

Bank Marketing Analysis - Campaign Dashboard

Key Insights & Actionable Recommendation

1. Optimize Call Duration for Conversion

- a. **Finding:** Customers with call durations average **550 seconds** showed the highest conversion rates.
- b. **Recommendation:** Train agents to target this optimal window using guided scripts and real-time call monitoring.
- c. **Suggested KPI:** % of calls within optimal duration range.

2. Prioritize High-Value Segments/Clusters

- a. **Finding:** Cluster 4 (avg Age 40, Balance > \$1.5K, Long call durations of 16 mins) had a 3x higher conversion rate(4.6).
- b. **Recommendation:** Allocate more budget and personalized messaging to this segment in the next cycle.
- c. **Suggested KPI:** Conversion rate by segment.

3. Refine Funnel Drop-Off Strategy

- a. **Finding:** 80% of Final Subscriptions are not traceable to Qualified Leads
- b. **Recommendation:** Audit funnel logic and enforce sequential stage tracking
- c. **Suggested KPI:** % of conversions with full funnel traceability

4. Seasonal Timing Matters

- a. **Finding:** Campaigns launched in **Q2 (April–June)** performed 30% better than other quarters.
- b. **Recommendation:** Schedule major campaigns in Q2 and test smaller pilots in Q1 and Q3.
- c. **Suggested KPI:** Conversion rate by campaign.

5. Job & Education Category

- a. **Finding:** Top 3 categories i.e. 1.Retired 2. Student and 3. Not specified ,where the **subscription rate** is highest.
- b. **Recommendation:** Subscription is highest in retired age group category.

6. Anomalies in Subscription rate :

- a. Subscription rate was unexpectedly high on March 2024, with value 0.43, which is above expected range of 0.13 - 0.22

7. Recommendations :

8. Enhance Data Quality for Personalization

- a. **Finding:** Missing or inconsistent demographic data limited targeting precision

Key Performance Indicators

TotalCalls

4.52K

SuccessCount

521

Subscription...

0.12

AvgDuration

263.96

AvgBalance

1.42K

Avg Age

41

Month Year

January 2024

February 2024

March 2024

April 2024

May 2024

June 2024

July 2024

August 2024

September 2024

October 2024

November 2024

December 2024

Education

Not Specified

primary

secondary

tertiary

Quarter

1

2

3

4

Profession

admin.

blue-collar

entrepreneur

housemaid

management

Not Specified

retired

Bank Marketing Analysis - Campaign Dashboard

Key Performance Indicators

TotalCalls
4.52K

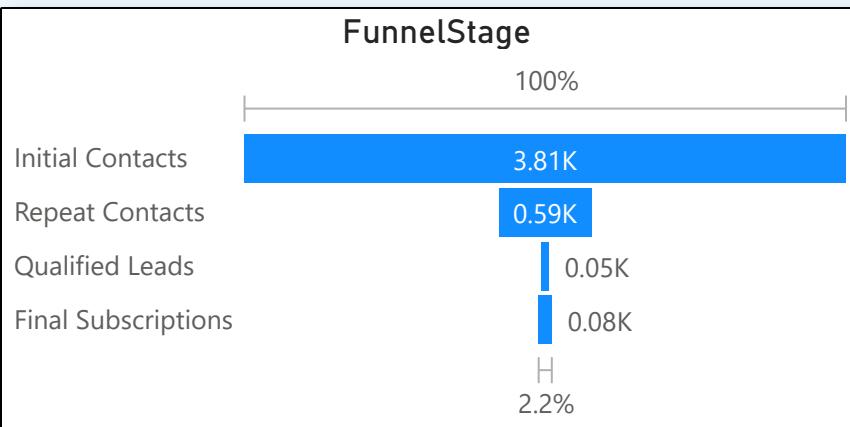
SuccessCount
521

Subscription...
0.12

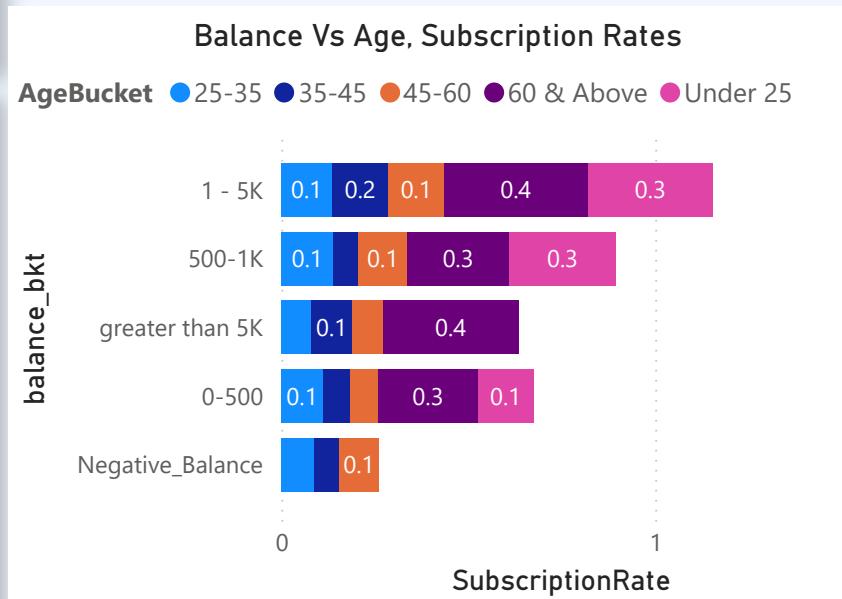
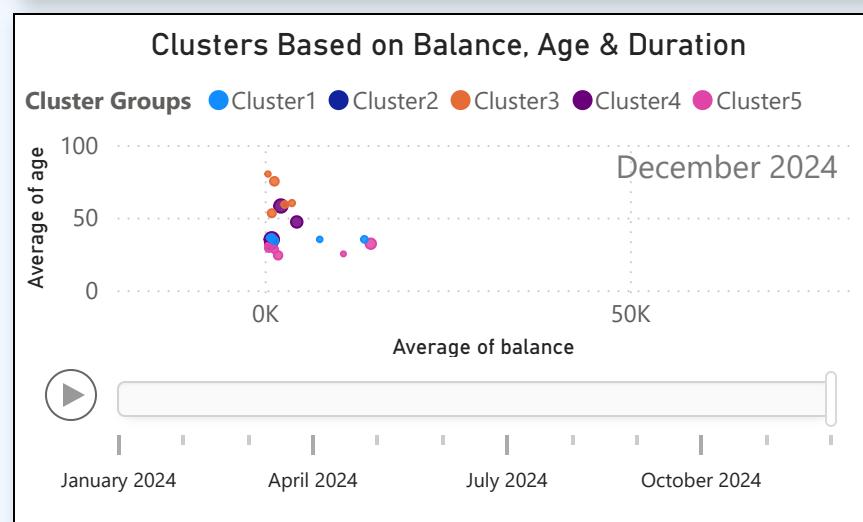
AvgDuration
263.96

AvgBalance
1.42K

Avg Age
41



SortOrder	FunnelStage	DropOff%
1	Initial Contacts	
4	Final Subscriptions	-80.4% drop-off
2	Repeat Contacts	84.6% drop-off
3	Qualified Leads	92.2% drop-off



- Month Year**
 - January 2024
 - February 2024
 - March 2024
 - April 2024
 - May 2024
 - June 2024
 - July 2024
 - August 2024
 - September 2024
 - October 2024
 - November 2024
 - December 2024
- Education**
 - Not Specified
 - primary
 - secondary
 - tertiary
- Profession**
 - admin.
 - blue-collar
 - entrepreneur
 - housemaid
 - management
 - Not Specified
 - retired

Data Validation & Summary of all the New variables and Dax, intermediate calculations in our data.

DAX Validation Table

1,422.66 AvgBalance	263.96 AvgDuration	0.12 SubscriptionRate	521 SuccessCount	4521.00 TotalCalls
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Name

Filter by keyword



Type

- Column
- Measure
- Relationships
- Table

Filters/Slicers for the below table :

1. The Name slicer filters from the name column in table with DAX, Table, Measures.
2. Type Slicer helps us directly filter from the category of types .
3. This helps us get an understanding of our data better and also can check for the expression of DAX we created with our data and also has auto update feature.

Name	Type	Expression
age	Column	
AgeBucket	Column	SWITCH(True(),bank[age]<25,"Under 25",bank[age]<35,"25-35",bank[age]<45,"35-45",bank[age]<60,"45-60",bank[age]>=60,"60 & Above")
Avg Age	Measure	AVERAGE('bank'[age])
Avg Balance	Measure	AVERAGE('bank'[balance])
Avg Call Duration	Measure	AVERAGE('bank'[duration]))
AvgBalance	Measure	AVERAGE(bank[balance])
AvgDuration	Measure	AVERAGE(bank[duration])
balance	Column	
balance_bkt	Column	switch(True(),bank[balance]<0,"Negative_Balance",bank[balance]<500,"0-500",bank[balance]<1000,"500-1K",bank[balance]<5000,"1 - 5K",bank[balance]
bank	Table	
'bank'[Contact_Date] *[<->]1 'Calendar_Table'[Date]	Relationships	'bank'[Contact_Date] *[<->]1 'Calendar_Table'[Date]
Calendar_Table	Table	
campaign	Column	
ClusterId	Column	
Column	Column	
contact	Column	

Job Vs Education performance against subscription rates, success rates.

Job Vs Education , Subscription Rate Metrics					
job	Not Specified	primary	secondary	tertiary	Total
admin.	0.12	0.06	0.12	0.14	0.12
blue-collar	0.07	0.04	0.09	0.08	0.07
entrepreneur	0.09	0.12	0.12	0.05	0.09
housemaid		0.14	0.11	0.14	0.13
management	0.15	0.13	0.08	0.14	0.14
Not Specified	0.20	0.29	0.13	0.13	0.18
retired	0.21	0.20	0.21	0.42	0.23
self-employed	0.25	0.13	0.03	0.17	0.11
services	0.08	0.12	0.09	0.13	0.09
student		1.00	0.21	0.37	0.23
technician	0.05	0.20	0.11	0.11	0.11
unemployed		0.12	0.10	0.09	0.10
Total	0.10	0.09	0.11	0.14	0.12



Job Vs Education , Subscription Rate :

1. The top 3 categories with higher subscription rate are 1.Retired 2. Student and 3. Not specified.
2. We see high educated customers are having high subscriptions.
3. Retired group performs better to the currently working class.

Contact Distribution and its performance in campaign

KPI

TotalCalls

4.52K

SuccessCount

521

SubscriptionRate

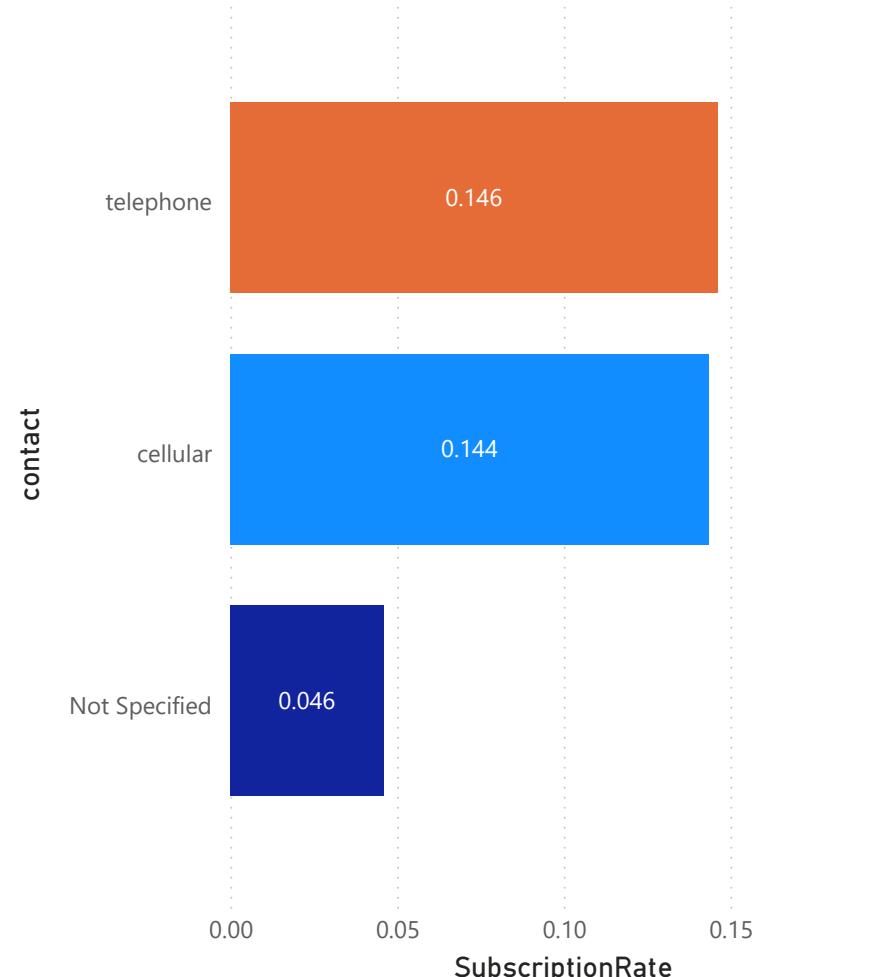
0.12

AvgDuration

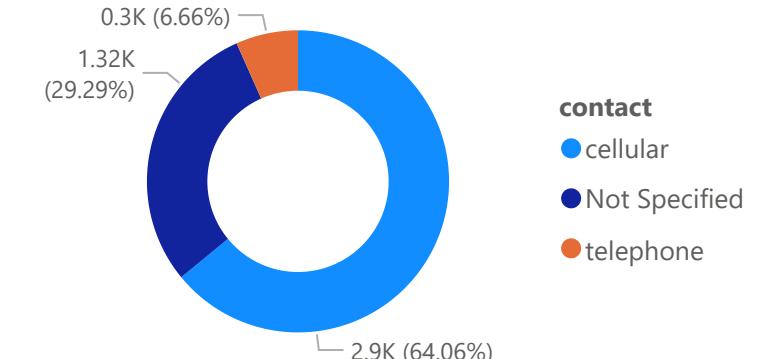
263.96

SubscriptionRate by contact and contact

contact ● telephone ● cellular ● Not Specified



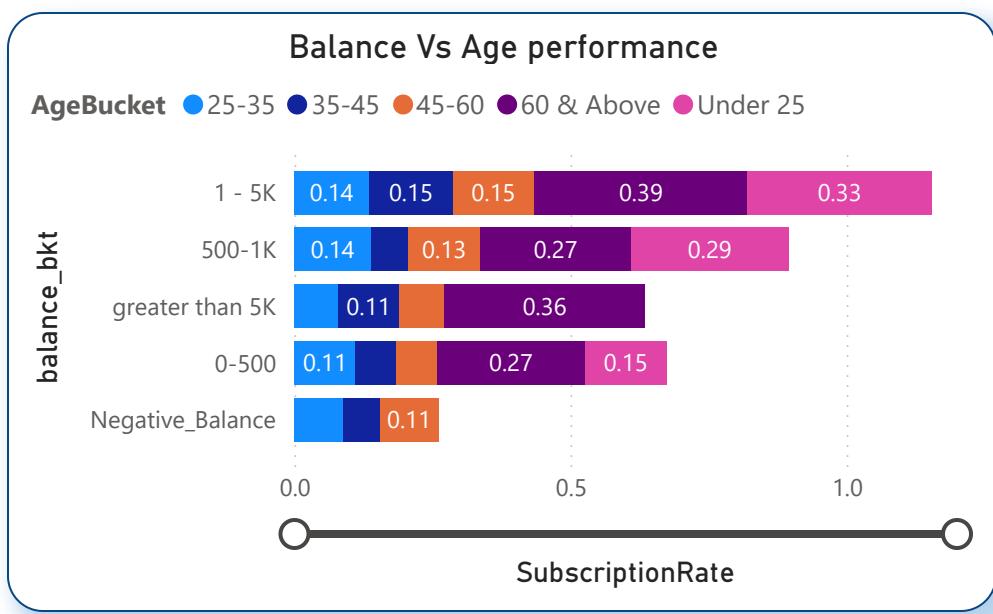
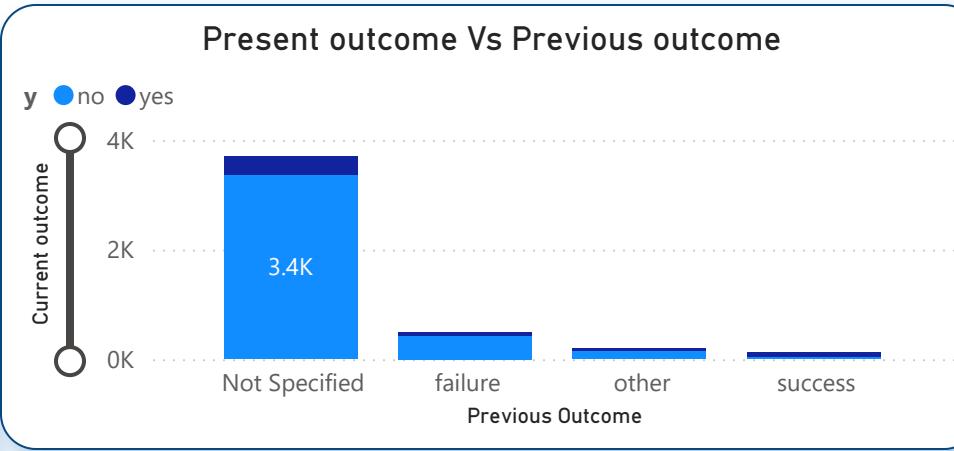
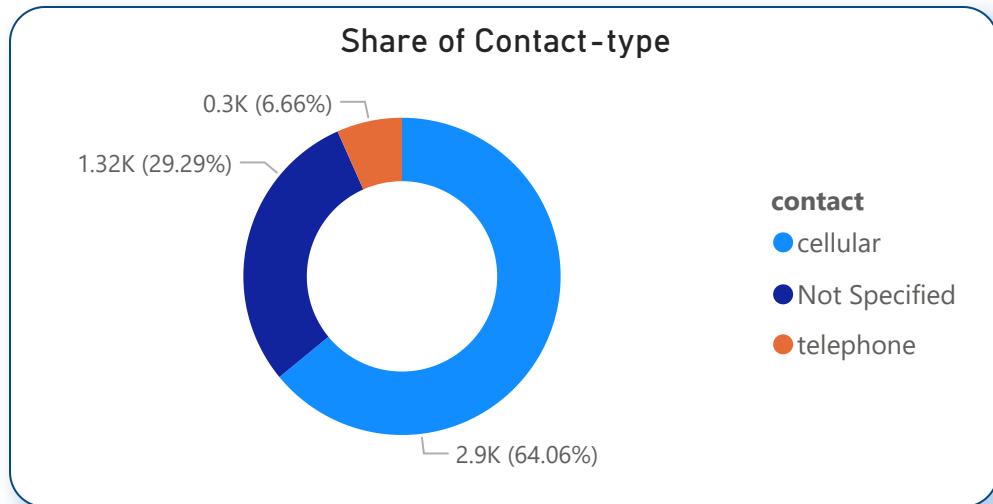
Count of contact by contact



Contact Categories and its Distribution

1. The top 3 categories with higher subscription rate are 1.Retired 2. Student and 3. Not specified.
2. We see high educated customers are having high subscriptions.
3. Retired group performs better to the currently working class.

Contact Distribution and its performance in campaign



Balance Vs Age performance

balance_bkt	25-35	35-45	45-60	60 & Above	Under 25	Total
Negative_Balance	0.09	0.07	0.11			0.08
greater than 5K	0.08	0.11	0.08	0.36		0.11
500-1K	0.14	0.07	0.13	0.27	0.29	0.12
1 - 5K	0.14	0.15	0.15	0.39	0.33	0.16
0-500	0.11	0.07	0.08	0.27	0.15	0.09
Total	0.12	0.09	0.11	0.32	0.19	0.12

Key Takeaways :

- High subscription rate in age group above 60.
- 💡 Negative balance clients are less likely to subscribe across all age groups
- Marketing Team should target customers : Age > 60 and proper source of income.

Current_outcome

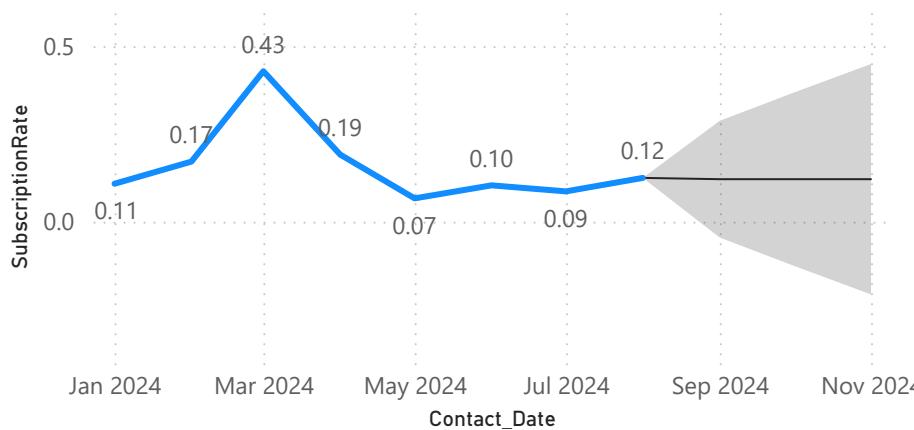
- no
- yes

Prevoious outcome

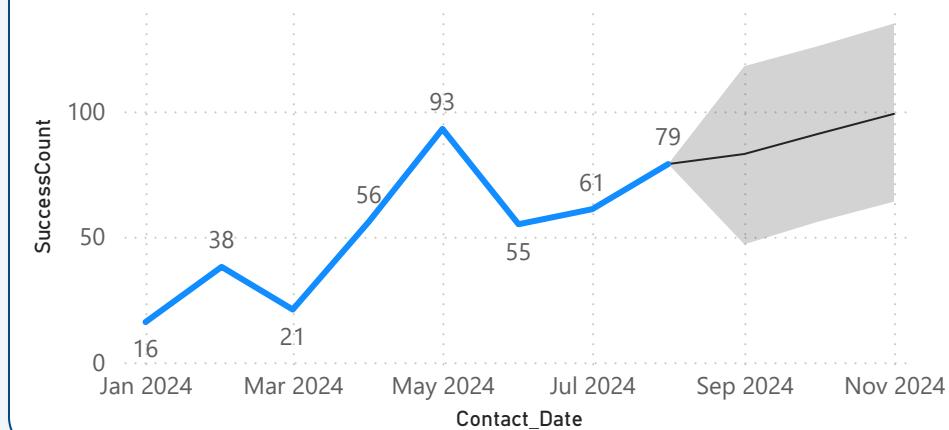
- failure
- Not Specified
- other
- success

Subscription Rate forecasting for Q1,2025.

SubscriptionRate by Contact_Date



SuccessCount by Contact_Date



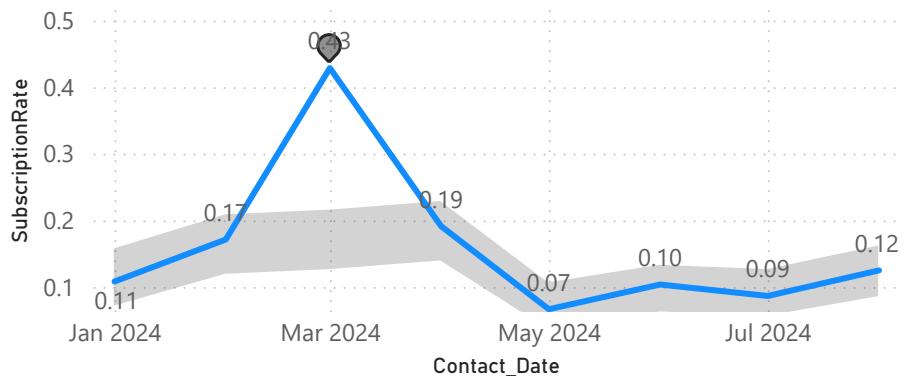
Contact_Date

1/1/2024

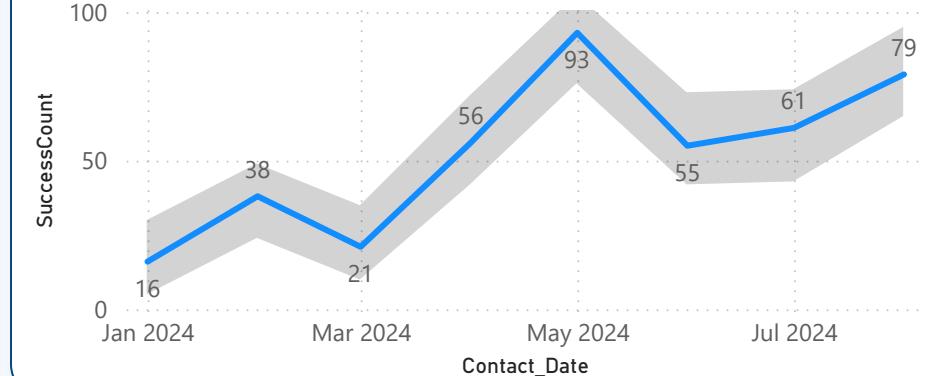
8/23/2024



SubscriptionRate by Contact_Date



SuccessCount by Contact_Date

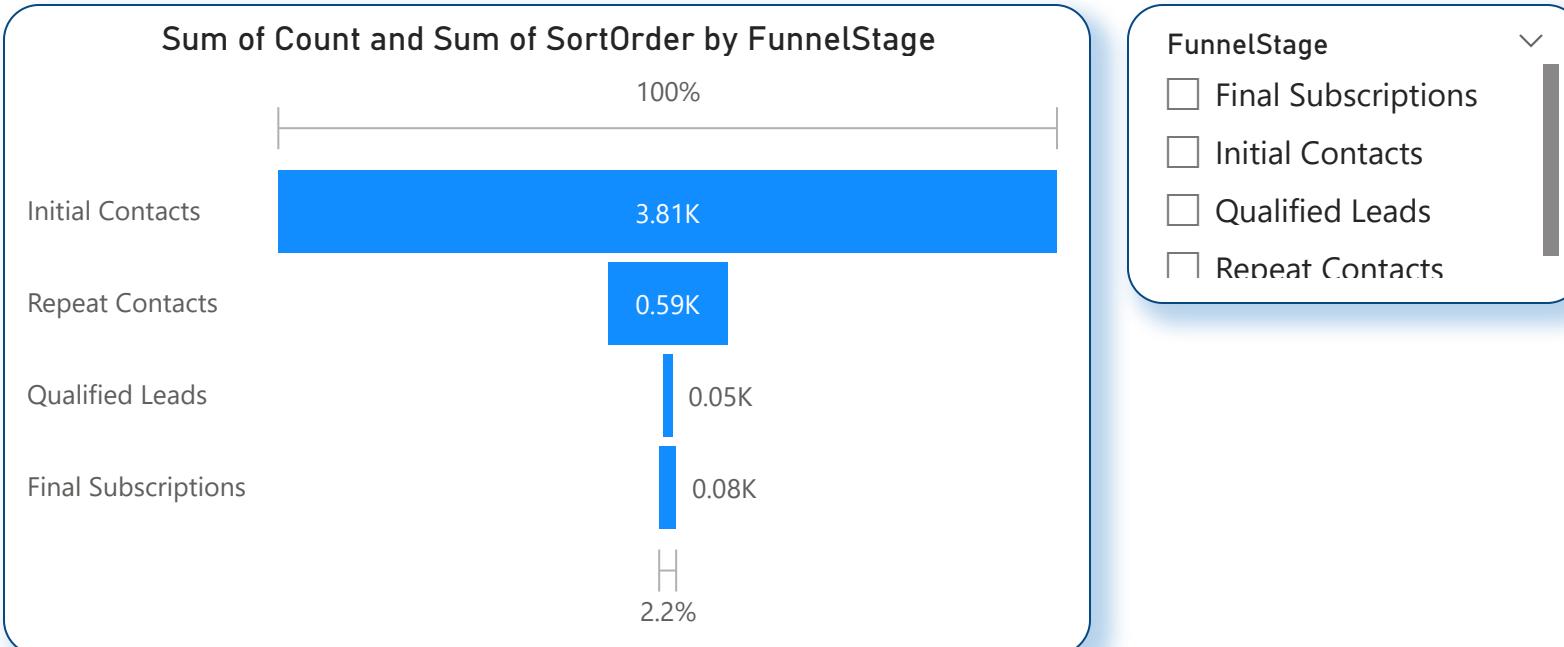


Subscription Rate forecasting for Q1,2025.

Anomalies in Data:

1. Subscription rate was unexpectedly high in March 2024 with a value of 0.43.

Funnel Summary to understand the drop offs and flow.



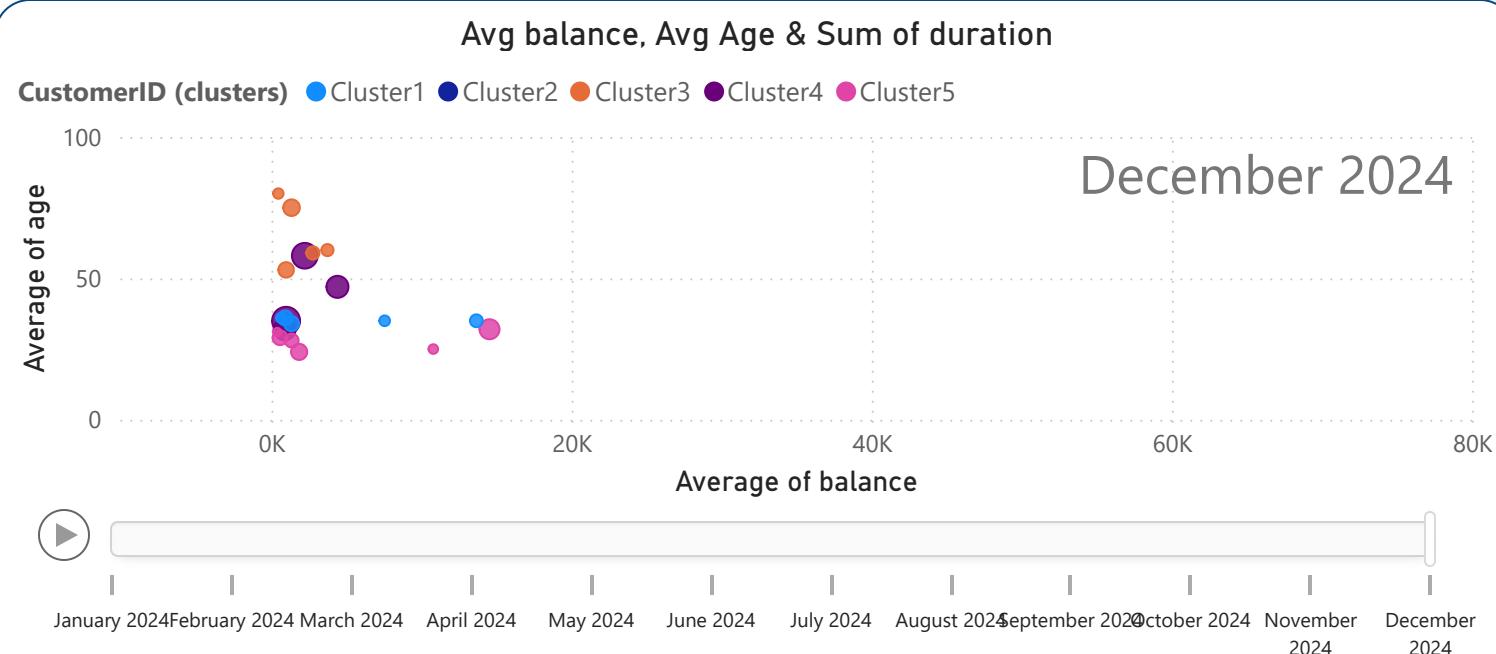
SortOrder	FunnelStage	Sum of Count	DropOff%
1	Initial Contacts	3806	
2	Repeat Contacts	586	84.6% drop-off
3	Qualified Leads	46	92.2% drop-off
4	Final Subscriptions	83	-80.4% drop-off
Total		4521	

Logic for funneling explained.

Filtration logic:

```
'bank'[y] = "yes", "Final Subscriptions",
'bank'[y] = "no" && 'bank'[duration] > 0 && 'bank'[poutcome] = "success",
"Qualified Leads",
'bank'[y] = "no" && 'bank'[previous] > 0, "Repeat Contacts",
TRUE(), "Initial Contacts"
```

Cluster Creations and its performance



Cluster creation criteria exploration:

Table on the left:

1. Age , Balance and call duration and conversion rate columns were used in creation of clusters.
2. These clusters gives a fair understanding of groups to be targeted at next campaign.

Insights :

1. Cluster 4 with a count of 305 observations and average age of 40, Average Balance of 1.2K and average call duration of 16 mins has the highest conversion/success rate

Cluster characteristics by Age Balance, Duration & Conversion Rate

CustomerID (clusters)	Count of CustomerID (clusters)	Avg Age	Avg Balance	Avg Call Duration	Conversion Rate
Cluster1	1342	37	1,343.72	183.52	0.06
Cluster2	1093	47	1,467.12	194.46	0.06
Cluster3	740	59	1,925.55	239.99	0.15
Cluster4	305	40	1,157.28	962.89	0.46
Cluster5	1041	29	1,198.00	252.89	0.11
Total	4521	41	1,422.66	263.96	0.12