

Phase 4: Statistical Hypothesis Testing for TikTok Engagement: Verified vs. Unverified Accounts

Email from Mary Joanna Rodgers, Project Management Officer

Subject: New Request - Hypothesis Test: Verified/Unverified Accounts

From: "Rodgers, Mary Joanna" —maryjoannarodgers@tiktok

Cc: "Rainier, Orion" —orionrainier@tiktok; "Jaffey, Willow" —willowjaffey@tiktok; "Bradshaw, Rosie Mae" —rosiemaebradshaw@tiktok

Hello Data Team!

Really excellent work so far. The leadership team is impressed with the results—especially the progress and insights shared on the last executive summary report! Thanks so much for the hard work.

On that note, they have requested an additional item to be added to the initial project scope. We are interested in whether there is a statistical difference in the data between verified and unverified accounts. Do you have any indication which variable would be most insightful to test in terms of verified and unverified accounts?

Many thanks!

Mary Joanna Rodgers

Project Management Officer

TikTok

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Network with TikTok employees from a variety of teams and locations. Participate in TikTok Tuesdays, every Tuesday @2pm EST.

Email from Rosie Mae Bradshaw TikTok's Data Science Manager

Subject: RE: New Request - Hypothesis Test: Verified/Unverified Accounts

From: "Bradshaw, Rosie Mae" —rosiemaebradshaw@TikTok

Cc: "Jaffey, Willow" —willowjaffey@tiktok; "Rainier, Orion" —orionrainier@tiktok; "Rodgers, Mary Joanna" —maryjoannarodgers@tiktok

Thanks for the update, Mary Joanna.

It's great to hear that the leadership team is pleased with the data team's progress and the early insights we have been able to deliver. I never grow tired of being reminded of what a great data team we have assembled here at TikTok!

If you would, please tell them we will be providing this analysis in two weeks time.

@Orion, my initial thought is for us to conduct a hypothesis test to analyze whether there is a significant difference in video views for verified versus unverified accounts. What do you think?

In summary, I think we should do the following:

- Compute descriptive statistics on the claims classification data
- Conduct a two-sample hypothesis test of verified versus unverified accounts in terms of video view counts

Thanks,

Rosie Mae Bradshaw

Data Analysis Manager

TikTok

Email from Orion Rainier, Data Scientist

Subject: RE: New Request - Hypothesis Test: Verified/Unverified Accounts

From: "Rainier, Orion"—orionrainier@tiktok

Cc: "Jaffey, Willow"—willowjaffey@tiktok; "Rodgers, Mary Joanna"—maryjoannarodgers@tiktok ; "Bradshaw, Rosie Mae"—rosiemaebradshaw@tiktok

Hi all,

@Rosie Mae, I agree with you on statistical testing. We'll share a summary of the results before we present it to the client.

We'll get started right away.

Thank you,

Orion Rainier

Data Scientist

TikTok

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“Big data isn’t about bits, it’s about talent.” — Douglas Merrill

Email from Willow Jaffey, Data Science Lead

Subject: RE: New Request - Hypothesis Test: Verified/Unverified Accounts

From: “Jaffey, Willow” —willowjaffey@tiktok

Cc: “Rodgers, Mary Joanna” —maryjoannarodgers@tiktok; “Bradshaw, Rosie Mae” —rosiemaebradshaw@tiktok; “Rainier, Orion”—orionrainier@tiktok

I agree with everyone’s assessments on this project so far. I look forward to the team’s progress in this milestone. Thank you all.

Willow Jaffey

Data Science Lead

TikTok

Email from Orion Rainier, Data Scientist

Subject: RE: New Request - Hypothesis Test: Verified/Unverified Accounts

From: “Rainier, Orion”—orionrainier@tiktok

Cc: “Rodgers, Mary Joanna” —maryjoannarodgers@tiktok; “Bradshaw, Rosie Mae” —rosiemaebradshaw@tiktok; “Rainier, Orion”—orionrainier@tiktok

Hi there, fellow data professional!

You’ve been handling all of this work really well, by the way. Excellent job.

I was wondering if you’d like to try the statistical testing yourself? Based on what you’ve shared with me, I have every confidence you already have all the skills and experience needed for this task.

What do you think? Would you like to try?

Also, like I said in my email to Rosie Mae, you'll need to write an executive summary of the results so we can present it to Willow before sharing it with the client.

Thanks so much!

Orion Rainier

Data Scientist

TikTok

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“Big data isn’t about bits, it’s about talent.” — Douglas Merrill