

Project Title:

User Onboarding Funnel Analysis in Tableau

1. Objective

The purpose of this project was to analyse the **user onboarding journey from registration to the first payment** in order to identify where the majority of users drop off, how long it takes for users to convert, and what can be done to improve the conversion process.

This dashboard was designed to provide stakeholders with a clear, data-driven view of user progression across onboarding stages, enabling them to quickly answer critical business questions and take action to increase conversions.

2. Dataset

• Source: CSV dataset containing user activity logs.

• **Scope:** Covers the entire user journey from registration to first payment.

Volume: 8,460 total registered users over the analysis period.

Events included:

- Registration
- Email verification
- o Profile completion
- Setup completion
- Trial start
- First payment

The dataset was cleaned and pre-processed in Excel before being imported into Tableau for analysis and visualization.

3. Tools Used

• **Tableau:** For building interactive dashboards and visualizations.

• Excel: For initial data preparation and cleaning.

• **(Optional extension)** SQL: Could be used in future iterations to extract data directly from a database for real-time updates.

4. Key Questions

The dashboard was built to answer the following business-critical questions:

- 1. How many users register, start a trial, and eventually convert to paying customers?
- 2. At which step in the onboarding process do most users drop off?
- 3. What is the overall conversion rate from registration to trial and from trial to payment?
- 4. How long does it take users, on average, to make their first payment after registration?
- 5. How do monthly registration volumes impact conversion rates?

5. Methodology

The dashboard was developed in Tableau following best practices for BI reporting:

1. KPI Cards

- o Displayed the total number of registered users, trial users, and paid users.
- Conversion rates from registration to trial and registration to paid were added as tooltips for clarity.

2. Funnel Chart

- Showed user progression across onboarding steps (registration \rightarrow trial \rightarrow payment).
- Included both absolute numbers and relative conversion percentages at each stage.

3. Line & Area Chart

- Visualised monthly registration volumes alongside the trial conversion rate.
- Allowed tracking of user acquisition trends and conversion fluctuations.

4. Bar Chart

- Calculated the average number of days from registration to first payment for each registration month.
- Helped identify improvements in conversion speed over time.

5. Dashboard Principles Applied

- **5-second rule:** Users can quickly find answers to the main questions.
- o **Prioritisation:** Key KPIs placed at the top of the dashboard.
- Clarity: Clear metric labels, rounded values, and readable units of measurement.
- Design: Consistent colour scheme with no more than two accent colours for focus.

6. Results & Insights

• Conversion rates:

- 23% of registered users moved to a trial.
- o 7% of registered users converted to paid customers.

Biggest drop-off:

• At the profile completion stage, where only 37% of users continued.

• Trial-to-paid conversion:

o Remained steady at around 20%.

• Time-to-conversion:

o Improved significantly — from 69 days in March to 25 days in May.

• Overall onboarding performance:

 The funnel clearly showed bottlenecks that could be addressed to increase conversion.

7. Next Steps

Based on the analysis, the following actions are recommended:

- 1. **Simplify the profile completion process** to reduce the largest user drop-off point.
- 2. **Introduce automated reminders** for email verification and trial completion.
- 3. **Enhance trial-to-paid conversion strategies** by offering targeted discounts or onboarding support.

- 4. **Continue tracking average time-to-payment** to ensure further efficiency improvements.
- 5. **Integrate SQL or CRM data directly into Tableau** for real-time analysis in future iterations.

8. Link to Interactive Dashboard

Solution View Dashboard on Tableau Public

9. Visuals

