

INSURANCE Analytics

Project: P995

5th group



project Mentor

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Team Members



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weekly Review



Domain : Insurance Analytics

Modules :

- MS Excel
- Power BI
- Tableau
- MySQL



Agenda



- 1 Introduction**
- 2 Dataset Description**
- 3 Data Schema & KPI Analysis**
- 4 Dashboard Design**
- 5 Recommendation**
- 6 Conclusion**

Introduction

Project Overview: Explore the detailed performance of the Ahmedabad branch through an in-depth analysis of insurance data. This review highlights how Account Executives fare across various income brackets, focusing on essential indicators such as cross-selling effectiveness, renewal rates, new client acquisition, invoice breakdowns, financial outcomes, and employee-driven opportunities.

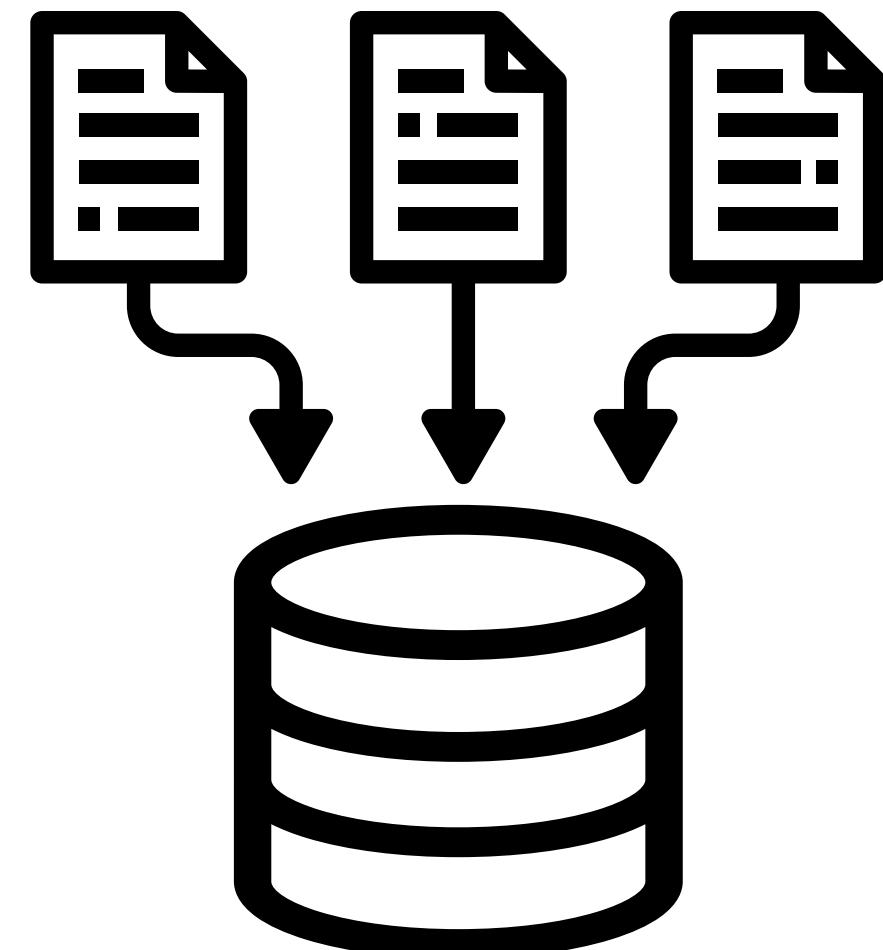
Objectives:

- Extract meaningful insights from performance data.
- Identify emerging patterns and potential challenges.
- Showcase achievements and pinpoint areas for growth.
- Design insightful dashboards using Excel, Power BI, Tableau, and SQL to monitor KPIs effectively.

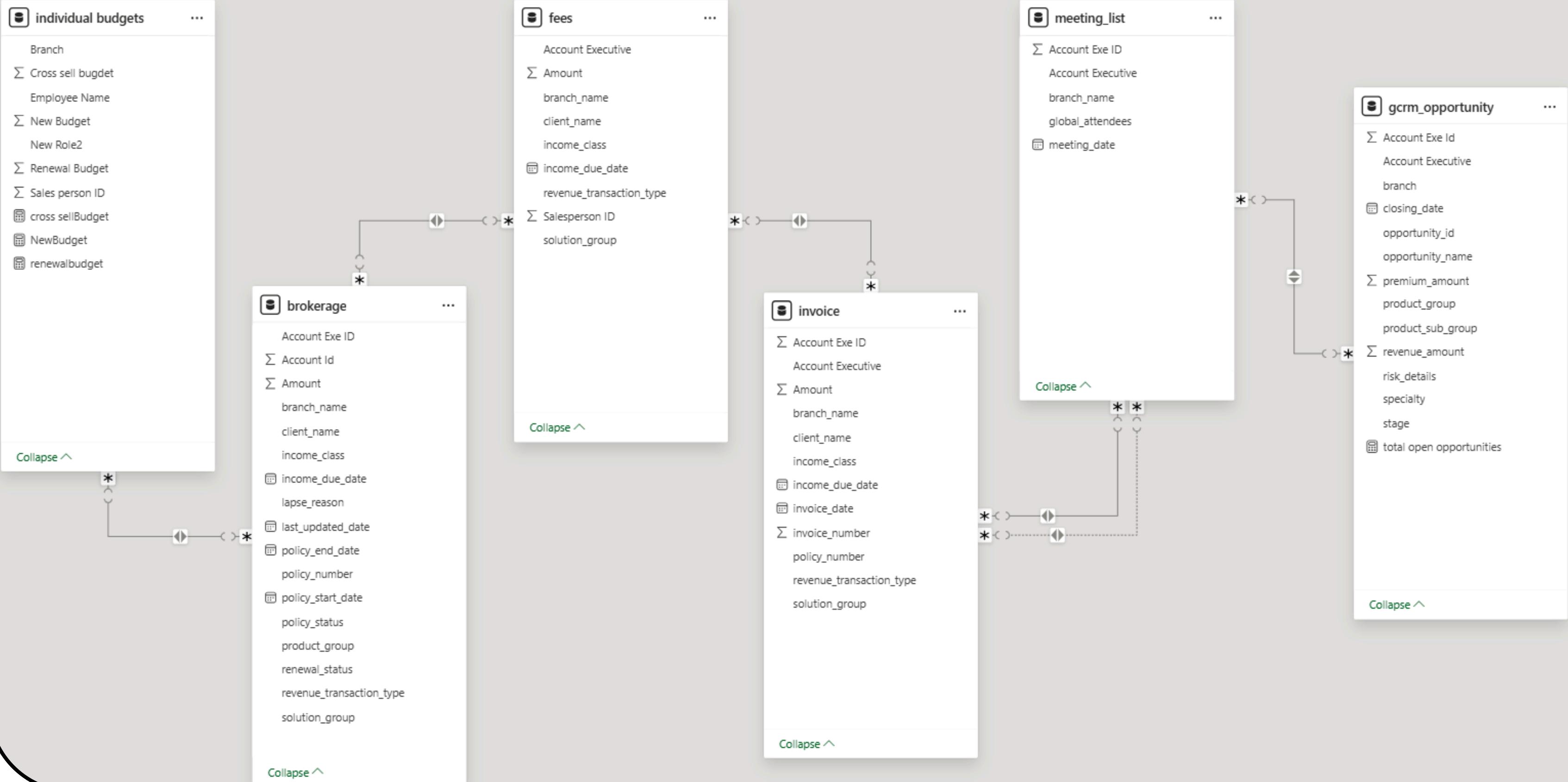


Dataset Description

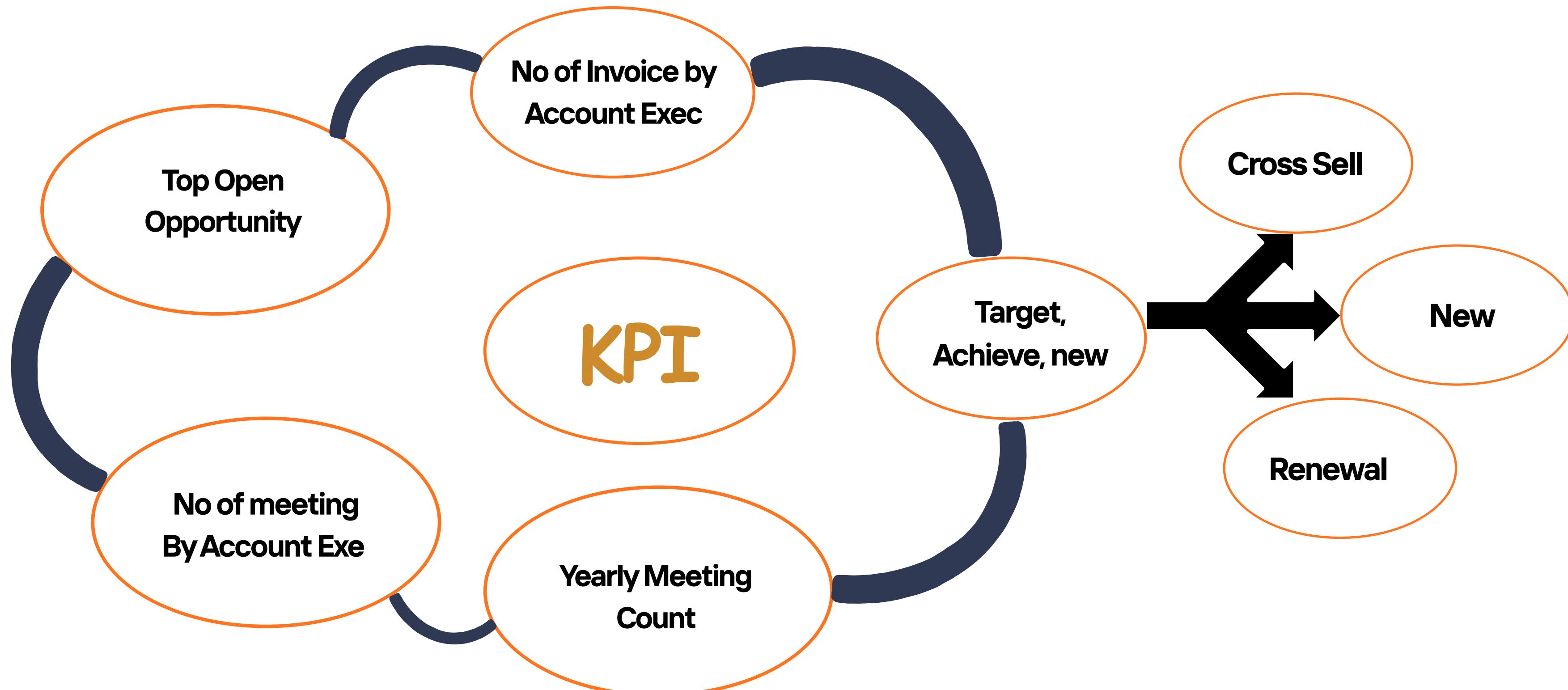
- The **Brokerage** module stores information about clients' policies, including policy details, income, and renewal status.
- The **Fees** module records client-related income transactions, such as revenue details and transaction types.
- The **Budget** module outlines allocations for branches and employees, covering new roles, cross-sell initiatives, and renewals.
- The **Invoice** module maintains information about invoices generated, including transaction details and linked clients.
- The **Meeting** module tracks meetings conducted by account executives, along with branch associations and attendee details.
- The **Opportunity** module documents opportunities handled by account executives, including revenue, sales stages, and risk information.



Data Schema



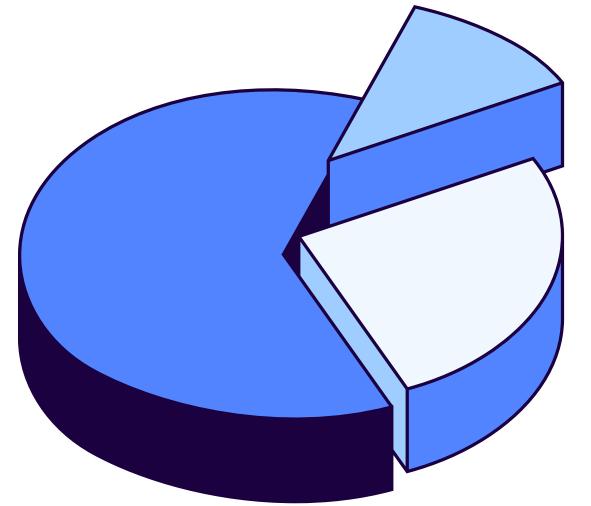
KPI Analysis



KPI (Key Performance Indicators)

KPIs Tracked using the Data Source

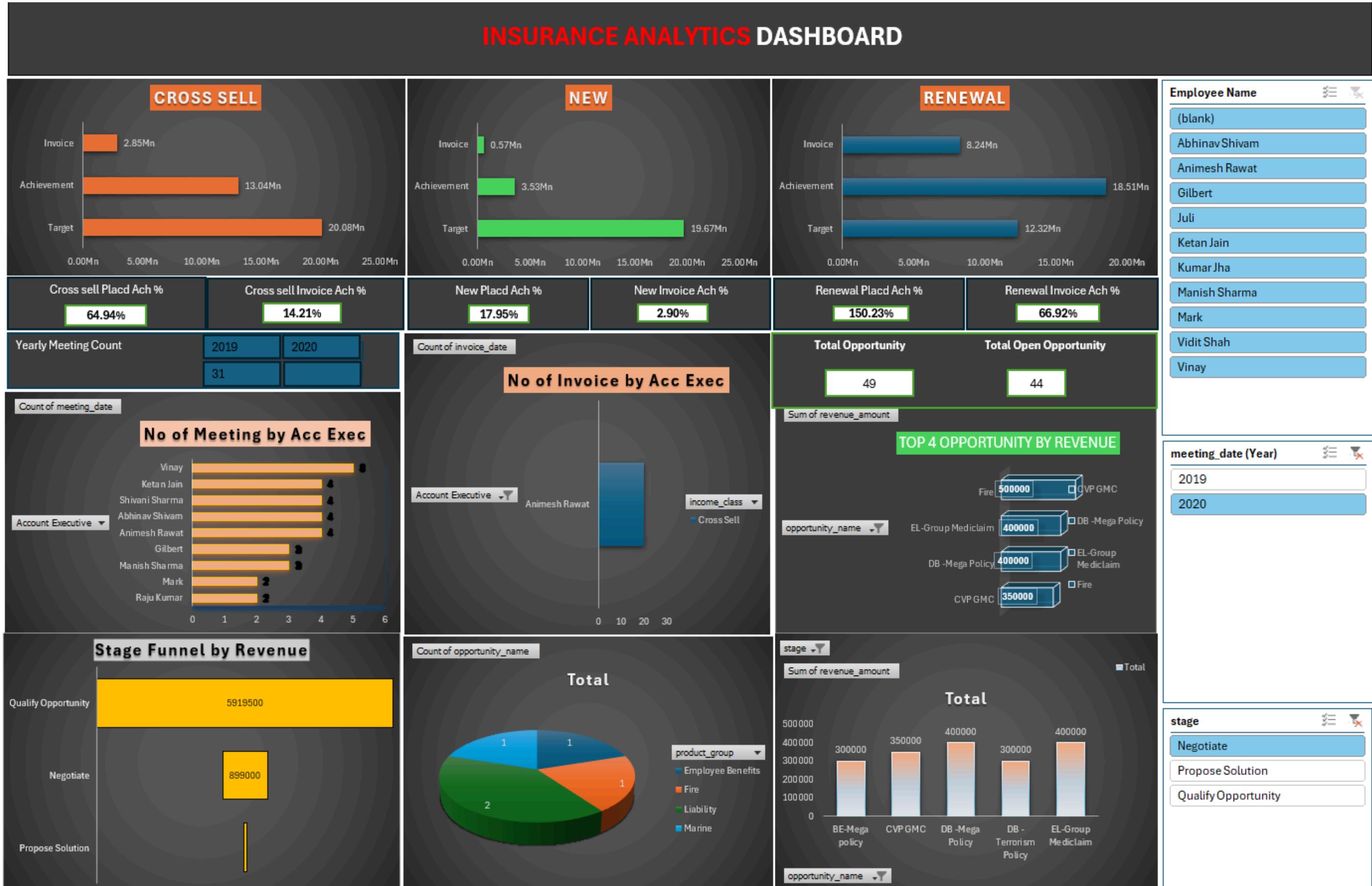
- **Cross sell, new, Renewal** calculation of Target, invoice, achieved by income class and cross sell, N
Renewal placed and invoice achievement percentage
- **Number of Meeting:** Calculation of meeting count for 2019,2020
- **Opportunity** calculation of total opportunity, total open opportunity top 4 open opportunity and op
by product distribution
- **Revenue:** opportunity by revenue top 4. Revenue by stage (Qualify Opportunity, Negotiate,
Propose Solution)
- **Account Executive:** Mooting count by Account Executive Number of invoice generated by
Account executive (filtered by income class)



Dashboard Design



Excel Dashboard



Power BI Dashboard

INSURANCE ANALYTICS

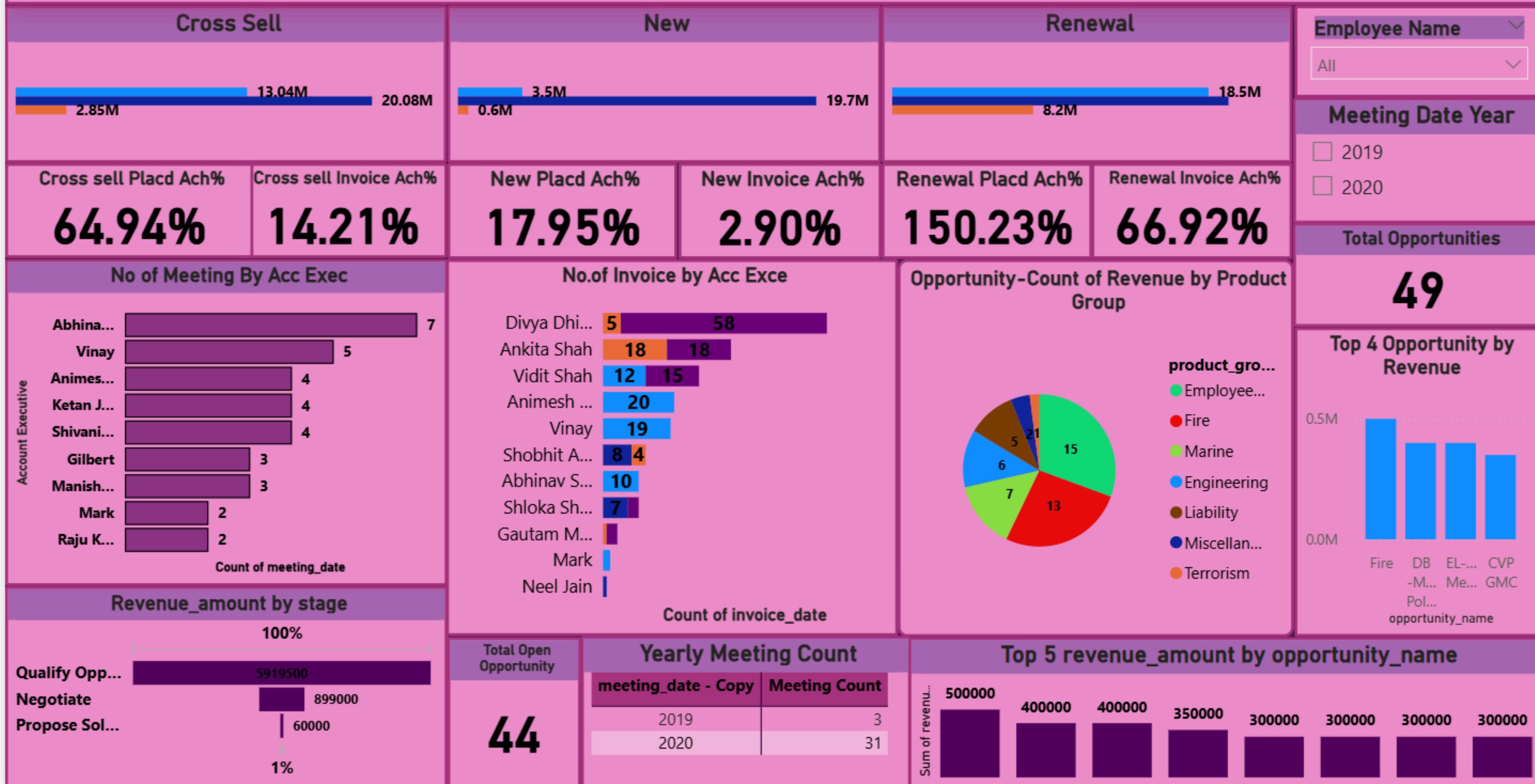
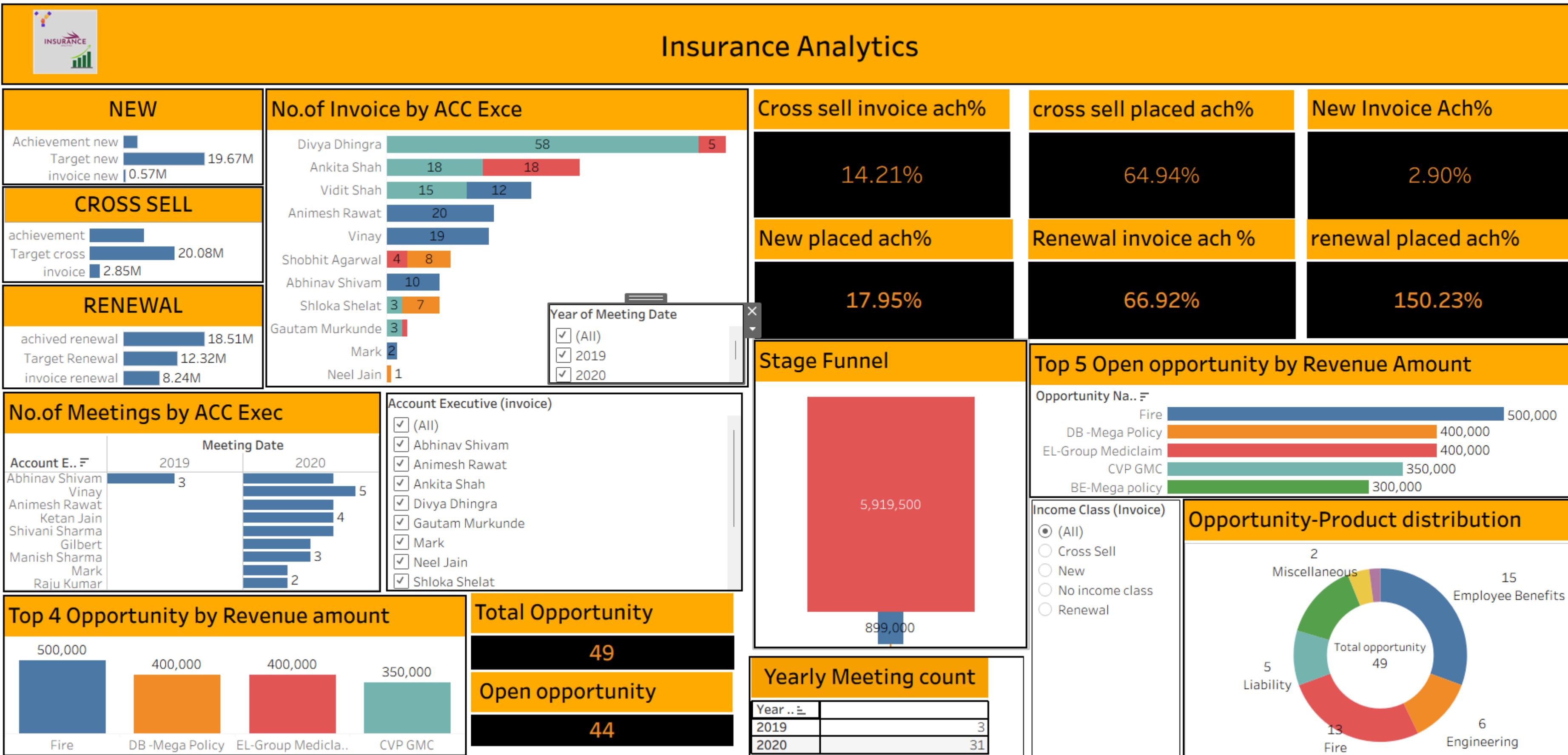


Tableau Dashboard



SQL Dashboard

Renewal_Invoice_Ach	Cross_Sell_Invoice_Ach	New_Invoice_Ach	Renewal_Placed_Ach	New_Placed_Ach	Cross_Invoice	Cross_Achievement	Cross_Target
66.92%	14.21%	2.9%	150.23%	17.95%	2853842	13041253.3	20083111
Cross_Sell_Placed_Ach	Total_Open_Opportunities	Total_opportunities	Invoice	Achievement	Target		
64.94%	44	49	2853842	13041253.3	20083111		
New_Invoice	New_Achievement	New_Target	Renewal_Invoice	Renewal_Achievement	Renewal_Target	stage	Amount
569815	3531629.309999999	19673793	8244310	18507270.640000015	12319455	Qualify Opportunity	5919500
						Negotiate	899000
						Propose Solution	60000
product_group	Count_of_Opportunity_name	opportunity_name	revenue_amount	opportunity_name	revenue_amount	Account_executive	count_of_meetingdate
Employee Benefits	15	EL-Group Medidaim	400000	Fire	500000	Raju Kumar	2
Fire	13	DB -Mega Policy	400000	EL-Group Medidaim	400000	Mark	2
Marine	Fire	CVP GMC	350000	DB -Mega Policy	400000	Gilbert	3
Engineering	7	DS- Employees GMC	300000	CVP GMC	350000	Manish Sharma	3
Liability	6	FM-Group Medidaim	300000			Arimesh Rawat	4
Miscellaneous	5					Ketan Jain	4
Terrorism	2					Shivani Sharma	4
	1					Vinay	5
						Abhinav Shivam	7
						income_class	Total_Amount
						Cross Sell	13041253.3
						New	3531629.309999999
						Renewal	18507270.640000015

MYSQL Queries

```
SQL Insurance x
File Edit View Insert Query Results Help | Limit to 1000 rows | Star | Print | Copy | Paste | Find | Replace | Save As | Open in New Tab | Close

1 •  create database insurance;
2 •  use insurance;
3 •  select * from brokeragecsv;
4 •  select * from feescsv;
5 •  select * from invoicecsv;
6 •  select * from meetingcsv;
7 •  select * from individual_budgets;
8 •  select * from opportunity;
9   -- Total amount from invoice
10 • select income_class,sum(amount) as Sum_of_Amount from invoicecsv where income_class in ('Cross Sell','New','Renewal') group by income_class order by income_class;
11   -- Total amount from brokerage
12 • select income_class,sum(amount) Sum_of_Amount from brokeragecsv where income_class in ('Cross Sell','New','Renewal') group by income_class order by income_class;
13   -- Total amount from fees
14 • select income_class,sum(amount) Sum_of_Amount from feescsv where income_class in ('Cross Sell','New','Renewal') group by income_class order by income_class;
15   -- Total amount from Budgets
16 • select sum(`Cross sell budget`),sum(`New budget`),sum(`Renewal budget`) from individual_budgets;
17   -- Total amount of Achievement
18 • create table Achievement as
19   select income_class,sum(amount) Total_Amount from
20   (select income_class,amount from brokeragecsv union all select income_class,amount from feescsv) as combined
21   where income_class in ('Cross Sell','New','Renewal') group by income_class order by income_class;
22 • select * from Achievement;
23
24   -- Cross sell Sum across Invoice,Achievement,Target
25 • select
26   (select sum(amount) from invoicecsv where income_class='Cross sell') Invoice,
27   (select sum(Total_Amount) from Achievement where income_class='Cross sell') Achievement,
28   (select sum(`Cross sell budget`) Cross_sell_budget from individual_budgets) Target;
29   -- New Sum across Invoice,Achievement,Target
30 • select(select sum(amount) from invoicecsv where income_class='New') Invoice,
31   (select sum(Total_Amount) from Achievement where income_class='New') Achievement,
32   (select sum(`New budget`) New_budget from individual_budgets) Target;
33   -- Renewal Sum across Invoice,Achievement,Target
34 • select(select sum(amount) from invoicecsv where income_class='Renewal') Invoice,
35   (select sum(Total_Amount) from Achievement where income_class='Renewal') Achievement,
```

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31   (select sum(Total_Amount) from Achievement where income_class='New') Achievement,
32   (select sum(`New budget`) New_budget from individual_budgets) Target;
33   -- Renewal Sum across Invoice,Achievement,Target
34 •  select(select sum(amount) from invoicecsv where income_class='Renewal') Invoice,
35   (select sum(Total_Amount) from Achievement where income_class='Renewal') Achievement,
36   (select sum(`Renewal budget`) Renewal_budget from individual_budgets) Target;
37
38   -- Cross Sell Placed Ach%
39 •  select concat(round(((select sum(Total_Amount) from Achievement where income_class='Cross sell') / (select sum(`Cross sell budget`) from individual_budgets))*100,2),'%')
40   Cross_Sell_Placed_Ach;
41   -- New Placed Ach%
42 •  select concat(round(((select sum(Total_Amount) from Achievement where income_class='New') / (select sum(`New budget`) from individual_budgets))*100,2),'%')
43   New_Placed_Ach;
44   -- Renewal Placed Ach%
45 •  select concat(round(((select sum(Total_Amount) from Achievement where income_class='Renewal') / (select sum(`Renewal budget`) from individual_budgets))*100,2),'%')
46   Renewal_Placed_Ach;
47   -- Cross Sell Invoice Ach%
48 •  select concat(round(((select sum(Amount) from invoicecsv where income_class='Cross sell') / (select sum(`Cross sell budget`) from individual_budgets))*100,2),'%')
49   Cross_Sell_Invoice_Ach;
50   -- New Invoice Ach%
51 •  select concat(round(((select sum(Amount) from invoicecsv where income_class='New') / (select sum(`New budget`) from individual_budgets))*100,2),'%')
52   New_Invoice_Ach;
53   -- Renewal Invoice Ach%
54 •  select concat(round(((select sum(Amount) from invoicecsv where income_class='Renewal') / (select sum(`Renewal budget`) from individual_budgets))*100,2),'%')
55   Renewal_Invoice_Ach;
56   -- Yearly Meeting Count
57 •  select Meeting_Year,count(*) Meeting_Count
58   from (
59     select year(str_to_date(meeting_date, '%d-%m-%Y')) Meeting_Year
60     from meetingcsv) t
61   group by Meeting_Year
62   order by Meeting_Year;
63
64   -- No of meeting by Acc Exec
65 •  select Account_executive,count(meeting_date) as count_of_meetingdate from meetingcsv group by Account_executive order by count(meeting_date);
```

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60     L      from meetingcsv) t
61     group by Meeting_Year
62     order by Meeting_Year;
63
64     -- No of meeting by Acc Exec
65 •  select Account_executive,count(meeting_date) as count_of_meetingdate from meetingcsv group by Account_executive order by count(meeting_date);
66     -- No of Invoice by Acc Exec
67 •  SELECT employeename as AccountExecutive,income_class,COUNT(invoice_date) AS invoice_count
68     FROM invoicecsv GROUP BY income_class,employeename ORDER BY invoice_count DESC;
69     -- Total opportunities and Open opportunities
70 •  select count(stage) as Total_opportunities from opportunity;
71 •  select count(stage) as Total_Open_Opportunities from opportunity where stage in ('Propose Solution','Qualify Opportunity');
72     -- Stage funnel by revenue
73 •  Select stage, sum(revenue_amount) AS Amount from opportunity Group By stage
74     ORDER BY Amount DESC;
75     -- Top 4 Opportunity by revenue
76 •  SELECT opportunity_name,revenue_amount FROM opportunity ORDER BY revenue_amount desc LIMIT 4;
77     -- Top 5 Open-Opportunity
78 •  select opportunity_name,revenue_amount from opportunity where stage IN ('Propose Solution','Qualify Opportunity') order by revenue_amount desc limit 5;
79     -- Opportunity- productgroup
80 •  select product_group,count(opportunity_name) as Count_of_Opportunity_name from opportunity group by product_group order by count(opportunity_name) desc;
81
82
```

Recommendation

To drive growth, focus on improving opportunity management by targeting weaker areas like small businesses and new markets. Tailored marketing and extra sales training can boost results. Increasing support and regular check-ins for account managers will also raise client meetings and sales. These actions will accelerate reaching the company's key goals.

Conclusion

In conclusion, the analysis of key performance indicators—such as cross-sell, new business, renewals, meeting volume, revenue generation, and account executive performance—offers meaningful insights into the effectiveness of our strategies. By comparing actual performance data from 2019 and 2020 against target KPIs, we can clearly identify areas of strong performance as well as opportunities for growth and improvement.





Thank You