

How to run a funnel analysis in R (with a little help from RSQLite)

Sara Iacozza, Ph.D.

Chief Data Officer & UX researcher
Co-founder **R-Ladies Italy**



Agenda

1. What's funnel analysis?
2. An example of conversion flow
3. RStudio tutorial - Hands-on
4. Report your insights!

What's **funnel** analysis?



Track their behaviours on an app/website, or through a process of any kind

It allows you to **follow your users** throughout a series of **defined events**, and to calculate the given event-to-event **conversion rates**

What's the % of those who went to Zalando who complete each step and end up buying a pair of shoes?

Steps users need to take to meet the final goal (e.g., buy a pair of shoes from Zalando, or participate in a multi-day online experiment)



If only users behaved like a liquid!



It helps identify **barriers** that cause users to **leave** before reaching a conversion point

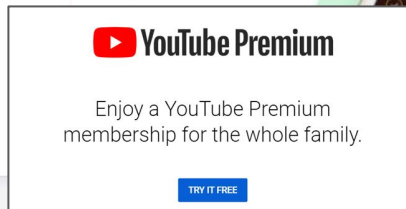
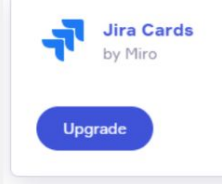
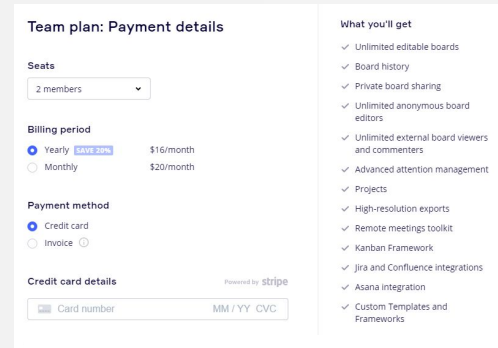
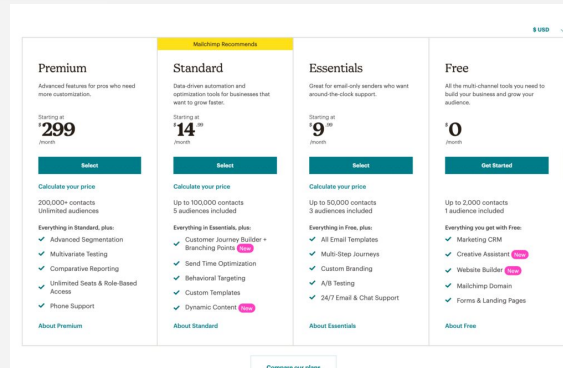
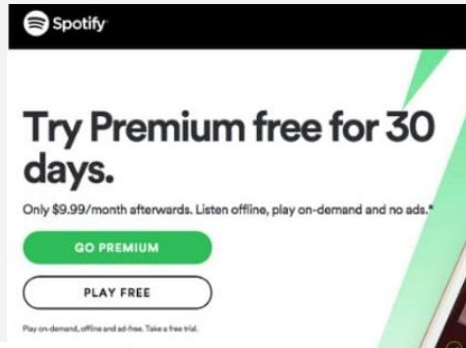
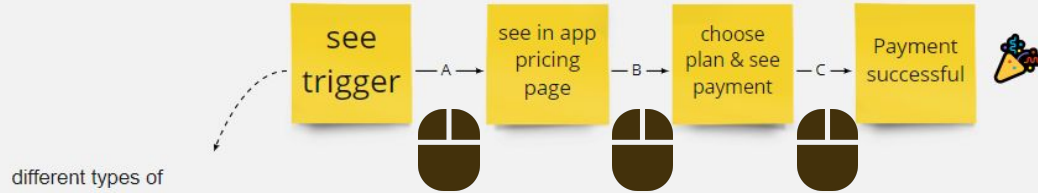
After that, you will need to understand the **why**:

not clear,
not interested,
too many steps,
too expensive...

An example of conversion flow

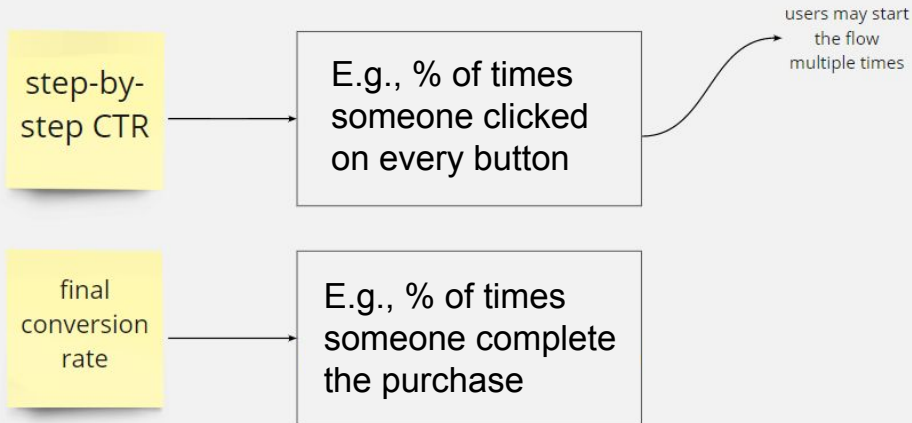
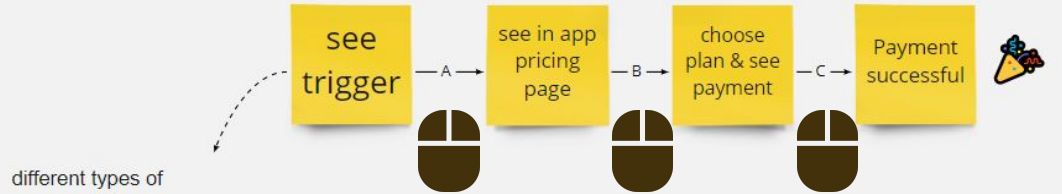
Freemium to Premium

Upgrade Flow Steps



Freemium to Premium

Upgrade Flow Steps



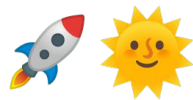
Our mission

As a data/product analyst 

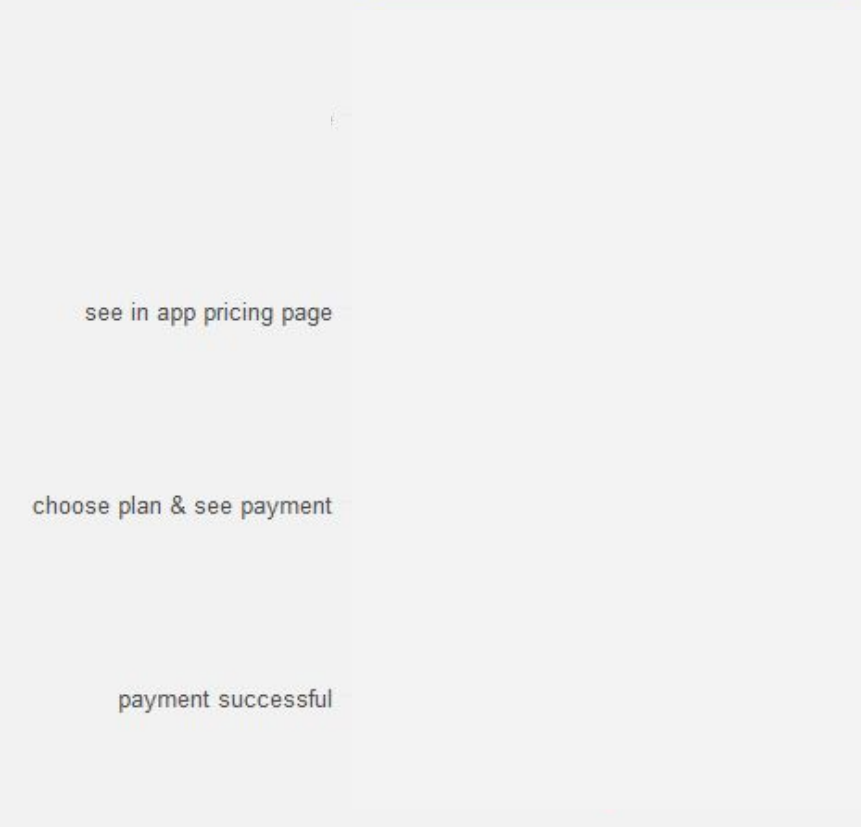
Our company aims to **convert more users** from free to premium plans by having some **fancy features available only if you pay**.

1. Prep the data using **SQL**
2. Analyze it with **FA**
3. Suggest **3 hypotheses** and corresponding **product changes** to improve the flow

Move to RStudio



Freemium to Premium

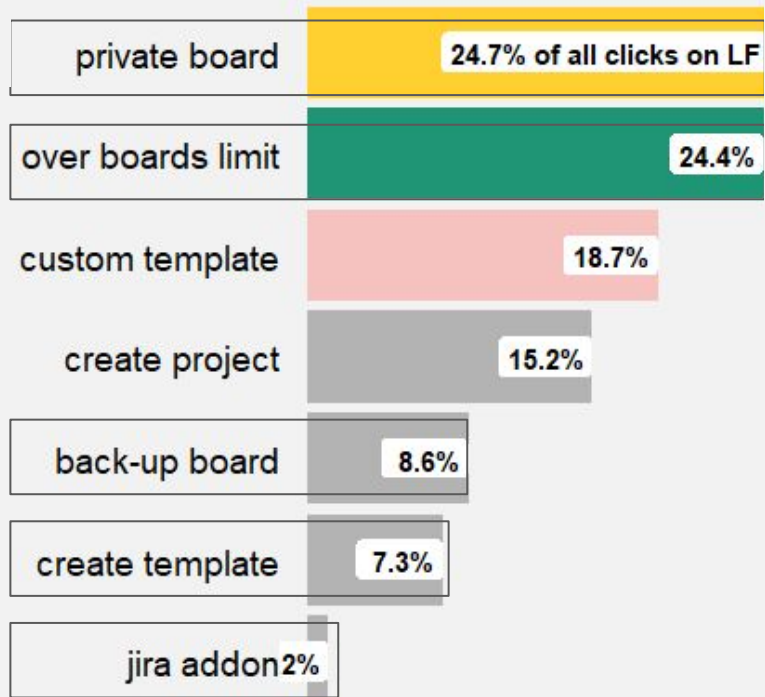


What do we learn?

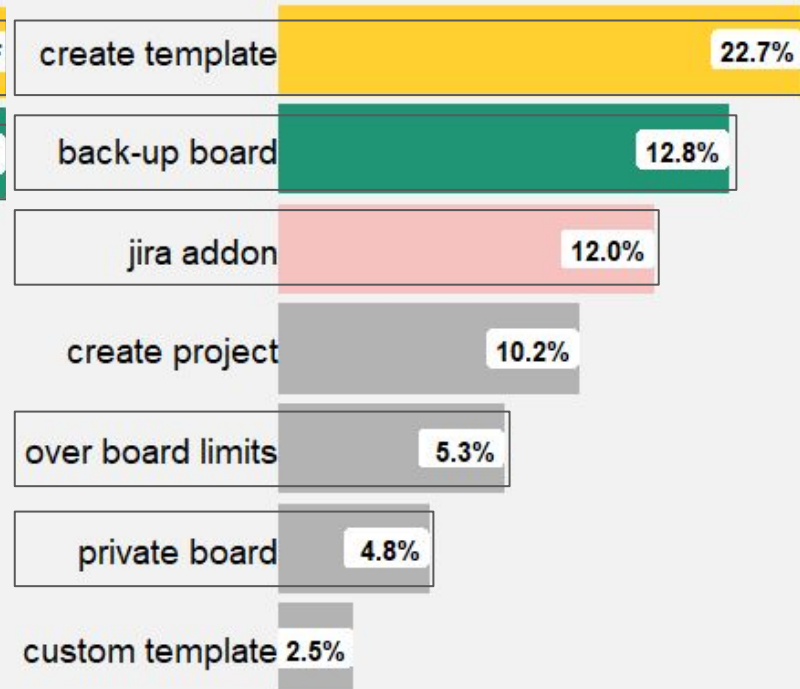
- About **80%** of the times users who initiate the flow leave after seeing **pricing options**
- **Only 15%** of times users who selected a plan then finalize the subscription by filling in **payment details**

Are there product features that bring more value than others from a **user stand-point?**

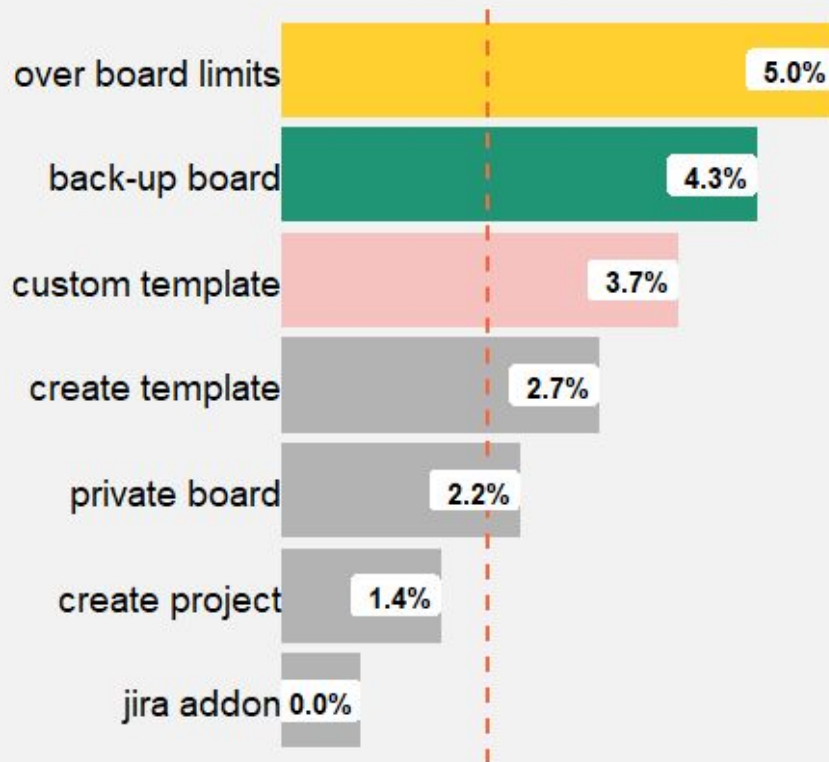
% of total clicks on locked features



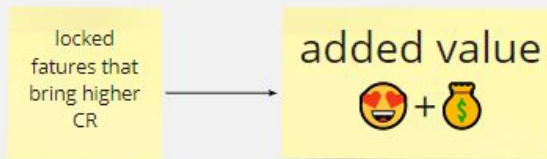
Upgrade CTR per feature



Same-day conversion rate



2.6%
mean upgrade flow CR

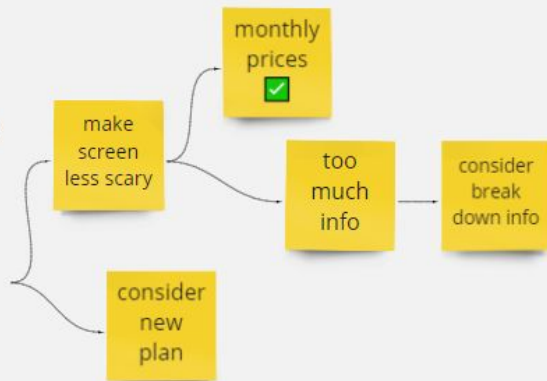


What do we learn?

- **Having more than 3 boards:**
 - highly discoverable feature
 - many times users see the pop-up and close it
 - contributes to the highest CR
- **Back-up board:**
 - not highly discoverable
 - users initiate upgrade flow to a larger degree than other features when clicking on it
 - contributes to the 2nd highest CRs

What can we improve?

- **Pricing:** users seem to be scared off!



logan, are you interested in Premium for work or personal use?
We'll recommend the right plan for you.

☐ I'd use Premium for my personal goals.

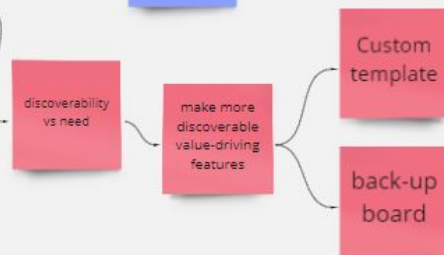
☐ I'd use Premium as part of my job.

[See all plans](#) [Next](#)

- **Payment methods:** few options available



- **Locked features:** leverage what brings value



Thank you for the opportunity!

