ONLINE RETAIL CUSTOMER SEGMENTATION

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Bussines Problem

- Segmentasi customer belum diterapkan agar strategi marketing tepat sasaran
- Segmentasi adalah langkah awal untuk Customer Relationship Management

Objectives

Clustering

Mengcluster Customer Berdasarkan RFM Analisis

Recommendations

Improvement terhadap kekurangan pada transaksi seperti Marketing Campaign pada cluster tertentu

RFM Analysis

Recency

Variabel untuk mengukur nilai pelanggan berdasarkan rentang waktu (tanggal, bulan, tahun) transaksi terakhir pelanggan sampai saat ini

Frequency

Mengacu pada berapa kali pelanggan berinteraksi dengan produk atau melakukan transaksi dalam periode waktu tertentu.

Monetary

Menunjukkan jumlah total yang dihabiskan oleh pelanggan untuk membeli produk Anda dalam periode waktu tertentu.

Customer Segmentation

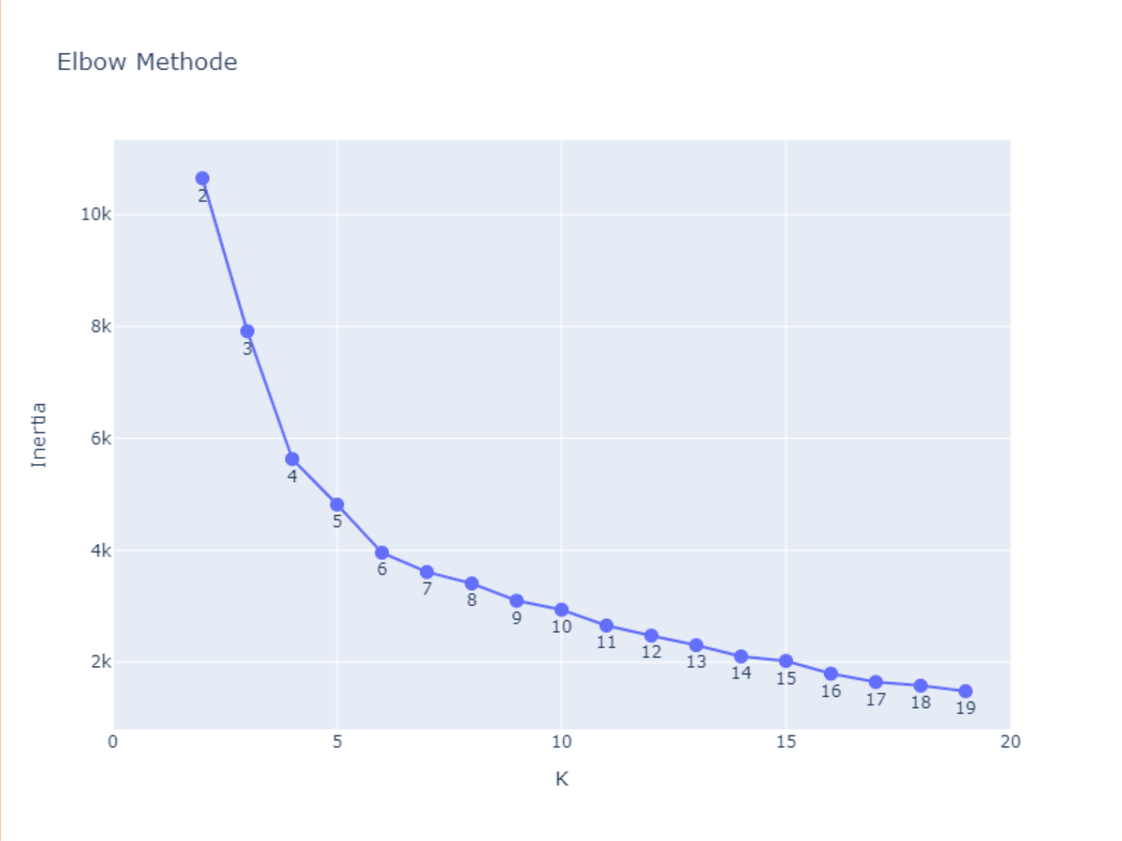
Scoring RFM Analysis

Score	Recency	Frequency	Momnetary
1	Transaksi terakhir 301 hari - 365 hari	0 < x <= 3	0 < x <= 1.000
2	Transaksi terakhir 241 hari - 300 hari	3 <= x < 5	1.000 < x <= 3.000
3	Transaksi terakhir 181 hari - 240 hari	5 <= x < 7	3.000 < x <= 5.000
4	Transaksi terakhir 121 hari - 180 hari	7 <= x < 10	5.000 < x <= 7.000
5	Transaksi terakhir 61 hari - 120 hari	10 <= x < 15	7.000 < x <= 10.000
6	Transaksi terakhir 0 hari - 60 hari	15 =< x	x > 10.000

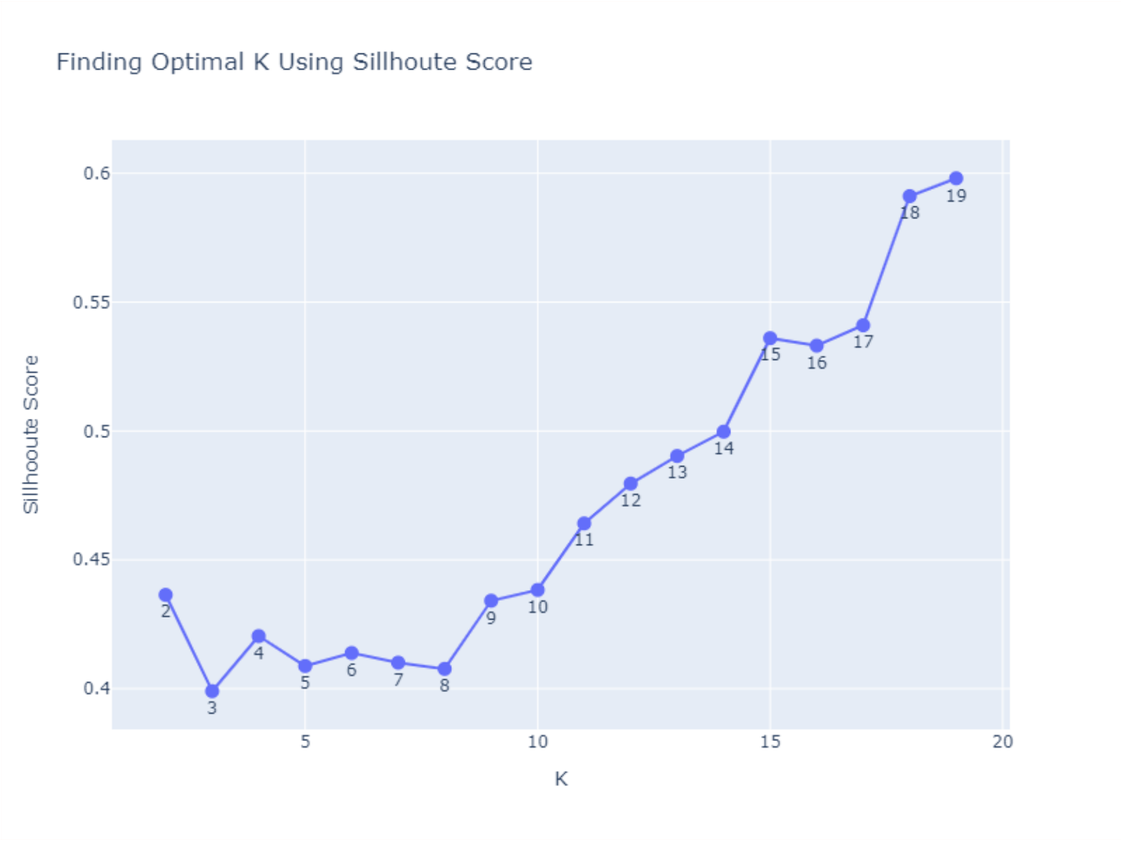
Online Retail Customers Segmentation

Clustering With K-Means

Mencari Potensial K Dengan Elbow Method Pada RFM DataFrame



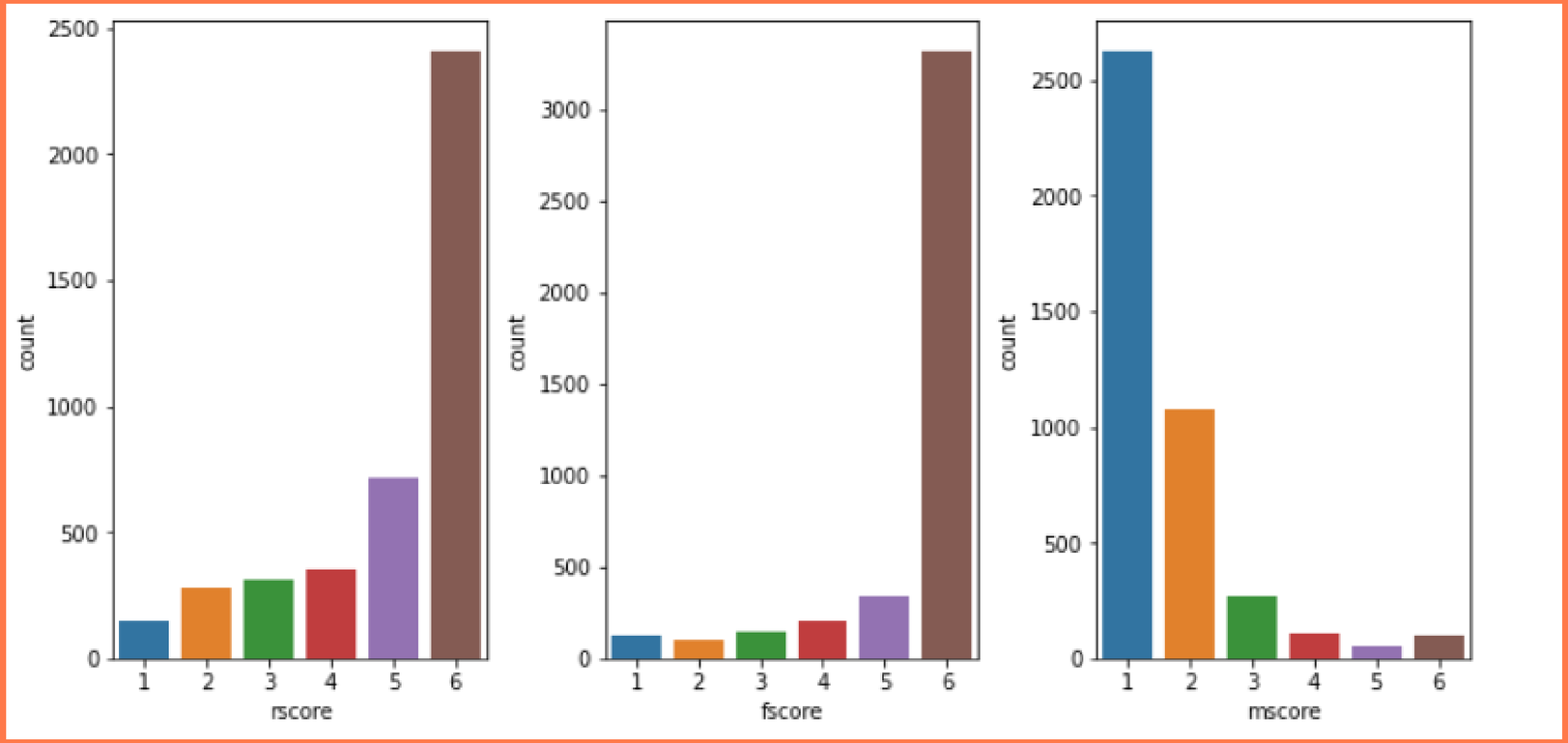
Mencari Potensial K Degan Sillhoute Score Menggunakan Euclidean



K = 4 diambil dikarenakan pada elbow method menjukan nilai yang tidak begitu signifikan dengan nilia k setelahnya, begitupun dengan sillhoute method, pada k=4 terlihat ada kenaikan meskipun bukan nilai yang tertinggi

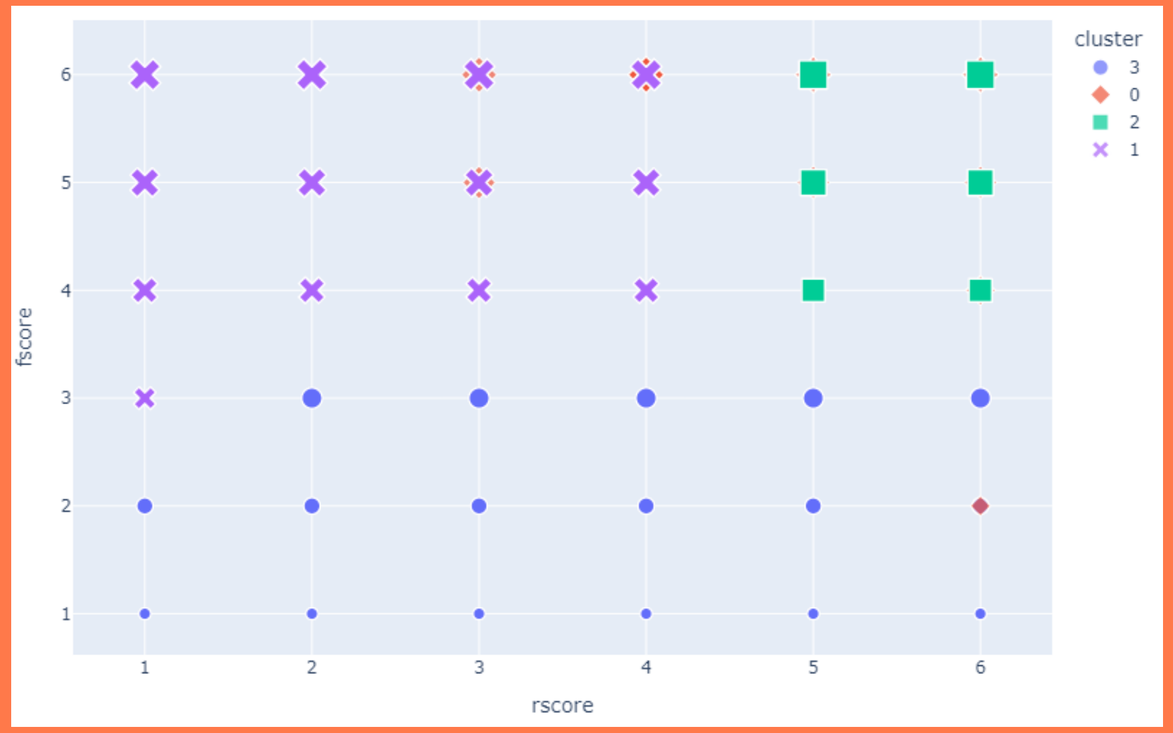
Clustering With K-Means

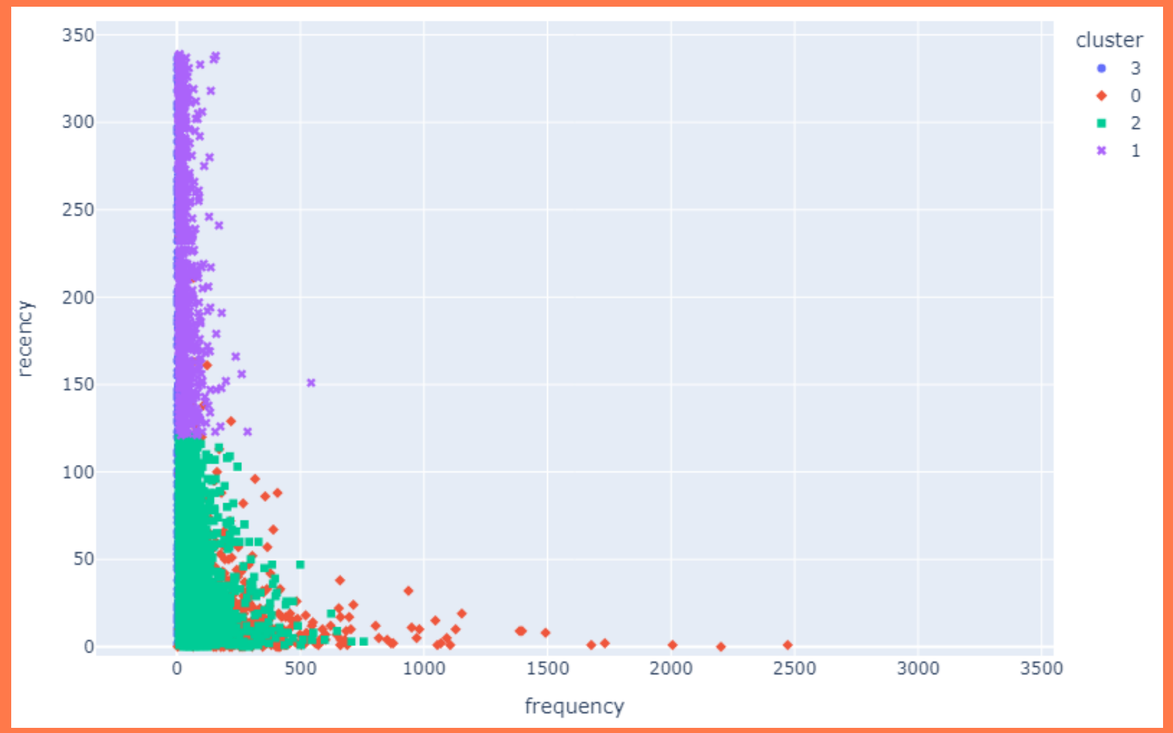
Distribusi Data Dengan Graph
Setelah Pengklusteran



Clustering With K-Means

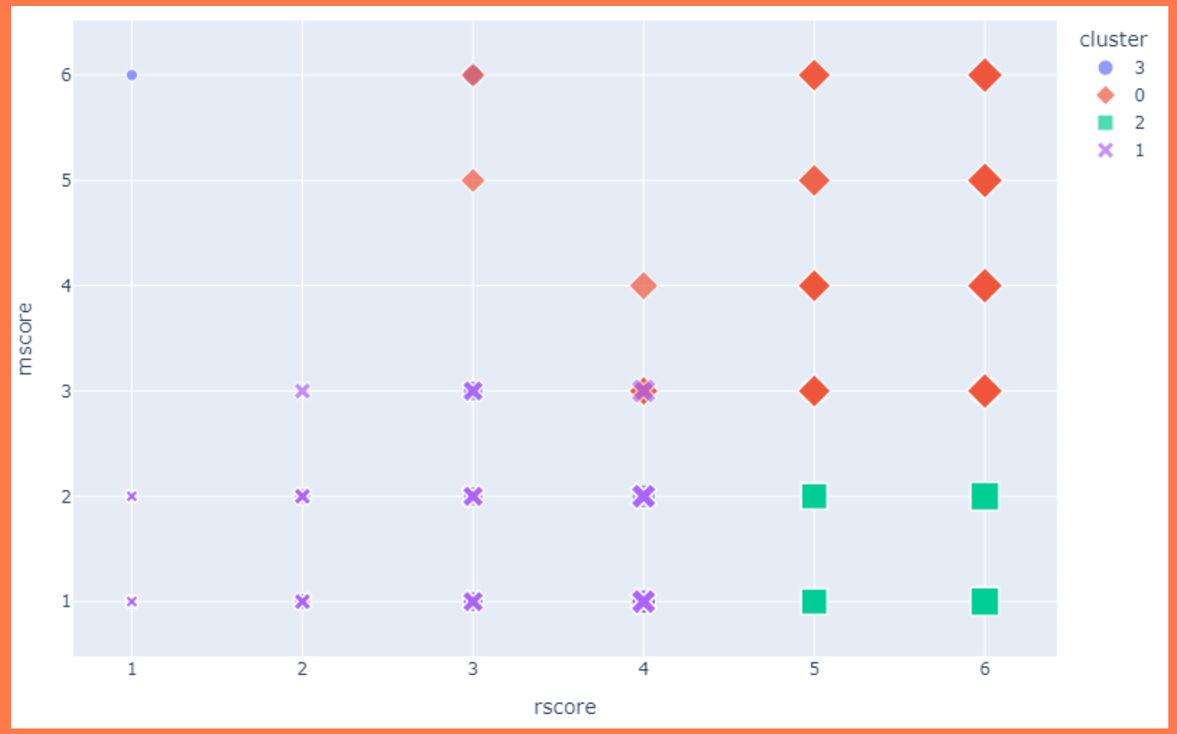
Recency Frequency Comparison After Clustering

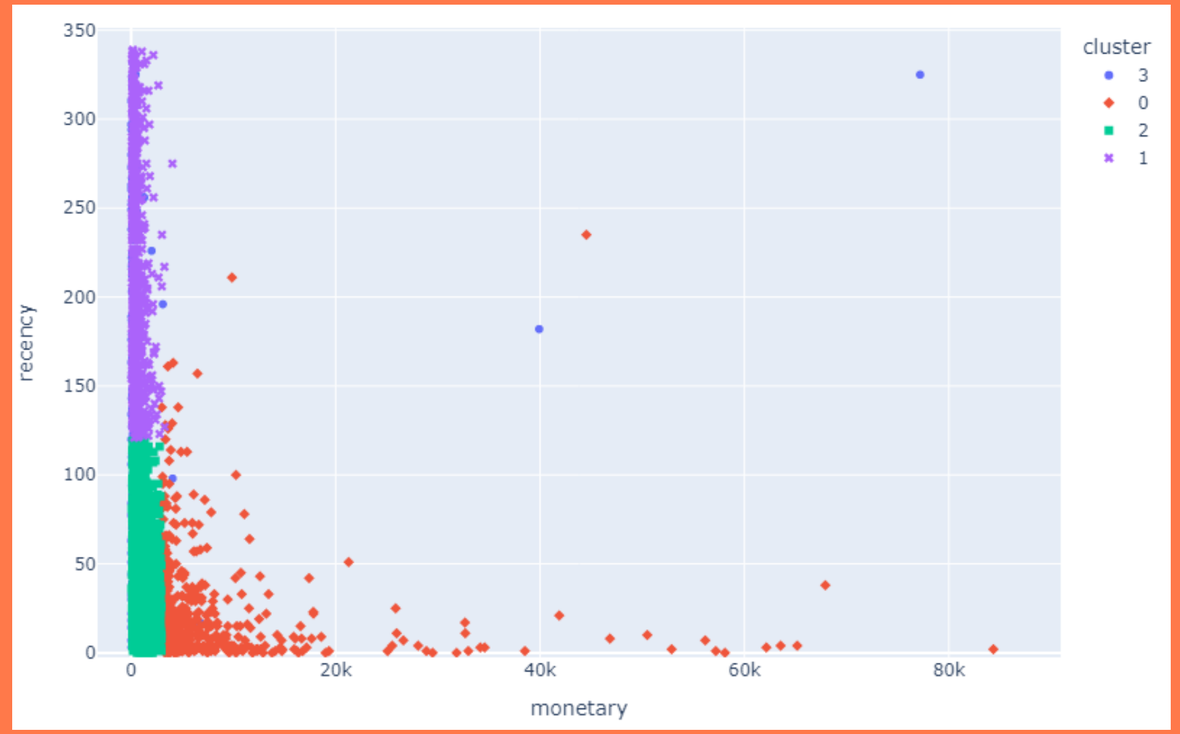




Clustering With K-Means

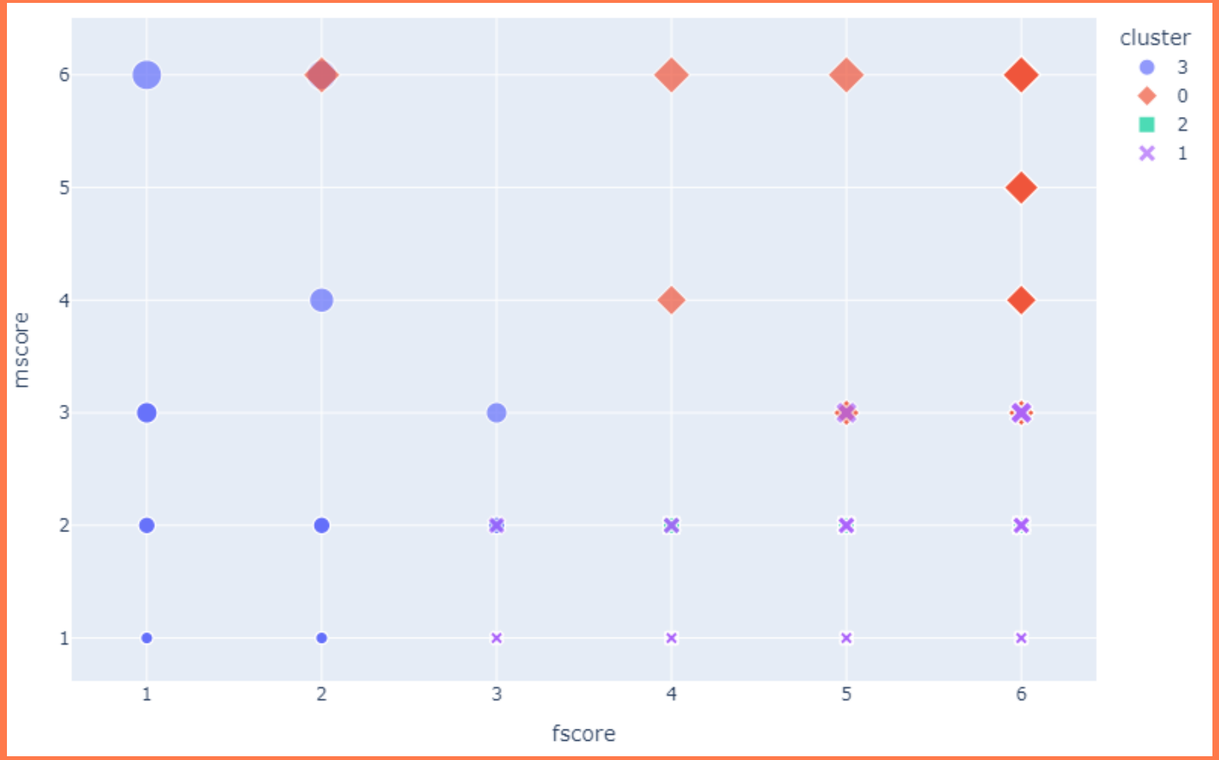
Recency Monetary Comparison After Clustering





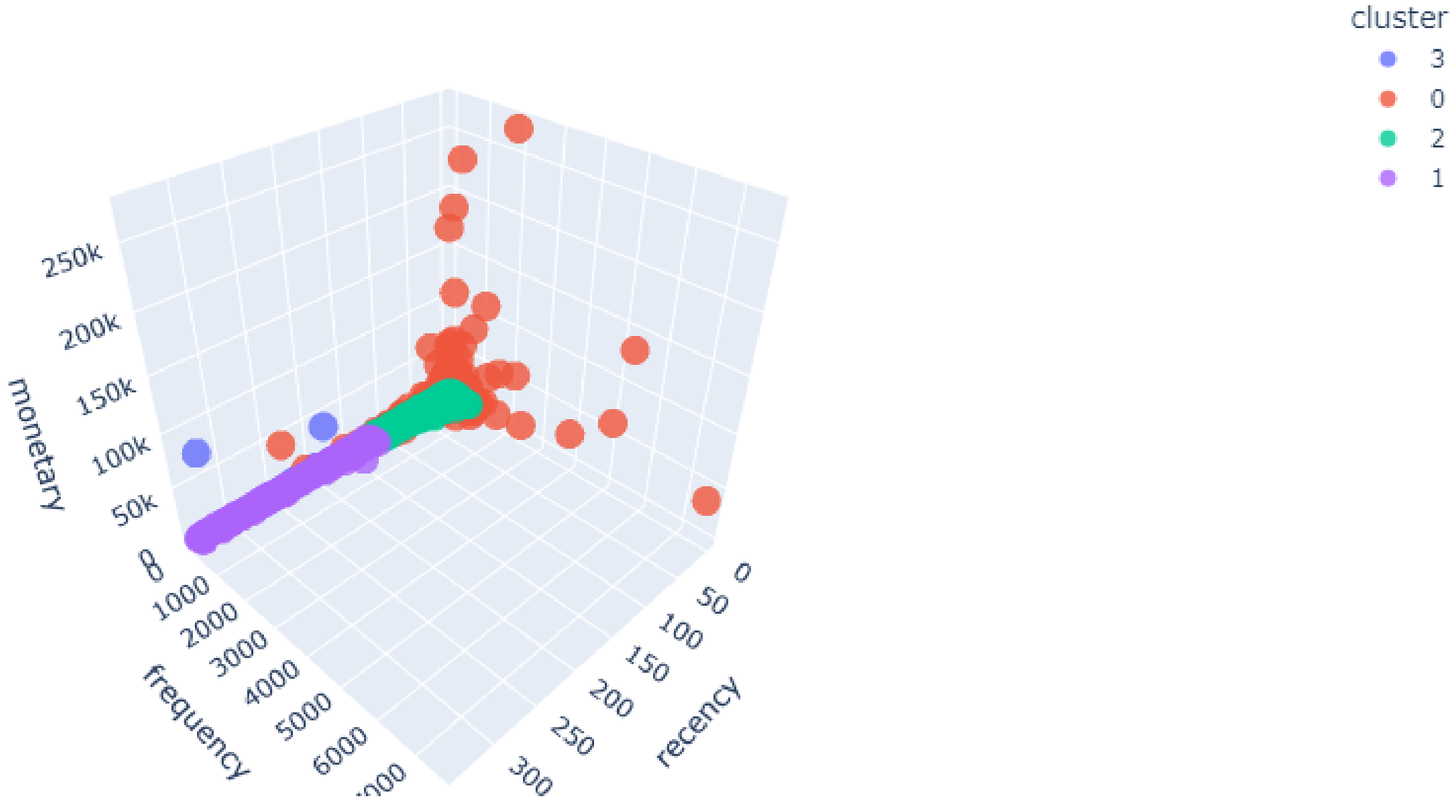
Clustering With K-Means

Frequency Monetary Comparison After Clustering



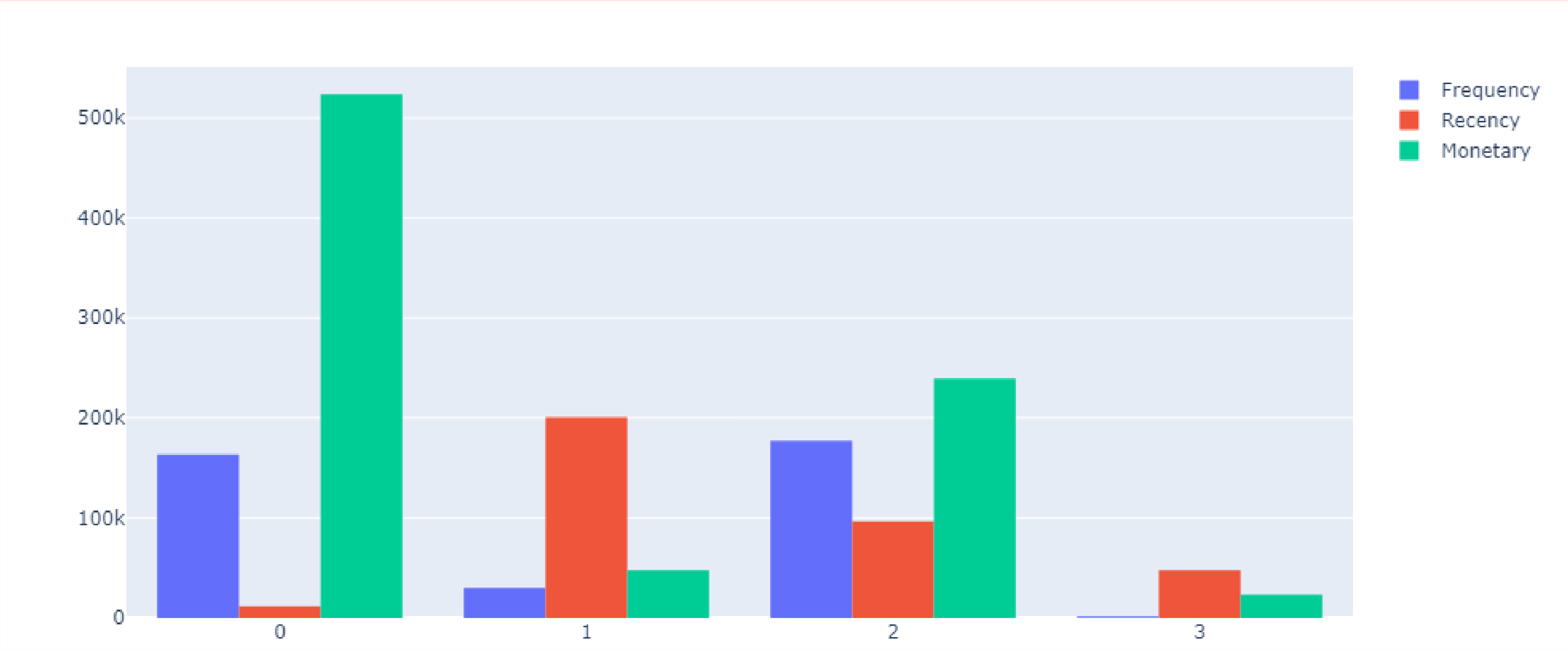
Clustering With K-Means

3D Comparison After Clustering



Clustering With K-Means

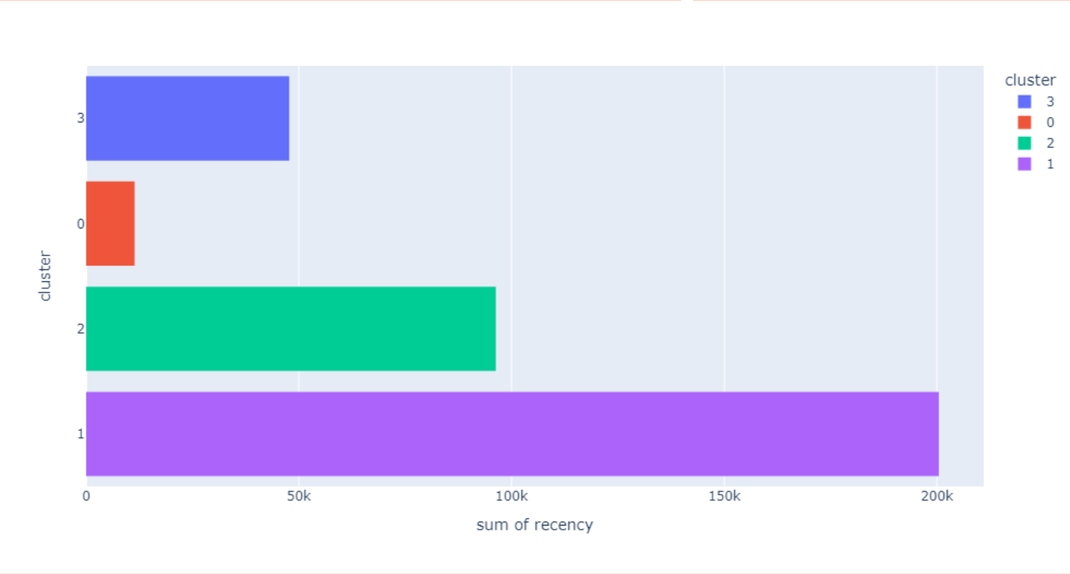
Data Distribution Per Total Cluster Value on Recency, Frequency, Monetary



Clustering With K-Means

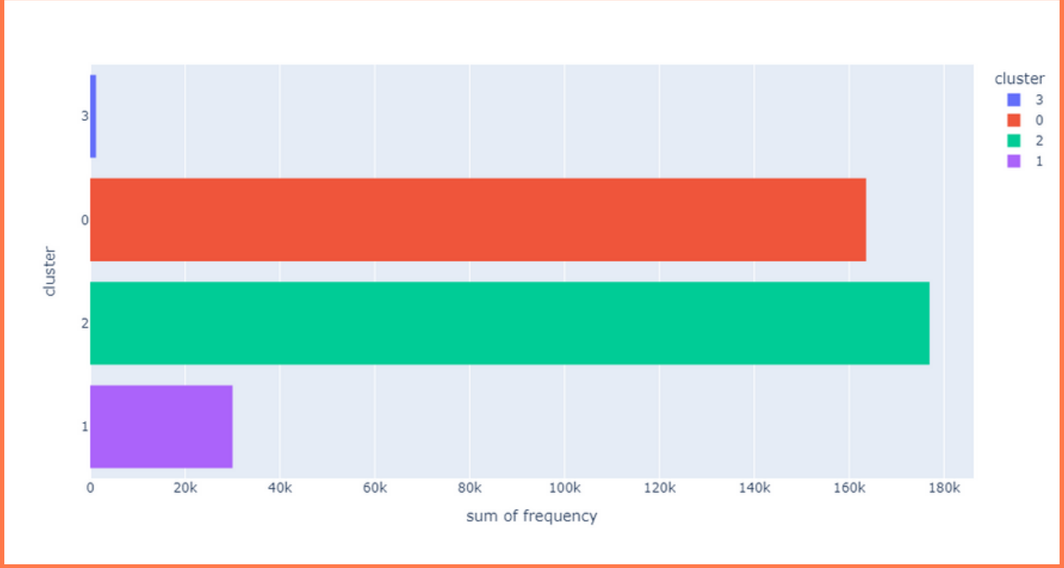
Data Distribution Per Cluster

Sum of Recency



Sum of Monetary

Sum of Frequency



- Cluster 0
- Cluster 1
- Cluster 2
- Cluster 3

Clustering With K-Means

Mapping Class From Clusters

Best Customers

0

New Customers
Low Spending

3

Low Spending
Pasif Customers

1

Middle Spending
Active Customers

2

Customer Segemntation

Recommendation

Best Customers

- Penawaran Product Baru atau Product yang mungkin belum dibeli sebelumnya

Low Spending Pasif Customers

- Melakukan follow up dengan marketing campaign terkait bundling product dan memberikan rekomendasi product yang paling diminati.
- Memberikan penawaran potongan harga agar customer spent lebih banyak.

Middle Spending Active Customers

- Memberikan penawaran potongan harga agar menarik customer untuk bertransaksi lagi.
- Memberikan poin sebagai reward dan dapat ditukarkan dengan product atau potongan harga

New Customers Low Spending

- Memberikan Rekomendasi Product berdasarkan product yang diminati customer lainnya.
- Memberikan poin agar customer bertransaksi lebih intens.

Note : Product Reccomendation sangat disarankan untuk tahap selanjutnya

THANK YOU