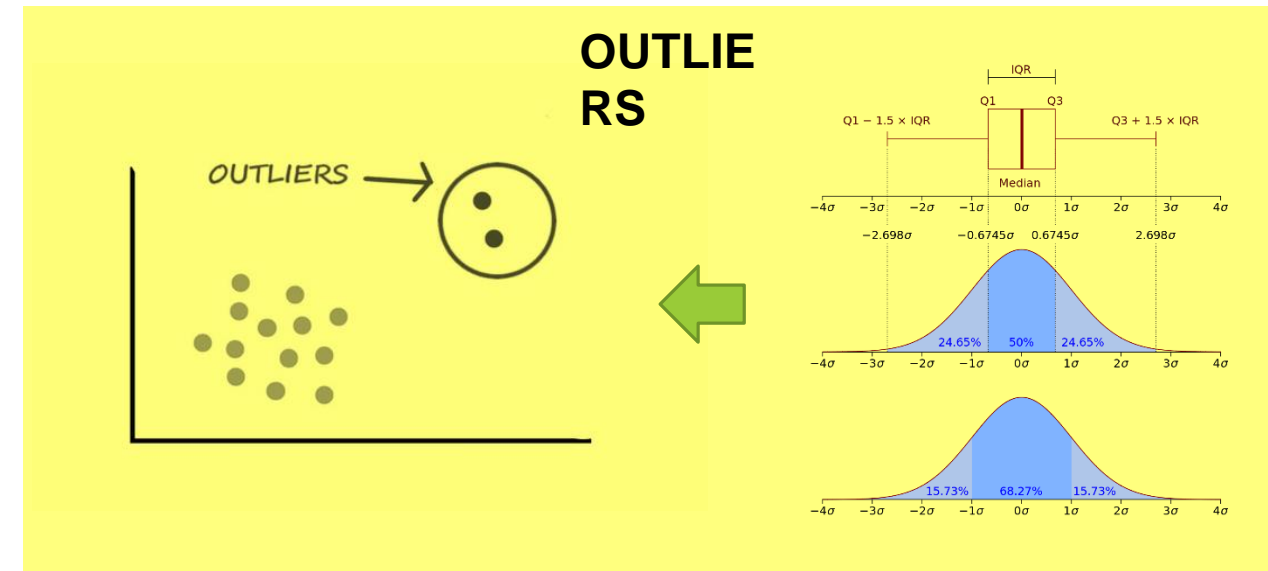
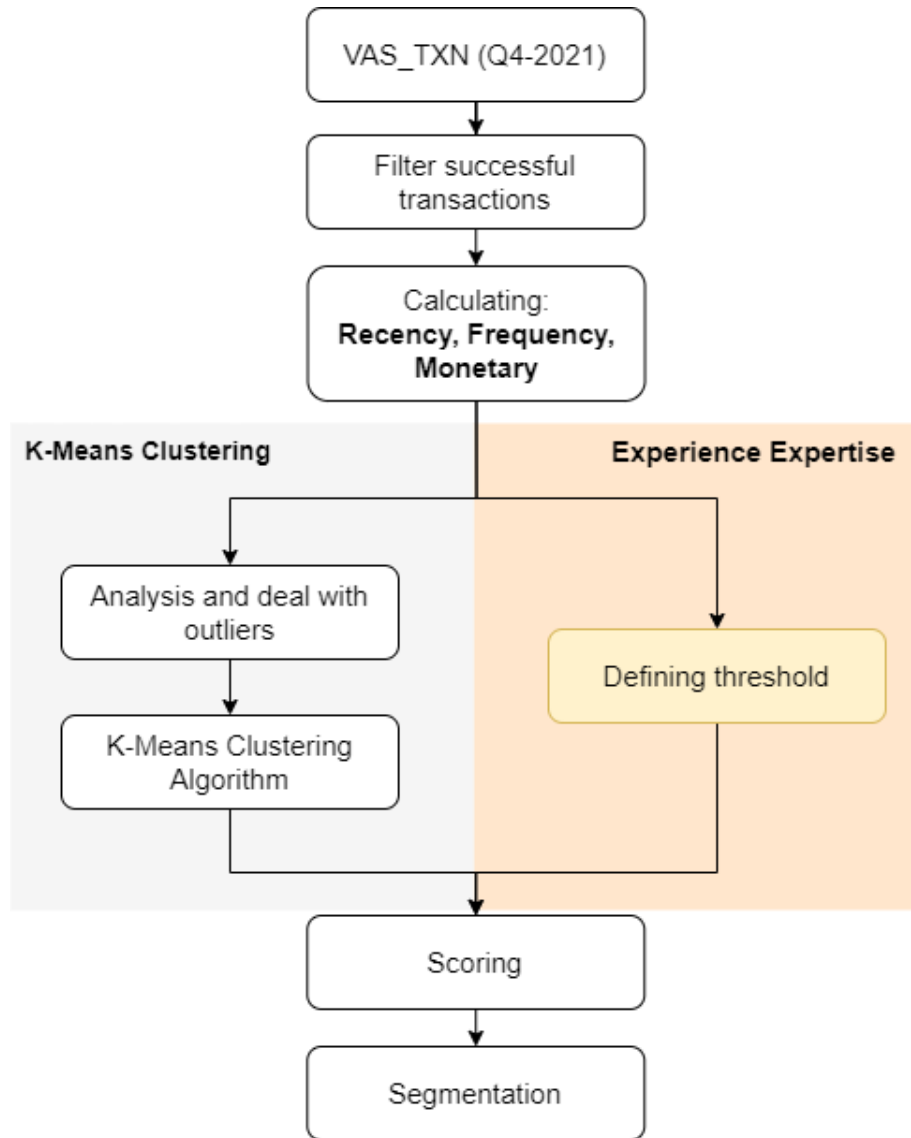
WHAT IS RFM?



Frequency and **monetary** value affects a customer's lifetime value.

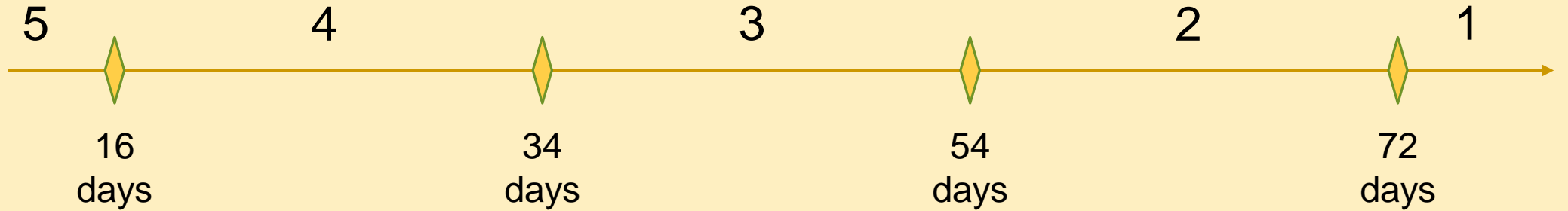
Recency affects **retention** (a measure of engagement).

WORKFLOW

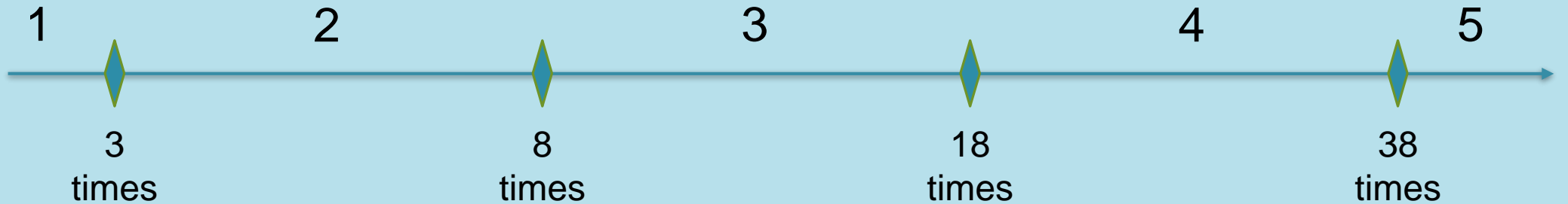


SCORING – USING K-MEANS ALGORITHM

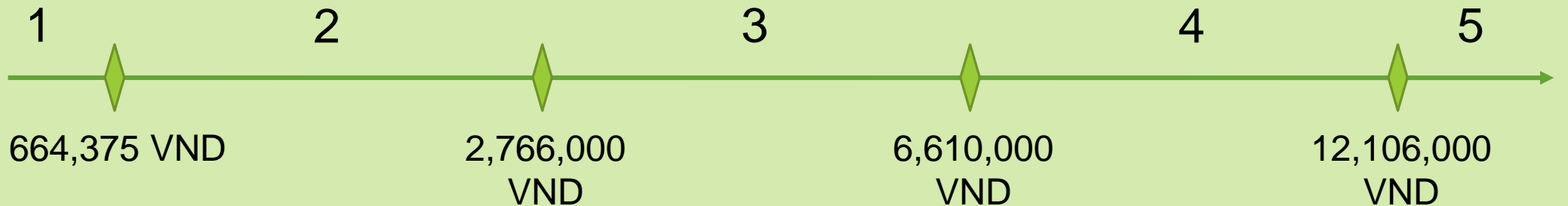
Recency



Frequency



Monetary



SEGMENTATION



Paper: “RFM Model for Segmentation in Retail Analytics: A Case Study” - EGE University - Turkey



Recency	Monetary	Frequency				
		1	2	3	4	5
1	1	Lost		Need attention	Losing Loyal customer	
	2					
	3	Need attention		Sleeper		
	4	Losing big spenders				
	5					
2	1	Lost		Need attention	Losing Loyal customer	
	2					
	3	Need attention		Sleeper		
	4	Losing big spenders				
	5					
3	1	Cold Leads	Need attention			Loyal customer
	2					
	3					
	4	Big spenders				
	5					
4	1	Warm leads	Recent customer			
	2	Recent customer	Promissing			
	3					
	4	Big spenders				
	5					
5	1	Recent customer				
	2		Promissing			
	3					
	4	Big spenders				
	5					
						Champions

Table 3. RFM customer segments

Segment	RFM score			Description
	R	F	M	
Best customer	5	5	5	Customers who visit and often spend a lot in the shop, and this group customer visit the shop recently
Lost cheap customer	1	–	1	Customers who have not visit the shop for long time and do not spending much money in this shop
Lost big spend customer	1	–	5	Customer who have not visited the shop for long time and spend a lot of money in this shop
Almost lost big spender	2	–	5	Customer who spend a lot in this shop but have not visit the shop for sometime
Almost lost	2	–	–	Customer who have not visited the shop for sometime
Loyal	–	5	–	Customer visit the shop for many time
Big spender	–	–	5	Customer spend a lot in this shop

Paper: “Dynamic Composable Analytics on Consumer Behaviour” - Faculty of Computing and Informatics, Multimedia University - Malaysia

SEGMENTATION EXPLANATION

RFM CUSTOMER SEGMENTATION EXPLANATION AND SUGGESTION

<https://docs.google.com/spreadsheets/d/1OHfiHbOoJYIT3GDhJJY535PxqbOI1ubl/edit?usp=sharing&oid=106346592180419359880&rtpof=true&sd=true>



REFERENCES

Paper name	Source	Link
Dynamic Composable Analytics on Consumer Behaviour	Faculty of Computing and Informatics, Multimedia University - Malaysia	Link www.researchgate.net
A review of the application of RFM model	National Changhua University of Education	Link www.researchgate.net
Customer Segmentation Based On Recency Frequency Monetary Model: A Case Study in E-Retailing	Ege University	Link www.researchgate.net
Customer's life-time value using the RFM model in the banking industry: a case study	Siegen University	Link www.researchgate.net
Smart Customer Segmentation: RFM Segmentation to drive sales and loyalty	Developed by How Many Steps Inc. . Creators of Shopify Customer Experience Apps .	Link how-many-steps-inc.webflow.io

THANKS FOR YOUR LISTENING!

Ref. links

<https://help.moengage.com/hc/en-us/articles/360037365132-RFM-Segments#what-is-rfm-analysis-0-0>

https://www.linkedin.com/pulse/solving-complex-journeys-segments-fintech-marketing-hitarth-saini/?trk=articles_directory

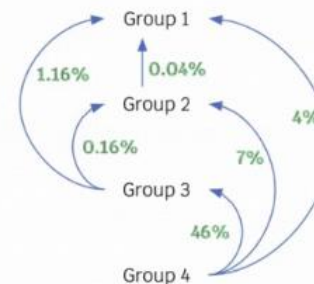
Grouping segments

Segment distribution (M0)
when we implemented the RFM model

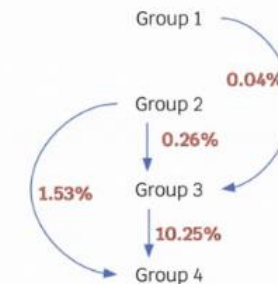
Groups	Segments	Period 1
Group 1	Champions	0%
	Loyals	
	Potentials	
Group 2	Recents	2%
	Promising	
Group 3	Need Attention	15%
	About To Sleep	
	Price Sensitive	
	Can't Lose Them	
Group 4	Hibernating	83%
	Lost	
TOTAL		100%

- **For Group 4:** we created multiple messaging routes, and use-case angles to build consideration to try again. This wasn't easy and we had to send multiple reminders at various times. Using personalisation heavily here to get attention and chance of success was the key.
- **For Group 3:** along with the usual offers we implemented short 'time-bound offers' approach for quick response. Additionally, we kept the reminder frequency consciously high for this group.
- **For Group 2:** Apart from timely reminders and personalised offers we ran campaigns with the 'Lucky winners' approach and regularly published additional communication with results of these.

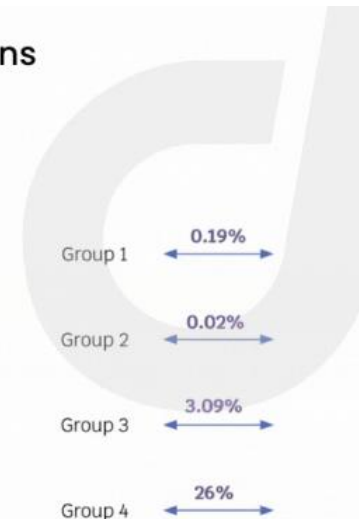
Segment movement with RFM campaigns



Net positive movement = 58.36%



Net negative movement = 12.08%



No movement = 29.30%

Segment distribution (M0)

when we implemented the RFM model

Groups	Segments	Period 1
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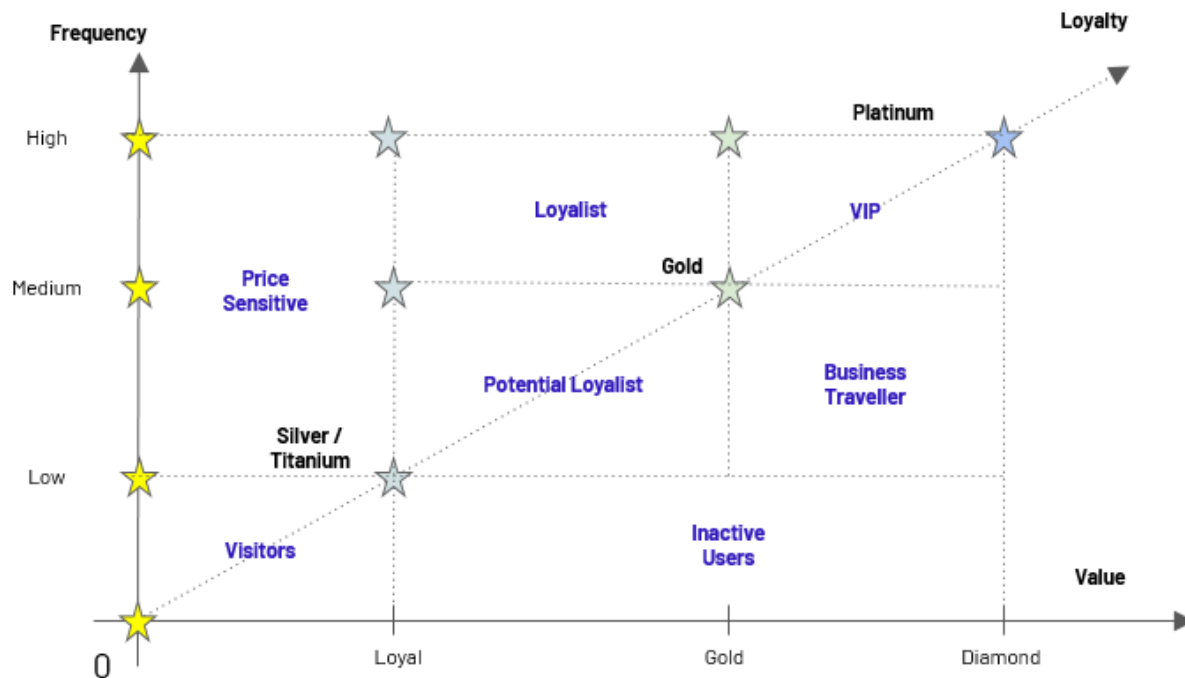
Customer Segment	Recency Score Range	Frequency & Monetary Combined Score Range
Champions	4-5	4-5
Loyal Customers	2-5	3-5
Potential Loyalist	3-5	1-3
Recent Customers	4-5	0-1
Promising	3-4	0-1
Customers Needing Attention	2-3	2-3
About To Sleep	2-3	0-2
At Risk	0-2	2-5
Can't Lose Them	0-1	4-5
Hibernating	1-2	1-2
Lost	0-2	0-2

Ideas

<https://www.nextlytics.com/blog/machine-learning-in-customer-segmentation-with-rfm-analysis>

R	M	F-4	F-3	F-2	F-1
1	1			Top customers (current, frequent, large revenues)	
	2				
	3			Active customers (continuous revenue)	
	4				
2	1		Emerging customers (potential for cross- and upselling)		
	2				
	3		Unsteady customers (potential for cross- and upselling depending on the offer)		
	4				
3	1	Customers at risk (Non-current but partly frequent and high revenues)			
	2				
	3			Potential lost customers	
	4				
4	1	Inactive customers (non-current, rare but high revenues)			
	2				
	3	Lost customers (non-current, rare, low revenues)			
	4				

Ideas



- + Thêm các filter về thiết bị sử dụng, model điện thoại để phân khúc họ là nhóm khách hàng giàu có.
- + Thêm độ tuổi để xác định họ thuộc nhóm khách hàng GenX, GenY or genZ
- + Thêm giới tính
- + Thêm thói quen mua sắm: merchant nào khách hàng đó Hay mua sắm nhất, dịch vụ nào nhóm khách hàng đó Hay sử dụng nhất,... để có chiến lược marketing phù hợp Với từng khách hàng
- + Phân loại các merchant thành các nhóm merchant khác nhau để Biết được nhóm khách hàng đó đang thích mua sắm ở những nơi Ntn
- + Xem nhóm khách hàng hay sử dụng ở giờ nào?, sử dụng trong Tuần hay cuối tuần, ngày nào trong tuần

Ideas

RFM Analysis can be used to answer questions like -

- Who are your loyal customers?
- Which are the customers who are most likely to churn?
- Which customers are purchasing the most on your platform?
- Which are the customers who can be turned into the best customers with little effort?
- Which customers are most likely to engage with your campaigns?

Biểu đồ hay về RFM

<https://www.neenopal.com/RFM-analysis.html>

