INSURANCE ANALYTICS

PROJECT : P669

Team members are :

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- ❖ GAURI JIDDEWAR
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- ❖ TUSHAR S. DESHMUKH
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Domain : Insurance Analytics

Modules :
MS Excel
Power Bi
MySQL
Tableau

Project Goal & Insurance Analytics

Introduction

Dataset Description

Data Schema

Kpi Analysis

Dashboard Design

Recommendation

Conclusion

Closure

Project Goal

Branch dashboard to discuss New and renewal business number with each branch. This dashboard will be discussed between Corporate team and Individual branch heads.
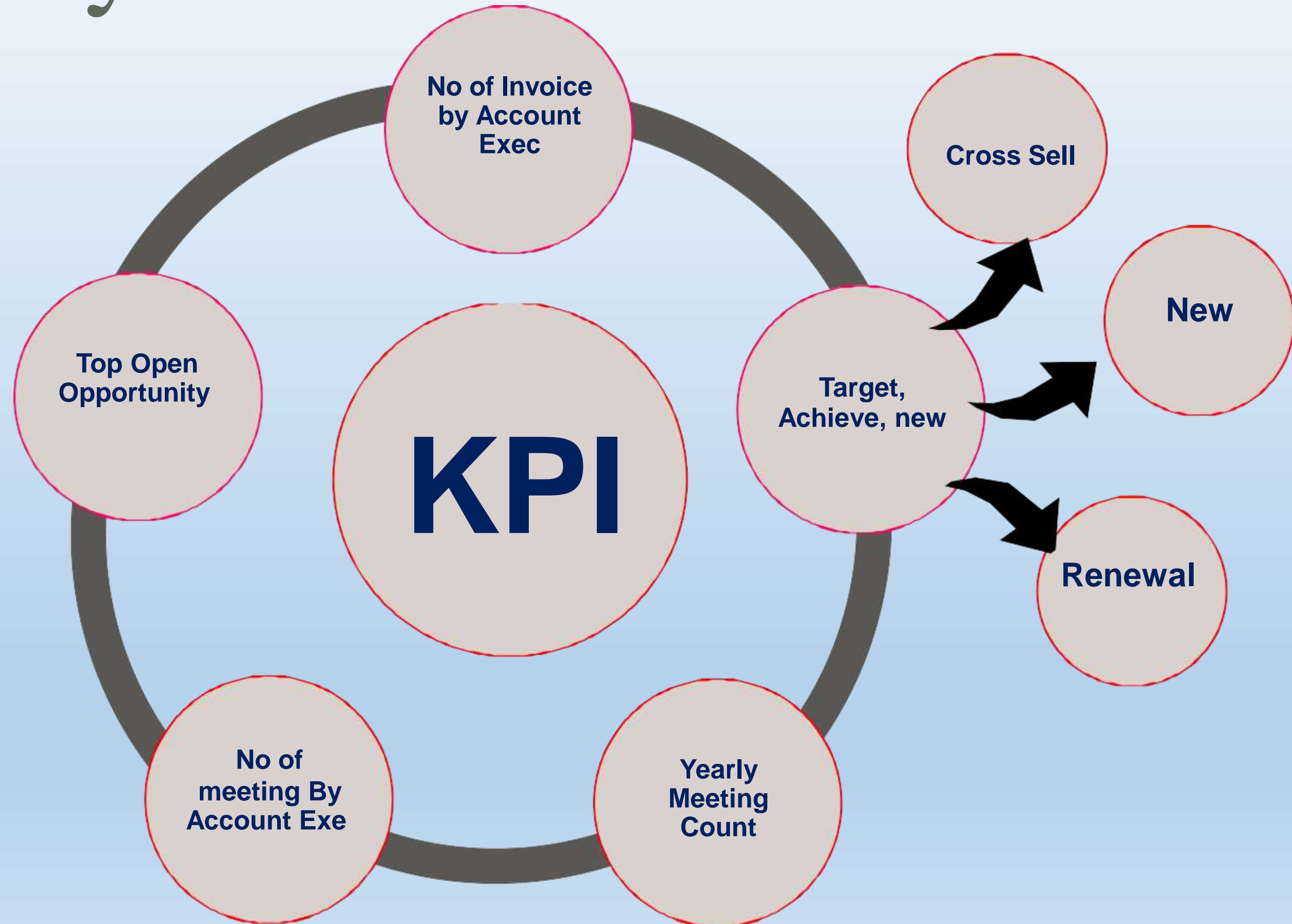
Discuss performance metrics in the branch.

- Overall performance summary
- Detailed branch performance
- Key insights and action items
- Summary of new ,cross sell and renewal business
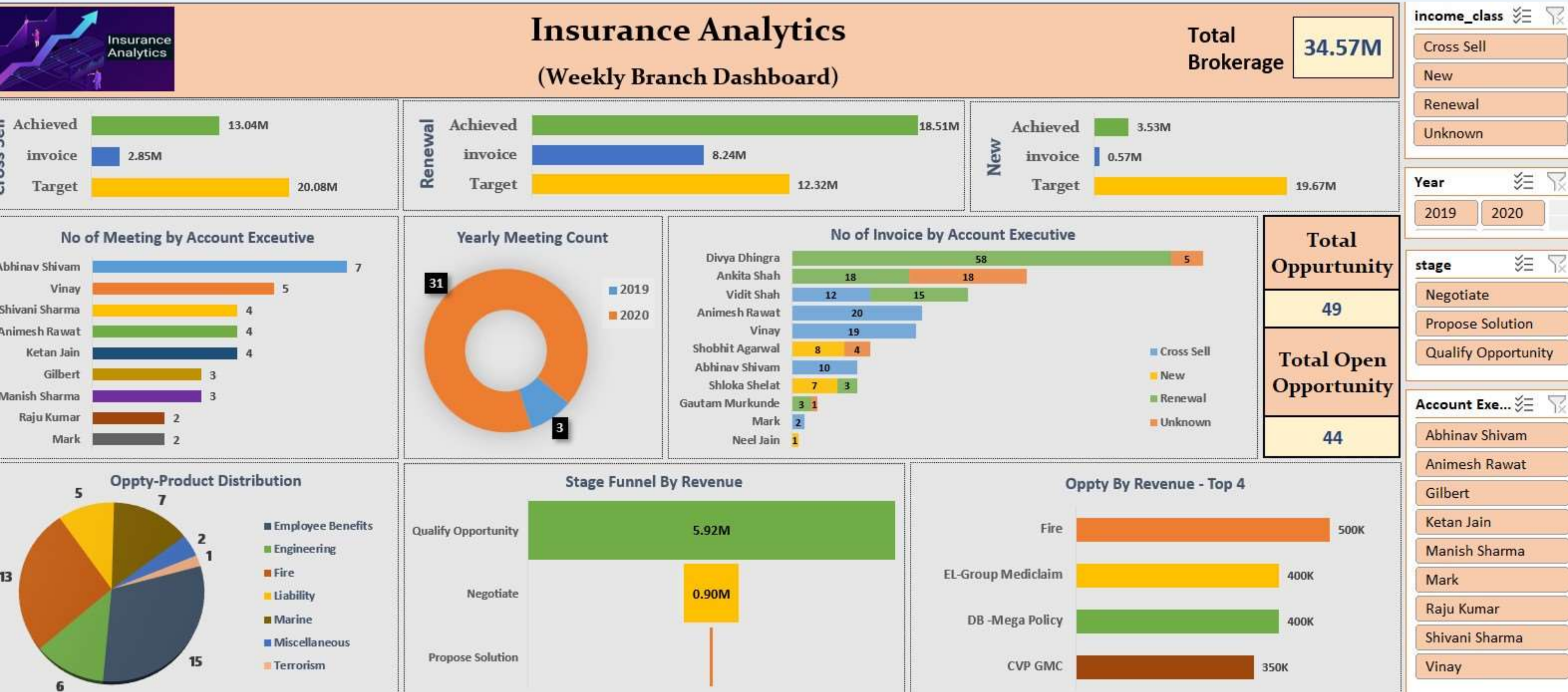- numbers for the branch

KPI Analysis

Excel Dashboard

Tableau Dashboard

Insurance Analytics
(Weekly Branch Dashboard)

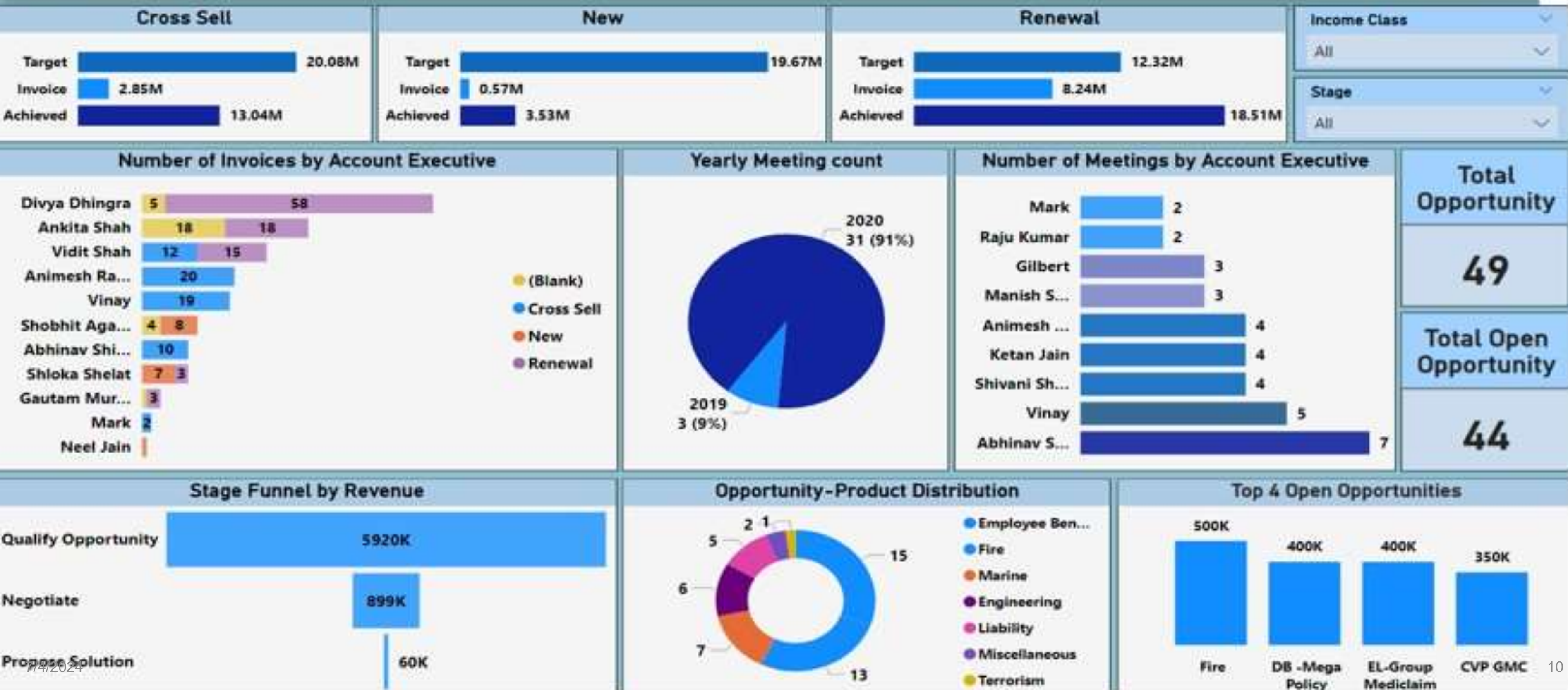**Stage** (All) **Income Class** (All) **Account Executive** (All)

Cross Sell
- Target: 20.08M
- Invoice: 2.85M
- Achieved: 13.04M

New
- Target: 15.96M
- Invoice: 0.57M
- Achieved: 3.53M

Renewal
- Target: 12.32M
- Invoice: 8.24M
- Achieved: 18.51M

Cross Sell Placed Achievement % 64.94%
Cross Sell Invoice Achievement % 14.21%

New Placed Achievement % 17.95%
New Invoice Achievement % 2.90%

Renewal Placed Achievement % 150.23%
Renewal Invoice Achievement % 66.92%

Number of Invoices by Account Executive
- Divya Dhingra: 58 | 5
- Ankita Shah: 18 | 18
- Vidit Shah: 15 | 12
- Animesh Rawat: 20
- Vinay: 19
- Shobhit Agarwal: 8 | 4
- Shloka Shelat: 3 | 7
- Abhinav Shivam: 10
- Gautam Murkunde: 3 | 1
- Mark: 2
- Neel Jain: 1

Yearly Meeting Count
- 3 — 2019
- 31 — 2020

Number of Meetings by Account Executive
- Mark: 2
- Raju Kumar: 2
- Gilbert: 3
- Manish Sharma: 3
- Animesh Rawat: 4
- Ketan Jain: 4
- Shivani Sharma: 4
- Vinay: 5
- Abhinav Shivam: 7

Stage Funnel by Revenue
- Qualify Opportunity: 5,920K
- Negotiate: 899K
- Propose Solution: 60K

Top Open 5 Opportunites
- Fire: 500K
- EL-Group Mediclaim: 400K
- DB -Mega Policy: 400K
- CVP GMC: 350K
- BE-Mega policy: 300K

Opportunity-Product Distribution
Total 49
- 15
- 6
- 13
- 5
- 7
- 2
- 1

MySQL Queries

```
## KPI 1 - Number of Invoice by Account Executive
SELECT  Account_Executive,
    SUM(CASE WHEN income_class = "Cross Sell" THEN 1 ELSE 0 END) as Cross_Sell_count,
    SUM(CASE WHEN income_class = "New" THEN 1 ELSE 0 END) as New_count,
    SUM(CASE WHEN income_class = "Renewal" THEN 1 ELSE 0 END) as Renewal_count,
    SUM(CASE WHEN income_class = "" THEN 1 ELSE 0 END) as NULL_invoice_count,
    COUNT(invoice_number) as Invoice_count
FROM Invoice
GROUP BY  Account_Executive
ORDER BY  Invoice_count desc;
```

Account_Executive	Cross_Sell_count	New_count	Renewal_count	NULL_invoice_count	Invoice_count
Divya Dhingra	0	0	58	5	63
Ankita Shah	0	0	18	18	36
Vidit Shah	12	0	15	0	27
Animesh Rawat	20	0	0	0	20
Vinay	19	0	0	0	19
Shobhit Agarwal	0	8	0	4	12
Shloka Shelat	0	7	3	0	10
Abhinav Shivam	10	0	0	0	10
Gautam Murkunde	0	0	3	1	4
Mark	2	0	0	0	2
Neel Jain	0	1	0	0	1

```
## KPI 2 - Yearly Meeting Count
SELECT YEAR(meeting_date) as Meeting_Year, COUNT(*) as Meeting_cou
-- , (Select count(*) from meeting) as Total_count
FROM meeting
GROUP BY Meeting_Year;
```

Meeting_Year	Meeting_count
2019	3
2020	31

```
## KPI 6 - Top 5 Opportunity by Revenue
SELECT opportunity_name, SUM(revenue_amount) as Revenue_amt
FROM opportunity
GROUP BY opportunity_name
ORDER BY Revenue_amt desc
LIMIT 5;
```

```
## KPI 4 - Stage funnel by Revenue
SELECT stage, SUM(revenue_amount) as Revenue_amt
FROM opportunity
GROUP BY stage
ORDER BY Revenue_amt desc;
```

stage	Revenue_amt
Qualify Opportunity	5919500
Negotiate	899000
Propose Solution	60000

```
## Opportunity - Product distribution
SELECT  product_group,
    COUNT(Account_Executive) AS oppty_count,
    CONCAT(FORMAT((COUNT(Account_Executive) * 100.0 / SUM(COUNT(Account_Executive)) OVER ()), 2), '%')
    AS Total_percent FROM opportunity
GROUP BY  product_group;
```

```
## KPI 5 - Number of Meetings by Account Executive
SELECT Account_Executive, COUNT(*) as Meeting_count
FROM meeting
GROUP BY Account_Executive
ORDER BY Meeting_count desc;
```

Account_Executive	Meeting_count
Abhinav Shivam	7
Vinay	5
Animesh Rawat	4
Ketan Jain	4
Shivani Sharma	4
Gilbert	3
Manish Sharma	3
Raju Kumar	2
Mark	2

opportunity_name	Revenue_amt
Fire	500000
EL-Group Mediclaim	400000
DB -Mega Policy	400000
CVP GMC	350000
FM-Group Mediclaim	300000

product_group	oppty_count	Total_percent
Employee Benefits	15	30.61%
Marine	7	14.29%
Miscellaneous	2	4.08%
Liability	5	10.20%
Fire	13	26.53%
Engineering	6	12.24%
Terrorism	1	2.04%

MYSQL QUERIES

```
# Procedure
DELIMITER //
CREATE PROCEDURE `Data_by_IncomeClass` (IN IncomeClass varchar(20))
BEGIN
    DECLARE Budget_val double;
## Target, Invoice, Achieved for Cross Sell, New, Renewal
    SET @Cross_Sell_Target = (SELECT SUM(Cross_Sell_Budget) FROM individual_budgets);
    SET @New_Target = (SELECT SUM(New_Budget) FROM individual_budgets);
    SET @Renewal_Target = (SELECT SUM(Renewal_Budget) FROM individual_budgets);

    SET @Invoice_val = (SELECT SUM(Amount) FROM invoice WHERE income_class = IncomeClass);
    SET @Achieved_val = ((SELECT SUM(Amount) FROM brokerage WHERE income_class = IncomeClass) +
                         (SELECT SUM(Amount) FROM fees WHERE income_class = IncomeClass));

    IF IncomeClass = "Cross Sell" THEN SET Budget_val = @Cross_Sell_Target;
        ELSEIF IncomeClass = "New" THEN SET Budget_val = @New_Target;
        ELSEIF IncomeClass = "Renewal" THEN SET Budget_val = @Renewal_Target;
        ELSE SET Budget_val = 0;
    END IF;
## Percentage of Placed Achievement for Cross Sell, New, and Renewal
    SET @Placed_achvment = (SELECT CONCAT(FORMAT((@Achieved_val / Budget_val)*100,2),'%'));
## Percentage of Invoice Achievement for Cross Sell, New, and Renewal
    SET @Invoice_achvment = (SELECT CONCAT(FORMAT((@Invoice_val / Budget_val)*100,2),'%'));
    SELECT  IncomeClass, Format(Budget_val,0) as Target, Format(@Invoice_val,0) as Invoice,
            Format(@Achieved_val,2) as Achieved, @Placed_achvment as Placed_Achievement_Percentage,
            @Invoice_achvment as Invoice_Achievement_Percentage;
END//
```

```
# KPI 3 - Target, Invoice, Achieved, Placed_Achvmt_percent,
# Invoice_Achvmt_percent by Income_Class
# (Cross Sell, New, Renewal)
Delimiter ; //
CALL Data_by_IncomeClass('Cross Sell');


Delimiter ; //
CALL Data_by_IncomeClass('New');


Delimiter ; //
CALL Data_by_IncomeClass('Renewal');
```

IncomeClass	Target	Invoice	Achieved	Placed_Achievement_Percentage	Invoice_Achievement_Percentage
Cross Sell	20,083,111	2,853,842	13,041,253.30	64.94%	14.21%

IncomeClass	Target	Invoice	Achieved	Placed_Achievement_Percentage	Invoice_Achievement_Percentage
New	19,673,793	569,815	3,531,629.31	17.95%	2.90%

IncomeClass	Target	Invoice	Achieved	Placed_Achievement_Percentage	Invoice_Achievement_Percentage
Renewal	12,319,455	8,244,310	18,507,270.64	150.23%	66.92%

Conclusion

New Policies

    Steady growth with a decent profit margin. Need to focus on increasing the growth rate

Total: 19.674 M

Profit: 0.5698 M

Revenue: 3.5316 M

Profit Margin: 17.95%

Growth Rate: 2.90%

Cross-Sell Policies

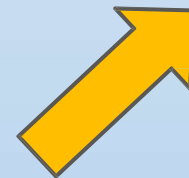   High profitability and significant growth. Continue leveraging cross-selling opportunities.

Total: 20.083 M

Profit: 2.854 M

Revenue: 13.04 M

Profit Margin: 64.94%

Growth Rate: 14.21%

Renewal Policies

    Exceptional performance in renewals with very high profitability and growth. Maintain this   strong focus

Total: 12.32 M

Profit: 8.244 M

Revenue: 18.507 M

Profit Margin: 150.23%

Growth Rate: 66.92%

Recommendation

Enhance Customer Service

- Implement AI-driven chatbots for 24/7 customer support.
- Train staff on customer engagement and conflict resolution.

Expand Product Offerings

- Introduce new insurance products tailored to emerging markets.
- Bundle products for better value to customers.

Increase Sales and Retention

- Launch personalized marketing campaigns based on customer data.
- Introduce loyalty programs to reward long-term customers.

Market Analysis and Adaptation

- Conduct market research to identify customer needs and preferences.
- Adjust strategies based on competitive analysis and market trends.

Employee Engagement

- Foster a positive work environment to boost employee morale.
- Introduce employee recognition programs to retain top talent.

Enhance Operational Efficiency

- Conduct regular training sessions for employees on new technologies.
- Team collaboration activities

Thank You