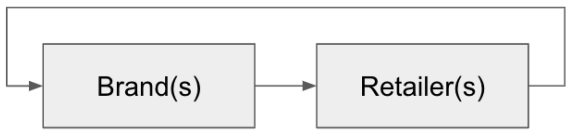
Exercise: Faire Direct

Business Context

💡 **Faire Direct** is a viral growth lever



Why is it important?

- By bringing in Brands' existing retailer accounts and leads, Faire Direct supports:
  1. **Retention/LTV**: Retailers acquired through Faire Direct begin with 1+ brand relationship, which makes them easier to retain over time (== +LTV).
  2. **Viral Loop**: Retailers who retain are more likely to refer new brands to Faire.

Problem

- Faire Direct's base metric of success is **new retailers acquired per week**.
- During the period of Feb. 25 - May 26, the baseline average was 485. Starting the week of May 27th, that KPI fell by over -20% — and has sustained at that lower level (355) for 3 weeks:

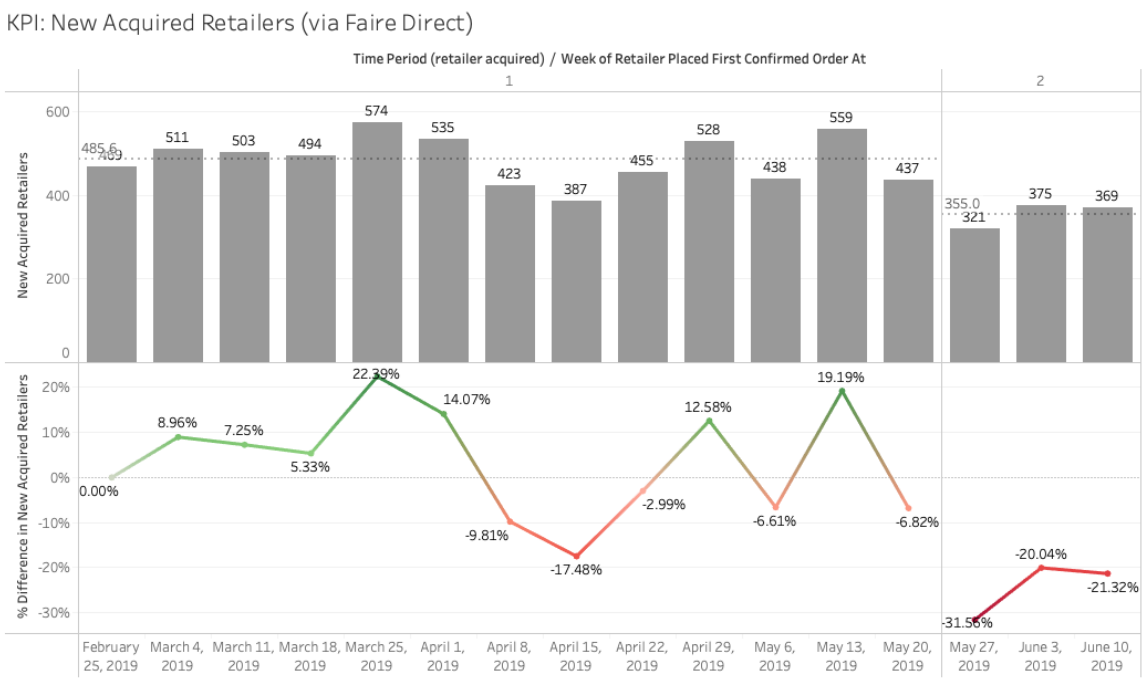


Fig 1. 1st row = New Retailers Acquired; 2nd Row = % difference from first week (Feb 25)

Objective

- Hypothesize drivers of **recent decline in new retailer acquisition** via Faire Direct.
- Suggest **product improvements** to shore up the decline.

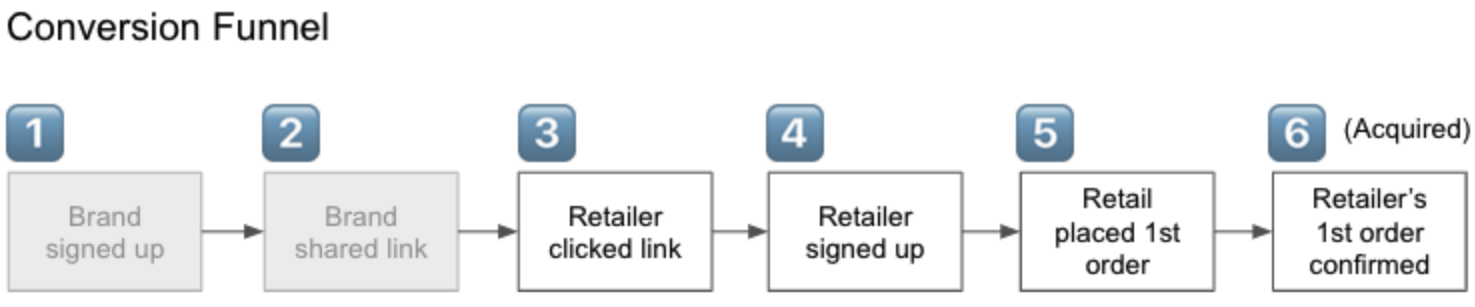
High-level Approach

1. Understand conversion funnel and hypothesize on key source(s) of decline.
2. Recommend further analysis and product improvements
    1. w/ opportunity sizings for prioritization purposes

Analysis

(1) Understand Conversion Funnel & Sources of Decline

To better understand the sources of the decline in acquired retailers, I've broken out Faire Direct's performance across a 6-part conversion funnel. For this exercise, I have access to retailer conversion data "post-click" (steps 3-6), but I will also explore potential up-funnel factors.



The below graph shows absolute retailers making it to each step, and conversion rates across the funnel. Each step in a numbered row — Below, I will review each step and highlight notable trends.

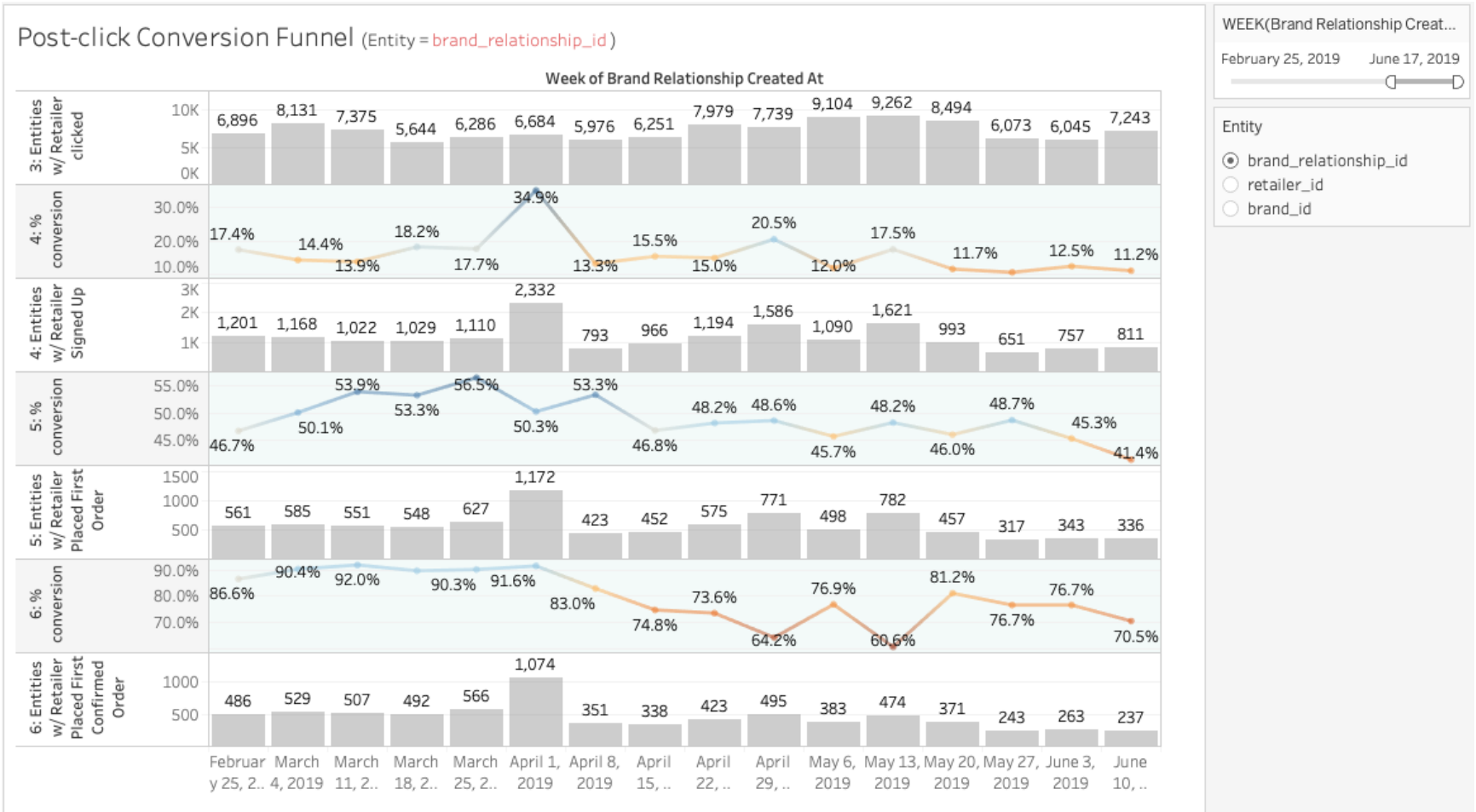


Fig 2a. (1) **The unit/"entity"** being counted is unique clicks, i.e. `brand_relationship_id`. After sign up, this is essentially very close to counting unique retailers (`retailer_id`). (2) **The time (x-axis)** here is the date the retailer clicked the link (`brand_relationship_created_at`) rather than their acquisition date (`retailer_first_order_confirmed_at`). Acquired retailer counts are lower as a result due to lag between click and acquisition (*see tableau fig A1*), but trends should still hold regardless of time field used.

Steps 3-4: Retailer clicked link —> Retailer signed up

Trends: We can see two trends of note:

1. **Unique clicks** (step 3) are down from `8k-9k` p/ week (5/6-5/27) to `6k-7k` (5/27-6/17) (25% drop). Granted, the current levels are consistent with much of the overall period prior to 5/6.
2. **Sign up rates** are down from `15%` (5/6-5/27) to `12%` (5/27-6/17) (20% drop).

Combining those factors, total sign ups are down from `1.25k` per week to about `750` per week (-40% drop == 66% lift if fixed).

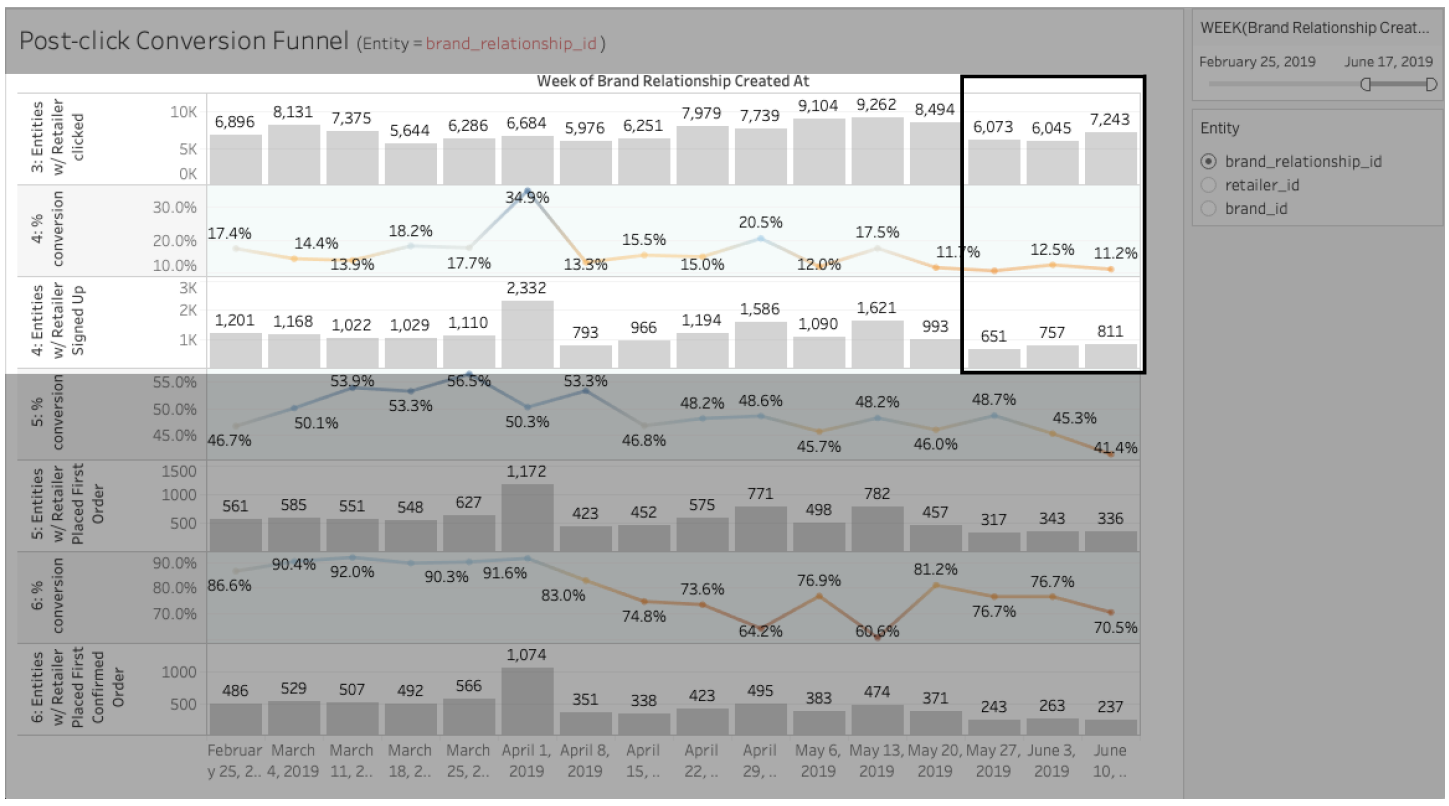


Fig 2b. Focus into Steps 3→4.

Why? Hypothesis: High-intent clicks from email are down.

- Clicks from email declined 50% from around `2k` per week to `1k` per week starting 5/27.
- Clicks from email tend to have a much higher **sign up rates** (`25%`) than other clicks (`10%`). Having fewer email clicks thus blended down the overall sign up rate (from `15%` to `10%`).
- Sizing: Assuming we double email clicks back to `2k`, (downstream conversions constant) we would add back an additional ~`77` acquired retailers from this channel (30% overall lift vs. 263).

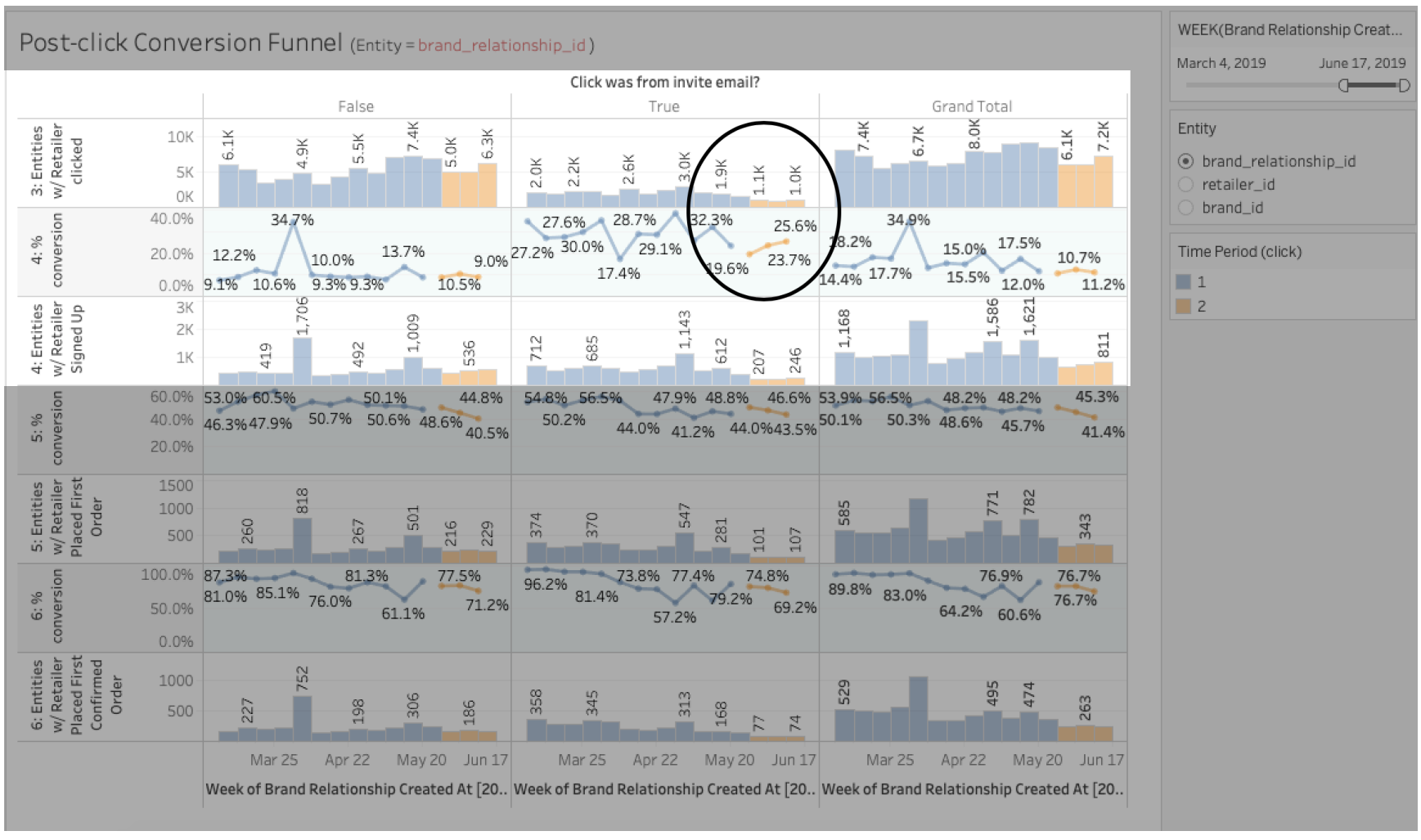


Fig 3. Conversion funnel: Cut (columns) = Email traffic vs. other.

So, what happened to these email clicks?

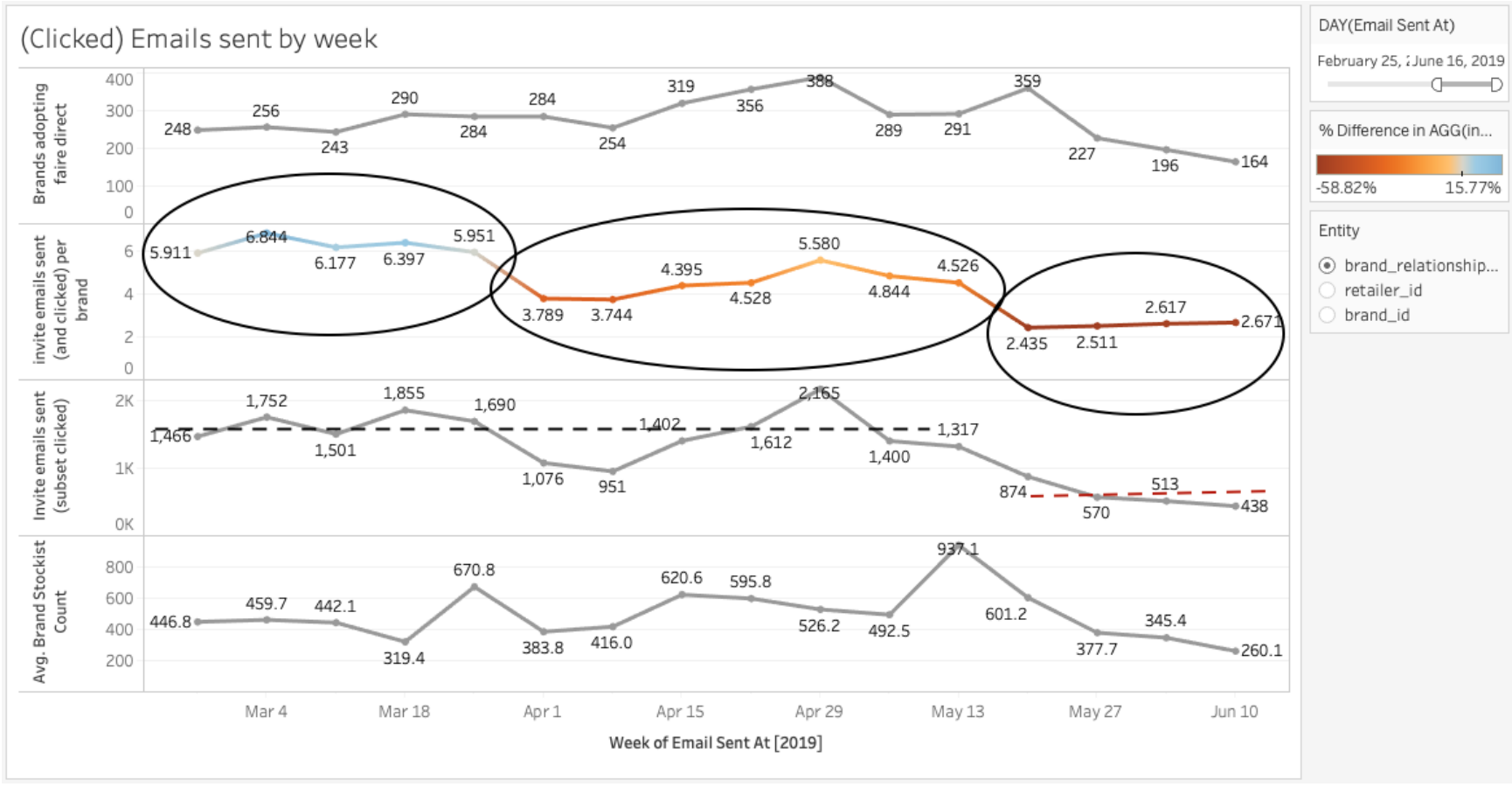


Fig 4. Emails clicked by email send date.

- (*3rd Row*) From 2/25-5/20, the number of clicked emails averaged around `1.5k` per week, but fell to around `500` per week after.
    - We further see this drop in both (*1st row*) the unique brands with an email click (`300` down to `200`), and (*2nd row*) the email clicks per brand (`4-5` down to `2-3`).
    - **Interpretation**: This means either (A) brands are sending fewer invite emails to their existing retailers or (B) the emails are performing worse (i.e. CTR is down). Given that (*4th row*) average reported accounts per brand are also slightly down, it's likely that brands are sending fewer emails.
        - Furthermore, let's say assume invite emails are getting 10% CTR — and we know brands have an average of 300 accounts and get 2.5 clicks on average. Then brands sending on average 25 sends = 8% of their accounts. **Can we improve upon this?**
    - **Next step**: Let's look into ways to encourage brands to send more emails as well as investigate any issues with email deliverability or engagement (*see Recommendations*).

Step 5: First Orders Placed

Trend: The % of sign ups placing a first order had a high period from March into early April, but fell to a new steady state around April 15:

- Before: 52%
- After 47% (-10% == 11% lift if fixed)

Also, we observe a sharp dip to 40% in the last 2 weeks, which is potentially concerning.

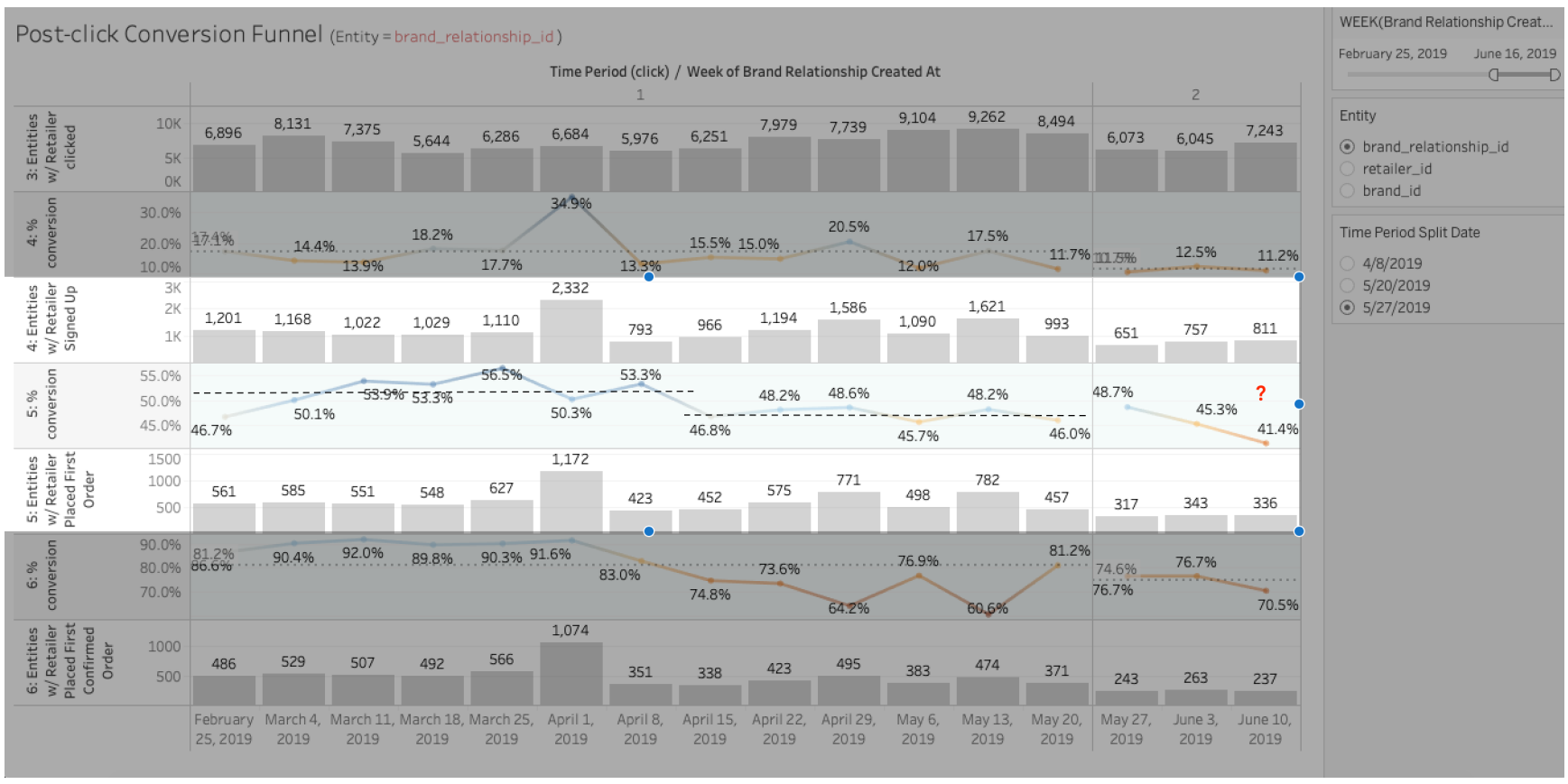


Fig 5a. First Orders Placed: Focus into Steps 4→5.

Why? Hypotheses: Perhaps a change occurred in April around Faire's:

- Marketplace discovery tools
- Placement algorithm, which is intended to prioritize Faire Direct brands to their retailers
- Follow-up messaging

Step 6: Order confirmations

Trend: The first order confirmation rate dropped suddenly starting the week April 8.

- Before: 90%
- After: 74% (-18% == 24% lift if fixed)

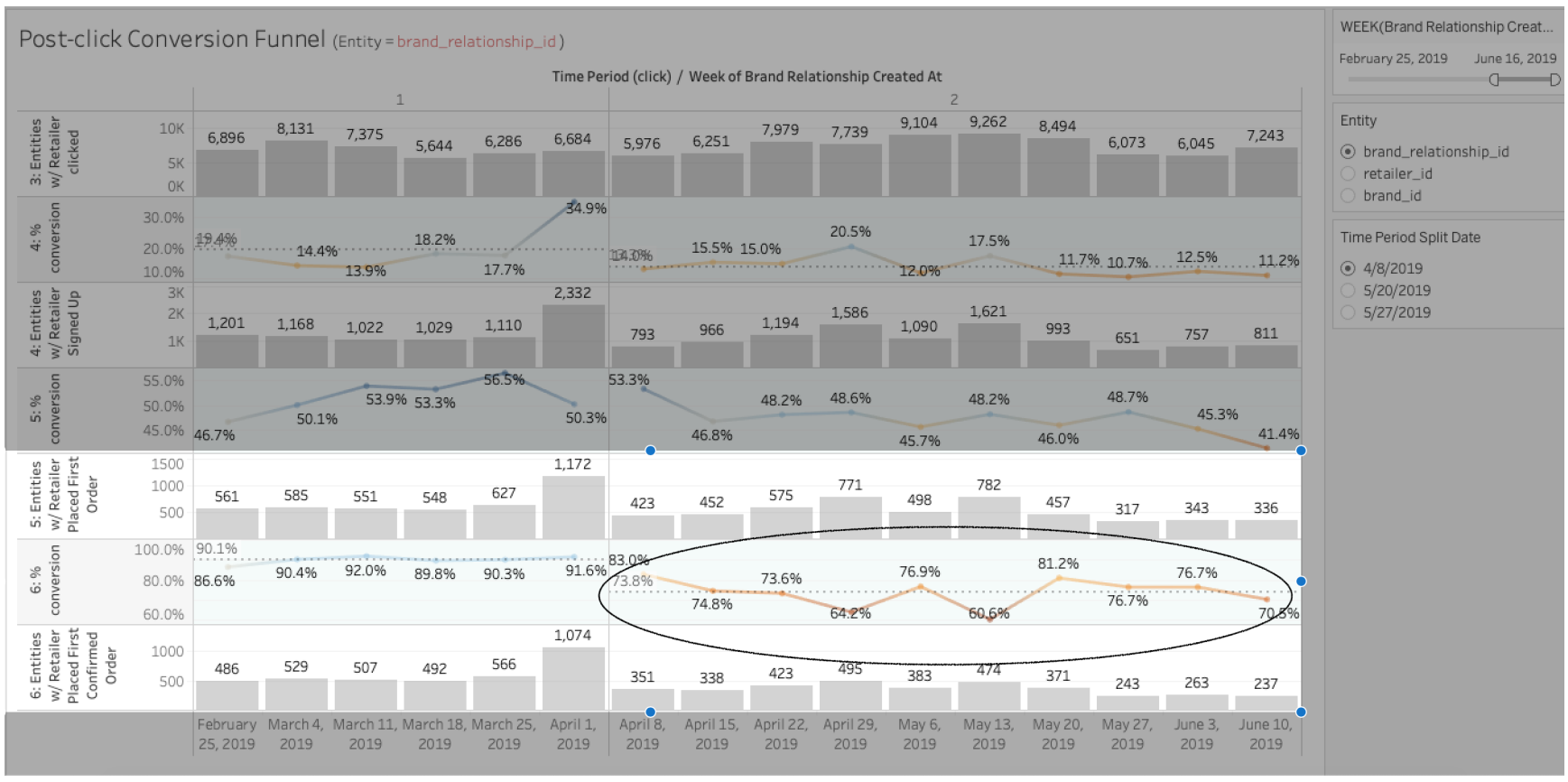
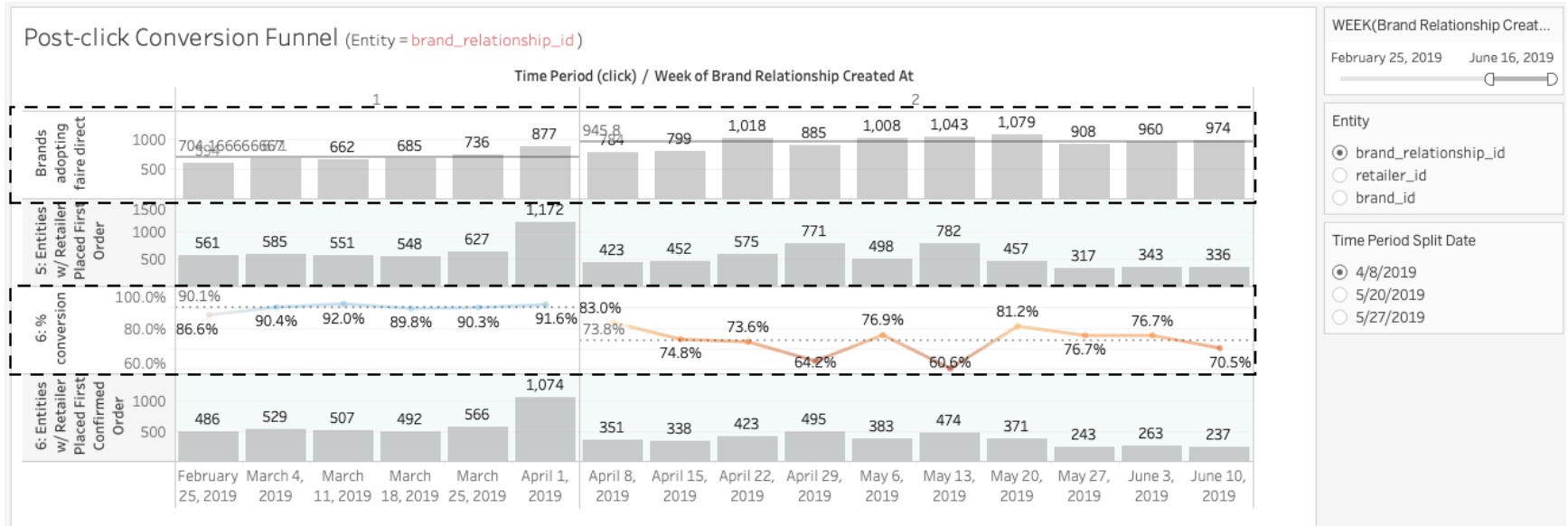


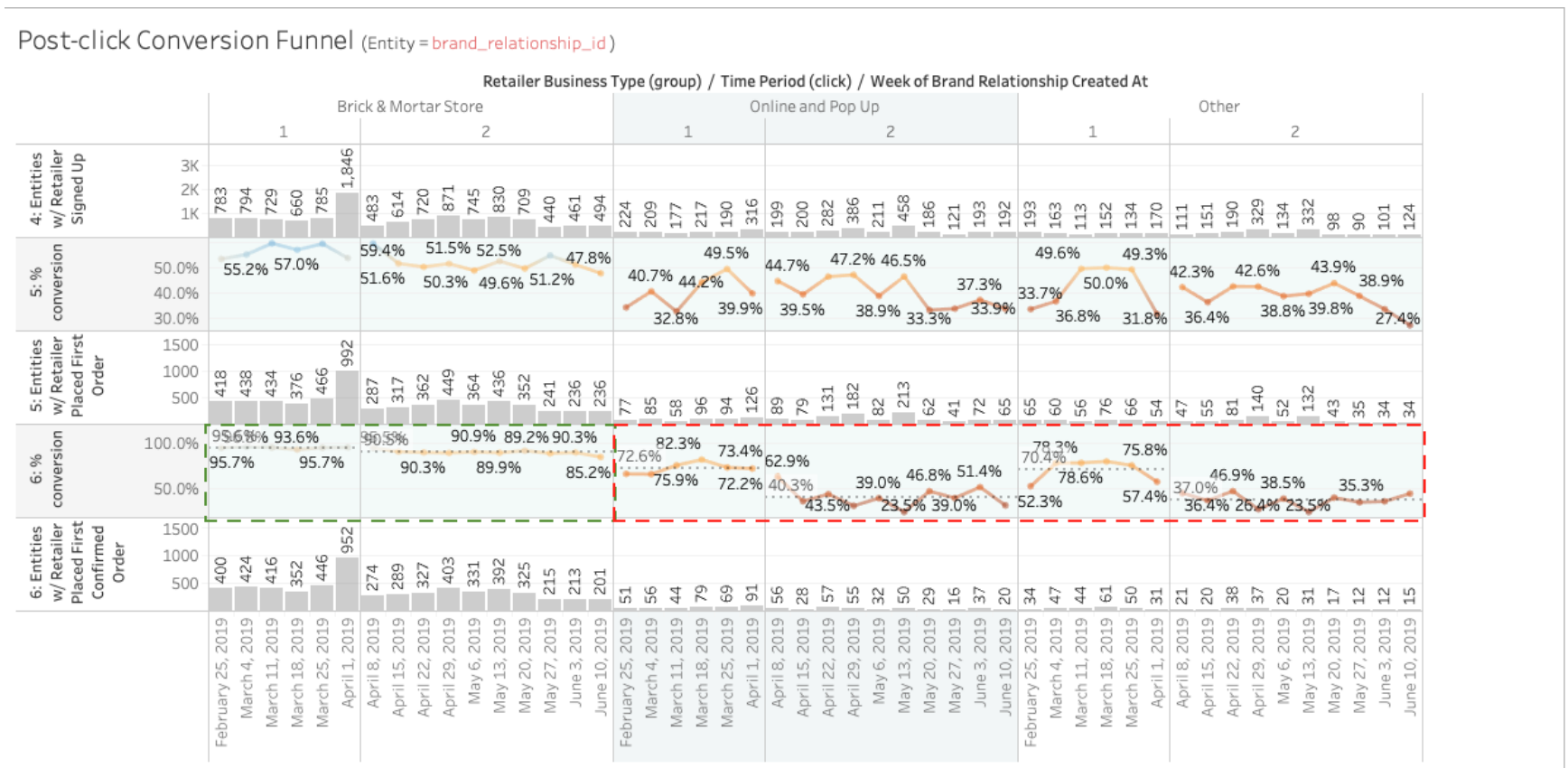
Fig 5b. Order Confirmations: Focus into steps 5→6.

Why? Hypothesis: (*1st row below*) The # of brands with a Faire Direct click stepped up around April . Faire orders must be confirmed by brands (source). Perhaps these additional brands are less responsive, or pickier regarding which retailers are allowed to carry their products?



To further investigate, let's look into the drop off in order confirmations by `retailer_business_type`, grouped as follows:

- `Brick & Mortar Store`
- `Online and Pop Up`: I combined these two retailer groups because their trends were similar.
- `Other`: (catch all for non-standardized values)



Interpretation: We can see above the dropoff in % orders confirmed around April 8th is much lower for `Brick & Mortar Store` retailers vs. `Online`, `Pop Up`, and `Other`. This suggests that something is awry with confirmations with non-brick & mortar locations. It might also be a site or notification issue affecting brands, but it hard to tell without experiencing the product UX.

Summary: Sources of Decline (Prioritized)

#	Step	Hypothesized Sources	Opportunity Sizing (% lift)	Timeframe of decline
3-4	Faire Direct clicks	- Fewer emails sent per brand - Fewer reported accounts per brand - Email CTR is down - Fewer Brands adopting Faire Direct (upstream from click)?	+66% (+30% from email)	May 27- present
6	Order Confirmations	- New Brands are signing up that are pickier about their product carriers or less responsive. - Specifically seems to be impacting non-Brick & Mortar retailers more.	+24%	April 8 - present
5	First Orders	- Marketplace discovery tools - Placement algorithm, which is intended to prioritize Faire Direct brands to their retailers - Follow-up messaging	+11%	April 15 - present

(2) Recommendations

Recommend further analysis and product improvements

I will focus on recommendations on fixing the top priority issue: **direct clicks from email**.

If fixed, this is sized to increase New Retailer Acquisition by +30% (369 → 479).

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3-4	Faire Direct clicks	- Fewer emails sent per brand - Fewer reported accounts per brand - Email CTR is down - Fewer Brands adopting Faire Direct (upstream from click)?	+66% (+30% from email)	May 27- present

Recommended Follow-up Analysis

Why are brands getting fewer clicks on their emails?

- Investigation: Are brands sending fewer invite emails?
  - We can look at additional up-funnel data around brand sign ups, invite email sends (in addition to email clicks) to confirm.
  - Do brands have fewer existing accounts to refer / draw from? Perhaps we are focusing on bringing in smaller brands. We can look into this further with the current data `account_owner` and `brand_stockist_count`.
- Investigation: Are Invite Emails are suffering a decrease in CTR, due to deliverability or engagement issues?
  - We can look at data to identify issues:
    - **Engagement**: email conversion rate data, active a/b tests.
    - **Deliverability**: We can look at open rate as a proxy.
    - **Retailer Intent**: We can break out sends by Retailer/Brand relationship. Are they existing accounts vs leads? This can impact retailers' engagement with emails.

Recommended Product Improvements

- Encourage brands to refer retails, with tools to more easily invite their existing accounts via email.
  1. Integrate with brands' key contact management providers and make it easy to import & send invites — to improve % of existing accounts sent (previously modeled at 8%).
  2. If not already, A/B test incorporating Faire Direct into brand onboarding to increase link shares.
  3. Identify any bugs/issues with current email invite system, including problems with email deliverability or sub-optimal email creative performance.
  4. If we ran a/b tests to encourage other channels for link sharing (I see some initial attempts at social sharing during this period), we should look into moving back toward email, which draws the highest retailer intent / conversion.

Appendix

- **Tableau Workbook**: I primarily used Tableau for the analysis (loaded the csv directly into Tableau).
  - Google drive link
- **Example SQL** to demonstrate reproducing figure 1 & 2.
  - Google drive link
  - github: https://github.com/lostinfugue/faire_analysis/blob/main/faire_analysis.sql