

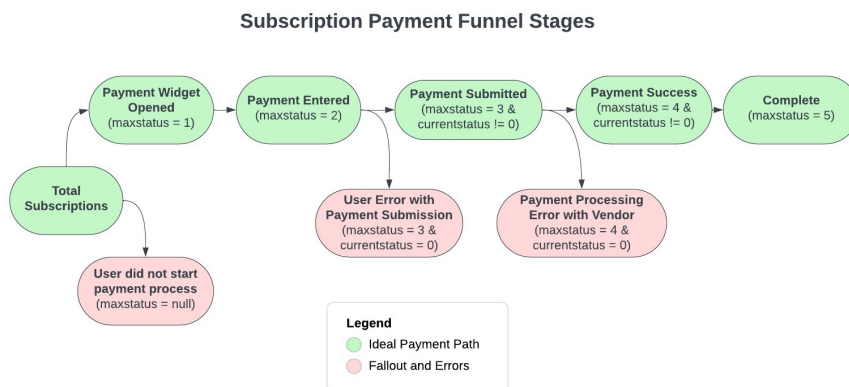
Payment Funnel Analysis

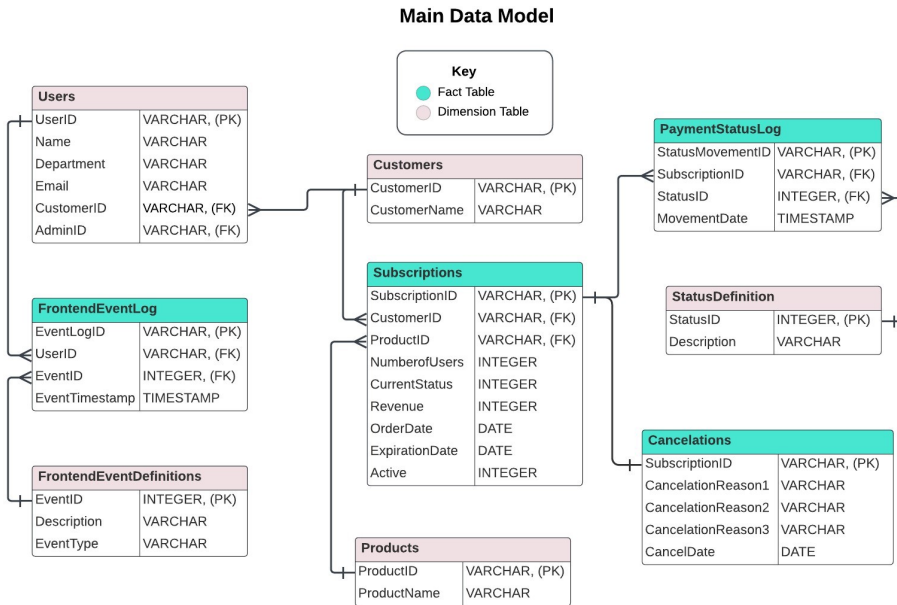
Business Problem: The product manager has requested a payment funnel analysis from the analytics team; she wants to understand what the furthest point in the payment process users are getting to and where users are falling out of the process. She wants to have full visibility into each possible stage of the payment process from the user's point of view.

Here's the payment process a user goes through when signing up for a subscription.

1. The user opens the widget to initiate payment process.
2. The user types in credit card information.
3. The user clicks the submit button to complete their part of the payment process.
4. The product sends the data to the third-party payment processing company.
5. The payment company completes the transaction and reports back with "Complete."

This process is converted into status ids in the status definition table.





Approach: In order to see the furthest point as well as where users are falling off in the payment process, I will the number of subs in each payment funnel stage by incorporating the max status reached and status per subscription.

```

with max_status_reached as(
Select subscriptionid,
max(statusid) as Maxstatus from
paymentstatuslog group by
subscriptionid
),
paymentfunnelstages AS (
SELECT
    s.subscriptionid,
    CASE
        WHEN maxstatus = 1 THEN 'PaymentWidgetOpened'
        WHEN maxstatus = 2 THEN 'PaymentEntered'
        WHEN maxstatus = 3 AND currentstatus = 0 THEN 'User Error with
Payment Submission'
        WHEN maxstatus = 3 AND currentstatus != 0 THEN 'Payment
    
```

Submitted'

```
    WHEN maxstatus = 4 AND currentstatus = 0 THEN 'Payment Processing Error with Vendor'
    WHEN maxstatus = 4 AND currentstatus != 0 THEN 'Payment Success'
    WHEN maxstatus = 5 THEN 'Complete'
    WHEN maxstatus IS NULL THEN 'User did not start the payment process'
END AS paymentfunnelstage FROM
subscriptions s LEFT JOIN
max_status_reached m
ON s.subscriptionid = m.subscriptionid
)
SELECT
    paymentfunnelstage,
    COUNT(subscriptionid) AS subscriptions FROM
paymentfunnelstages GROUP BY
paymentfunnelstage;
```

Result:

PAYMENTFUNNELSTAGE	SUBSCRIPTIONS
Complete	12
Payment Processing Error with Vendor	1
Payment Submitted	1
Payment Success	1
PaymentEntered	2
PaymentWidgetOpened	7
User Error with Payment Submission	1
User did not start payment process	3

Insights: I am now able to track the number of subscriptions that are in each stage of the payment process, which gives a good understanding of how users are interacting with the payment process. For instance, 12 users have completed the payment process, while 7 have opened the payment widget, and 3 users did not start the payment process. By having a clear understanding of what users are doing, which will overall lead to an improvement in the success rate.