



# Customer Churn Analysis Using MySQL



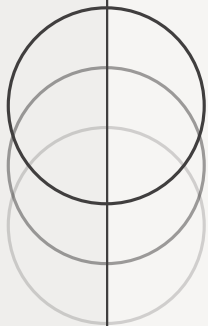
# Find total number of customers

---

```
SELECT  
COUNT(DISTINCT CUSTOMER_ID) AS CUSTOMER_COUNT  
FROM CHURN;
```

customer_count
4835

# How much revenue did Maven lose to churned customers?



```
SELECT Customer_Status,  
COUNT(Customer_ID) AS customer_count,  
ROUND((SUM(Total_Revenue)*100 ) / SUM(SUM(Total_Revenue)) OVER(), 1) AS  
Revenue_Percentage  
FROM churn  
GROUP BY Customer_Status having customer_status = 'Churned';
```

CUSTOMER_STATUS	CUSTOMER_COUNT	REVENUE_PERCENTAGE
Churned	1586	19.4



# Typical tenure for churners

```
WITH TENURE_COUNTS AS (  
  SELECT  
    CASE  
      WHEN TENURE_IN_MONTHS <= 6 THEN '6 MONTHS'  
      WHEN TENURE_IN_MONTHS <= 12 THEN '1 YEAR'  
      WHEN TENURE_IN_MONTHS <= 24 THEN '2 YEARS'  
      ELSE '> 2 YEARS'  
    END AS TENURE,  
    COUNT(CUSTOMER_ID) AS CHURN_COUNT  
  FROM CHURN  
  WHERE CUSTOMER_STATUS = 'CHURNED'  
  GROUP BY  
    CASE  
      WHEN TENURE_IN_MONTHS <= 6 THEN '6 MONTHS'  
      WHEN TENURE_IN_MONTHS <= 12 THEN '1 YEAR'  
      WHEN TENURE_IN_MONTHS <= 24 THEN '2 YEARS'  
      ELSE '> 2 YEARS'  
    END  
)  
SELECT TENURE,  
  ROUND(CHURN_COUNT * 100 / SUM(CHURN_COUNT) OVER(), 1) AS CHURN_PERCENTAGE  
FROM TENURE_COUNTS  
ORDER BY CHURN_PERCENTAGE DESC;
```

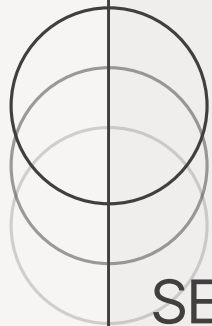
TENURE	CHURN_PERCENTAGE
6 months	39.2
> 2 Years	30.5
2 Years	16.4
1 Year	13.9

# Which cities have the highest churn rates?

```
SELECT
  city,
  COUNT(Customer_ID) AS Total_Customers,
  COUNT(CASE WHEN Customer_Status = 'Churned' THEN 1 END) AS
Churned,
  ROUND(COUNT(CASE WHEN Customer_Status = 'Churned' THEN 1 END)
* 100.0 / COUNT(Customer_ID), 2) AS Churn_Rate
FROM
  churn
GROUP BY
  city
HAVING
  COUNT(Customer_ID) > 30
  AND COUNT(CASE WHEN Customer_Status = 'Churned' THEN 1 END) > 0
ORDER BY
  Churn_Rate DESC
LIMIT 4;
```

CITY	TOTAL_CUSTOMERS	CHURNED	CHURN_RATE
San Diego	233	161	69.10
Fallbrook	37	24	64.86
San Francisco	69	28	40.58
Escondido	39	15	38.46

# Why did customers leave?



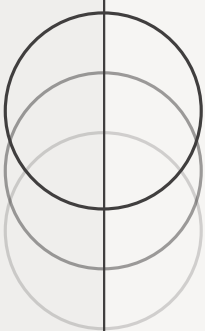
```
SELECT
  CHURN_CATEGORY,
  ROUND(SUM(TOTAL_REVENUE),0)AS CHURNED_REV,
  CEILING((COUNT(CUSTOMER_ID) * 100.0) / SUM(COUNT(CUSTOMER_ID)) OVER()) AS CHURN_PERCENTAGE
FROM
  CHURN
WHERE
  CUSTOMER_STATUS = 'CHURNED'
GROUP BY
  CHURN_CATEGORY
ORDER BY
  CHURN_PERCENTAGE DESC;
```

CHURN_CATEGORY	CHURNED_REV	CHURN_PERCENTAGE
Competitor	1641968	47
Dissatisfaction	589609	18
Attitude	545336	16
Other	341198	11
Price	404865	11

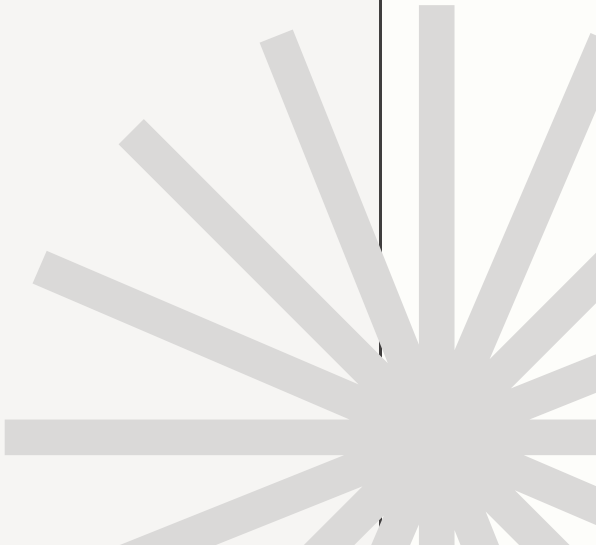


# Why exactly did customers churn?

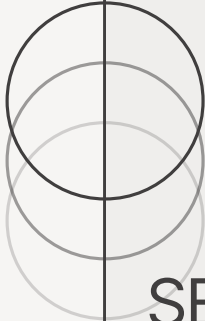
```
WITH churn_counts AS (  
  SELECT  
    Churn_Reason,  
    Churn_Category,  
    COUNT(Customer_ID) AS Churn_Count  
  FROM churn  
  WHERE Customer_Status = 'Churned'  
  GROUP BY Churn_Reason, Churn_Category  
)  
SELECT  
  Churn_Reason,  
  Churn_Category,  
  ROUND(Churn_Count * 100.0 / SUM(Churn_Count) OVER(), 1) AS  
  Churn_Percentage  
FROM churn_counts  
ORDER BY Churn_Percentage DESC  
LIMIT 5;
```



CHURN_REASON	CHURN_CATEGORY	CHURN_PERCENTAGE
Competitor had better devices	Competitor	17.7
Competitor made better offer	Competitor	17.2
Attitude of support person	Attitude	10.7
Don't know	Other	7.4
Competitor offered more data	Competitor	6.6



# What offers did churners have?



```
SELECT
  OFFER,
  ROUND(COUNT(CUSTOMER_ID) * 100.0 / SUM(COUNT(CUSTOMER_ID)) OVER(), 1) AS CHURNED
FROM
  CHURN
WHERE
  CUSTOMER_STATUS = 'CHURNED'
GROUP BY
  OFFER
ORDER BY
  CHURNED DESC;
```



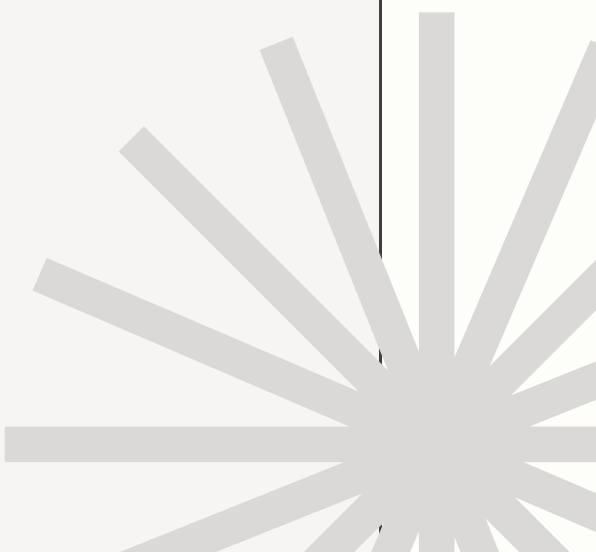
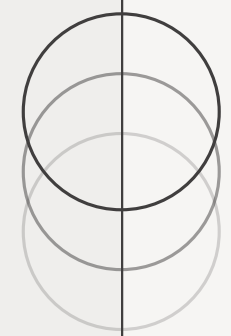
OFFER	CHURNED
None	57.1
Offer E	20.8
Offer D	9.0
Offer B	5.5
Offer C	5.5
Offer A	2.1



# What Internet Type did churners have?

```
SELECT
  Internet_Type,
  COUNT(Customer_ID) AS Churned,
  ROUND(COUNT(Customer_ID) * 100.0 /
SUM(COUNT(Customer_ID)) OVER(), 1) AS Churn_Percentage
FROM
  churn
WHERE
  Customer_Status = 'Churned'
GROUP BY
Internet_Type
ORDER BY
Churned DESC;
```

INTERNET_TYPE	CHURNED	CHURN_PERCENTAGE
Fiber Optic	1236	77.9
DSL	191	12.0
Cable	159	10.0



# What Internet Type did 'Competitor' churners have?

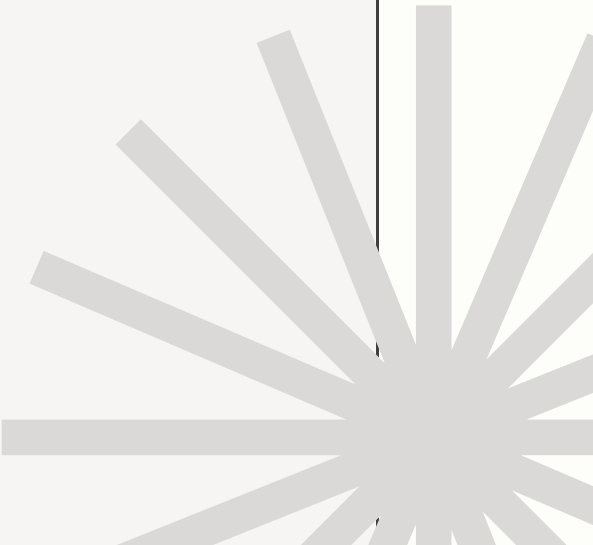
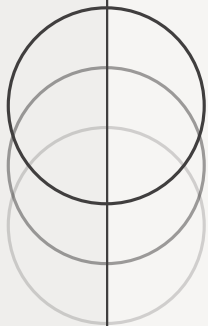
```
SELECT
  INTERNET_TYPE,
  CHURN_CATEGORY,
  ROUND(COUNT(CUSTOMER_ID) * 100.0 / SUM(COUNT(CUSTOMER_ID)) OVER(), 1) AS
CHURN_PERCENTAGE
FROM
  CHURN
WHERE
  CUSTOMER_STATUS = 'CHURNED'
  AND CHURN_CATEGORY = 'COMPETITOR'
GROUP BY
  INTERNET_TYPE,
  CHURN_CATEGORY
ORDER BY CHURN_PERCENTAGE DESC;
```

INTERNET_TYPE	CHURN_CATEGORY	CHURN_PERCENTAGE
Fiber Optic	Competitor	78.9
Cable	Competitor	10.9
DSL	Competitor	10.2

# Did churners have premium tech support?

```
SELECT
  Premium_Tech_Support,
  COUNT(Customer_ID) AS Churned,
  ROUND(COUNT(Customer_ID) *100.0 /
SUM(COUNT(Customer_ID)) OVER(),1) AS Churn_Percentage
FROM
  churn
WHERE
  Customer_Status = 'Churned'
GROUP BY Premium_Tech_Support
ORDER BY Churned DESC;
```


PREMIUM_TECH_SUPPORT	CHURNED	CHURN_PERCENTAGE
No	1304	82.2
Yes	282	17.8





# What contract were churners on?

```
SELECT
  CONTRACT,
  COUNT(CUSTOMER_ID) AS CHURNED,
  ROUND(COUNT(CUSTOMER_ID) * 100.0 / SUM(COUNT(CUSTOMER_ID)) OVER(), 1) AS
CHURN_PERCENTAGE
FROM
  CHURN
WHERE
  CUSTOMER_STATUS = 'CHURNED'
GROUP BY
  CONTRACT
ORDER BY
  CHURNED DESC;
```



CONTRACT	CHURNED	CHURN_PERCENTAGE
Month-to-Month	1403	88.5
One Year	143	9.0
Two Year	40	2.5