# Funnel Case Study

# Problem Statement

The company recently launched a new sign-up experience. In this presentation, we will analyze the user funnel, identify where and why are users dropping off, and go through recommendations to improve conversion rates.

# KPIs

- **Conversion Rate per step:** % of users progressing between funnel stages (e.g., from submitting email to putting in contact info …)

- **Drop-off Rate per step :** % of users abandoning at each stage, to identify bottlenecks

- **Overall Activation Rate**: % of sign-ups who reach the activation milestone – started the trial.

- **Time to Convert**: the total time it took for someone to convert to next stage or to reach the activation milestone.

Given the complexity of accurately modeling time spent per step without defined session boundaries, I'm focusing on clean funnel metrics like step progression and drop-off rates to ensure actionable and reliable insights.
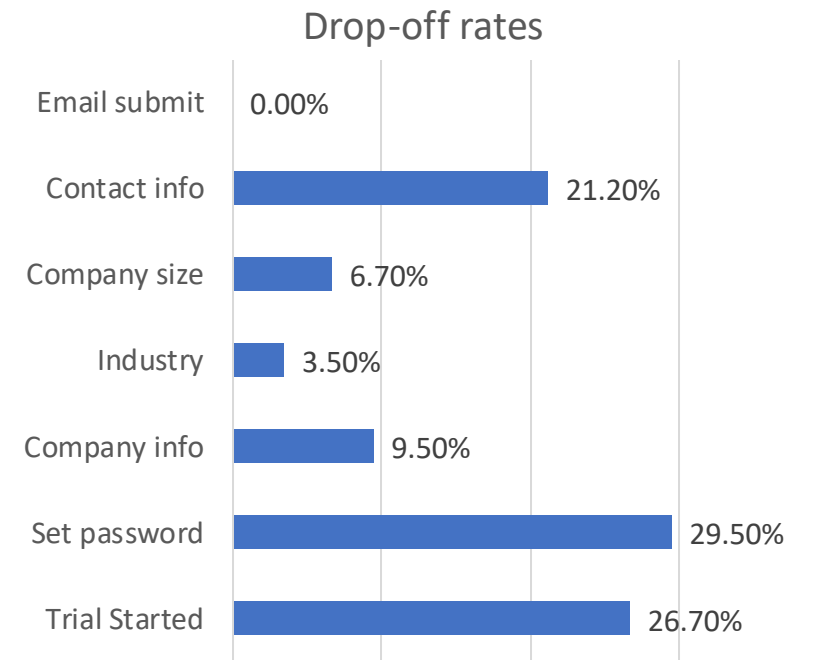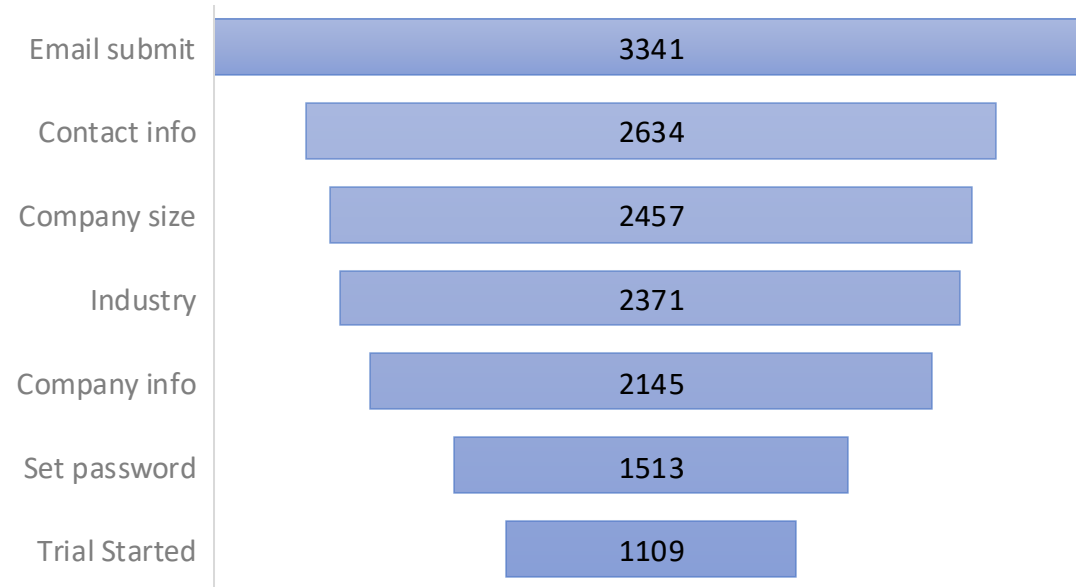
# Approach

- **Map the Funnel**: based on the data, the stages are : Email submit → Contact info → Company size → Industry → Company info -> Set password -> Trial started
- **Data Exploration**: understand and cleaning the data, derive and store user attributes
- **Analyze Data**: Use the dataset to calculate conversion and drop-off rates at each stage.
- **Segment Analysis**: Break down performance by user segments (e.g., acquisition channel, time of day, weekday-or-weekend) to identify patterns.
- **Qualitative Insights**: Hypothesize reasons for drop-offs (e.g., form complexity, unclear instructions, technical issues).
- **Visualize Findings**: Create a funnel chart to highlight drop-off points.
- **Recommend & Test**: Propose changes, define success metrics, and suggest A/B tests to validate improvements.

Assumptions: Each user can be attributed to a single channel, and all channels follow the same funnel

We are focused on funnel progression/activation that took place in March, anyone who activated in March and entered the funnel prior to March are excluded
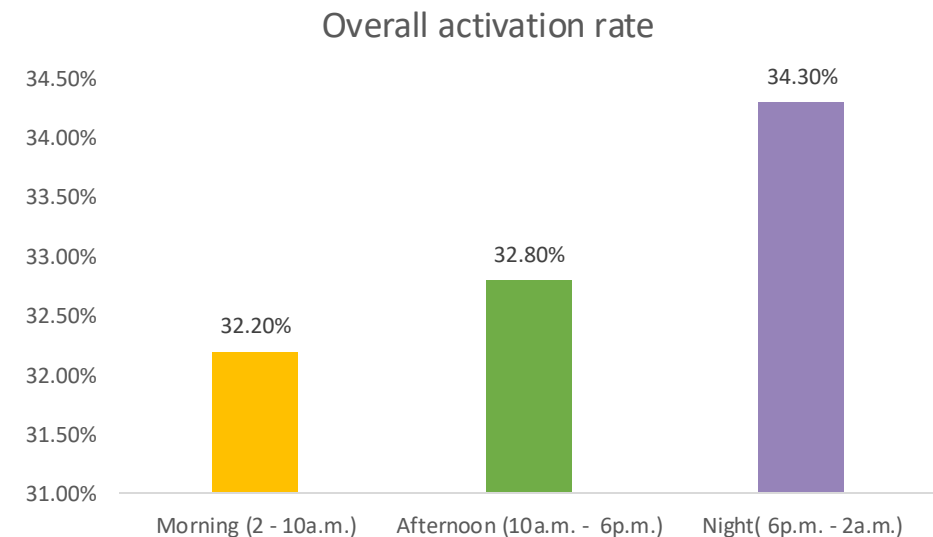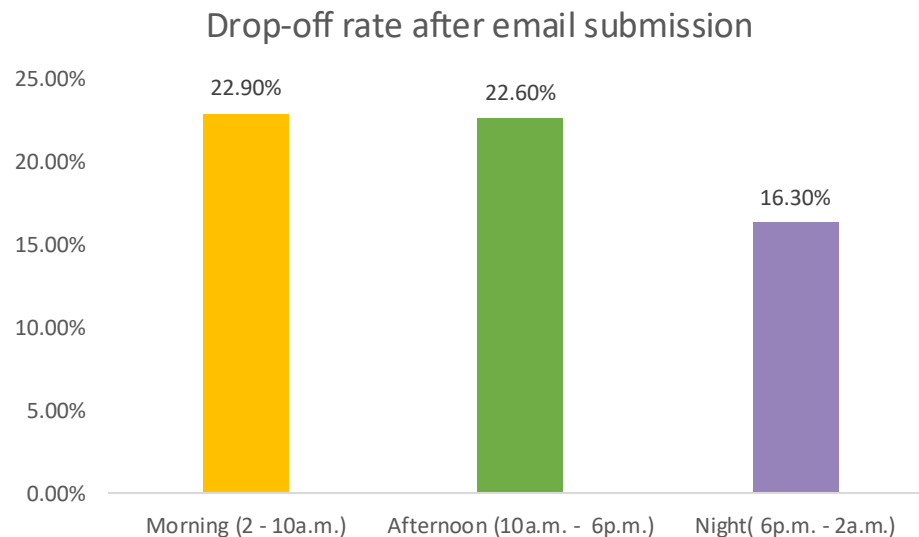
# Funnel



**Drop-off rates**

| Step | Count |
|---|---|
| Email submit | 3341 |
| Contact info | 2634 |
| Company size | 2457 |
| Industry | 2371 |
| Company info | 2145 |
| Set password | 1513 |
| Trial Started | 1109 |

| Step | Drop-off rate |
|---|---|
| Email submit | 0.00% |
| Contact info | 21.20% |
| Company size | 6.70% |
| Industry | 3.50% |
| Company info | 9.50% |
| Set password | 29.50% |
| Trial Started | 26.70% |

The major drop-off points in the funnel occur **after email submission** (21.2% drop-off) and then **when setting password** and **starting the trial** (29.5% and 26.7% respectively). In between submitting contact info and setting the password there was negligible drop-off between these steps.
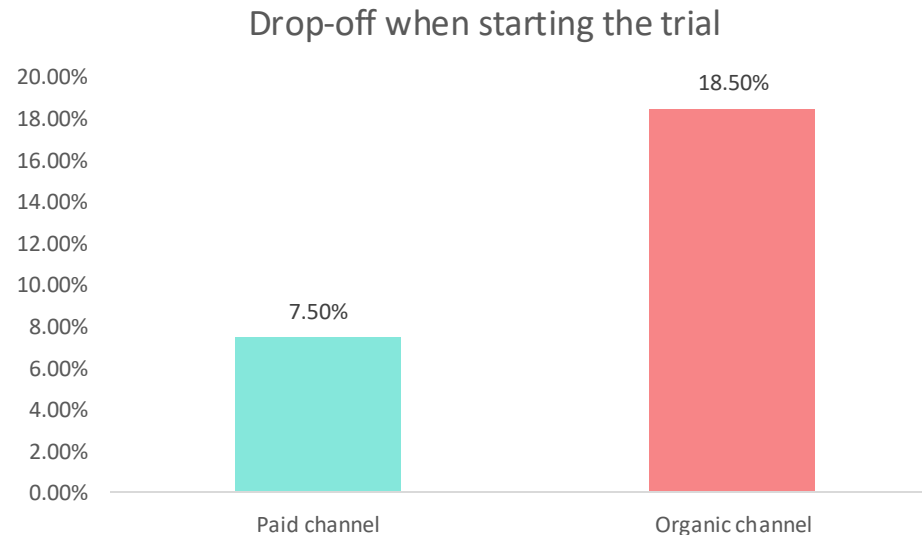
# Segment Analysis

- Users are more likely to keep signing up after email submission at night.

- Overall activation is highest at night compared to other hours of the day.



Drop-off rate after email submission

| | Morning (2 - 10a.m.) | Afternoon (10a.m. - 6p.m.) | Night( 6p.m. - 2a.m.) |
|---|---|---|---|
| | 22.90% | 22.60% | 16.30% |



Overall activation rate

| | Morning (2 - 10a.m.) | Afternoon (10a.m. - 6p.m.) | Night( 6p.m. - 2a.m.) |
|---|---|---|---|
| | 32.20% | 32.80% | 34.30% |

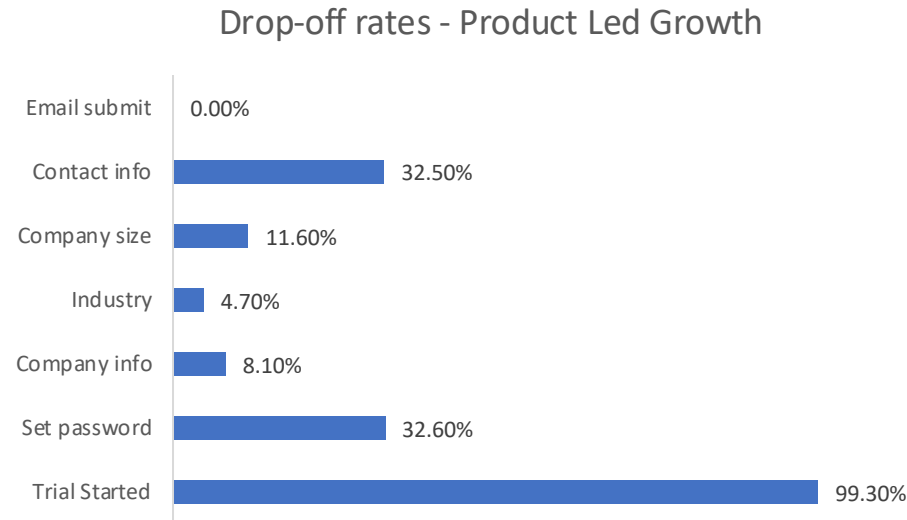# Segment Analysis (cont'd)

- Paid users have fewer drop-offs when starting a trial compared to organic users.

Drop-off when starting the trial

| | Paid channel | Organic channel |
|---|---|---|
| | 7.50% | 18.50% |

# Segment Analysis (cont'd)

- We observe an extreme drop-off for Product Led Growth (99.3%) when starting a trial, which is highly unlikely
- There is likely a tracking error to capture users with trial started.

**Drop-off rates - Product Led Growth**

| Stage | Drop-off rate |
|---|---|
| Email submit | 0.00% |
| Contact info | 32.50% |
| Company size | 11.60% |
| Industry | 4.70% |
| Company info | 8.10% |
| Set password | 32.60% |
| Trial Started | 99.30% |

# Summary

- The major drop-off points in the funnel occur **after email submission** (21.2% drop-off) and then **when setting password** and **starting the trial** (29.5% and 26.7% respectively). In between submitting contact info and setting the password there was negligible drop-off between these steps.

- Users are more likely to continue and complete the sign-up process at night (from 6pm to 2am).

- Paid users show the highest likelihood of starting a trial.

- There is a potential tracking error to capture users with trial started for PLG, which could impact the accuracy of drop-off rate at trial started, as well as overall activation rate for this channel.

Recommendations:

- Simplify the set password step ( details on [this slide](#)) to reduce drop-off when setting password

- Streamline the first two steps in the sign-up process ( details on [this slide](#)) to reduce drop-off rate after email submission

- Apply key elements from Paid to Organic and PLG landing pages to clarify product value and increase trial-start conversion ( details on [this slide](#))

- Perform an urgent check and fix of the tracking error for PLG to ensure conversion rates and activation rate are accurate

# Biggest friction points

**Simplify the Set Password Step**

- **Hypothesis 1** : The current password requirements are too complicated

- **Change**: Make password creation super lightweight (i.e. require fewer characters, display password rules)

- **Experiment**:
    - **A/B Test** a simpler password setup vs. the current one.

- **Hypothesis 2**: Users feel unsure why do they need to make an account now

- **Change**: Move password creation step to after starting a trial

- **Experiment**:
    - **A/B Test** current flow vs. a new flow to have users set password after they started the trial

Success metric: Drop-off rate at password setup

# Friction points (cont'd)

**Streamline the first two steps in the sign-up process**

- **Hypothesis**: Users might feel discouraged to continue when seeing two consecutive steps to provide contact info without being offered additional value.

- **Change**:
  1. Add a progress bar to show users their progress towards the end of the sign-up
  2. Combine email and contact information fields into a single step to streamline the experience

- **Experiment**:
  - **A/B Test** the current set up vs. combining email and basic contact info into one step
  - Success metric: drop-off rate after email submission

- Recommendation #1: Set up **Time-Based reminders**- send emails in the evening (e.g. after-work hours like 6-8pm ) to users who started but didn't finish providing contact info, encouraging them to finish during the high-conversion night window.

- Recommendation #2: **Optimize submission flow** by using night-friendly UI elements such as dark themes, soothing colors to align with users' evening mindset.

# Friction points (cont'd)

**Apply key elements from Paid channel to Organic and PLG landing pages to clarify Product value and highlight trial benefits**

- Recommendation: Analyze why paid users have a lower drop-off rate (e.g. targeted ads, clearer value propositions) and replicate those elements for organic users. For example, if paid ads emphasize specific benefits, update organic landing pages with similar messages or visuals.

- **Hypothesis**: After six steps, a lengthy process, users often forget what they're signing up for and lose interest in the trial
**Change**: Add a testimonial video or other marketing content to the "Start Trial" step to re-engage users and drive completion

- **Experiment**:
    - **A/B Test** the current start trial step vs. a start trial step with additional marketing content
    - Success metric: Measure drop-off rate when starting a trial

# Additional Data Needs and Purposes

- Traffic on landing page

We care about how many people converted from the landing page to submitting their email because this gives us a strong start at the top of the funnel, which helps with maximizing overall conversions.

- Device and platform data For example: Desktop vs mobile, iOS vs Android

This piece of data helps identify if certain devices have higher drop-off due to UX issues. It will also enable further cohort analysis and help us discover more patterns.

- Email engagement or follow-up response

Open rates, or click rates on reminders. To find out if users just need a nudge to come back and finish the sign-up.

# Questions?

# Appendix

In here you will find funnel conversion data tables for the various acquisition channels

You can also refer to the .ipynb file provided to view KPI calculations in detail and run additional queries.

## Paid channel

| step_no | step_completed | users | conversion_rate | drop_off_rate |
|---|---|---|---|---|
| 1 | email_submit | 1923 | NaN | NaN |
| 2 | contact_info | 1582 | 82.3 | 17.7 |
| 3 | company_size | 1507 | 95.3 | 4.7 |
| 4 | industry | 1455 | 96.5 | 3.5 |
| 5 | company_info | 1298 | 89.2 | 10.8 |
| 6 | set_password | 902 | 69.5 | 30.5 |
| 7 | trial_started | 833 | 92.4 | 7.6 |

## Organic channel

| step_no | step_completed | users | conversion_rate | drop_off_rate |
|---|---|---|---|---|
| 1 | email_submit | 637 | NaN | NaN |
| 2 | contact_info | 525 | 82.4 | 17.6 |
| 3 | company_size | 484 | 92.2 | 7.8 |
| 4 | industry | 472 | 97.5 | 2.5 |
| 5 | company_info | 439 | 93.0 | 7.0 |
| 6 | set_password | 336 | 76.5 | 23.5 |
| 7 | trial_started | 274 | 81.5 | 18.5 |

## Product channel

| step_no | step_completed | users | conversion_rate | drop_off_rate |
|---|---|---|---|---|
| 1 | email_submit | 781 | NaN | NaN |
| 2 | contact_info | 527 | 67.5 | 32.5 |
| 3 | company_size | 466 | 88.4 | 11.6 |
| 4 | industry | 444 | 95.3 | 4.7 |
| 5 | company_info | 408 | 91.9 | 8.1 |
| 6 | set_password | 275 | 67.4 | 32.6 |
| 7 | trial_started | 2 | 0.7 | 99.3 |

# Thank You