

Impact of App Notifications on Company's Revenue

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Summary of the Design

To understand whether app notifications increase the time users spend on the app

1

Where Tested?

Rady Cohorts and Friends

2

What App Tested?

Instagram

3

How long?

2 Weeks

4

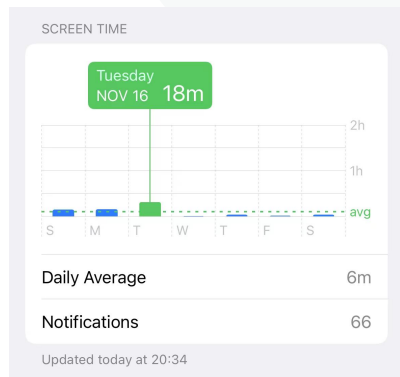
How To Test?

Iphone Daily Screen Time

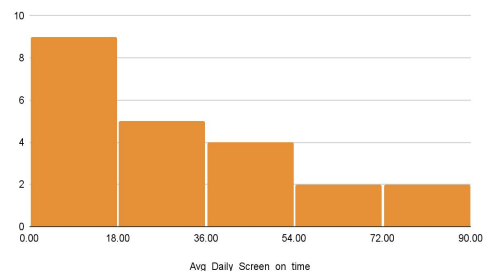
5

Where Randomized?

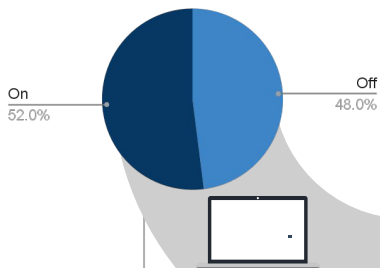
Through Radiant



Histogram of Avg_Daily_Screen_on_time



Count of Notification_on/off



1. Segment Users

- Light users
- Medium users
- Heavy users

Randomization

- Radiant
- Randomize amount User Segments and Current Notifications On/Off

Treatment Description

Treatment Groups

- Control Group: Notification Off
- Treatment Group: Notification On

Control/Treatment Group Summary

		Assign Off	Assign On
Light	Current Off	0.16	0.16
Light	Current On	0.08	0.12
Medium	Current Off	0.04	0.04
Medium	Current On	0.08	0.12
Heavy	Current Off	0.04	0.04
Heavy	Current On	0.08	0.04

Results



Time of Experiment

- 14 days of data collection from 11/03/2021 (Wednesday) to 11/16/2021 (Tuesday)



Sample Size

	Control Group: Turn Off Notification	Treatment Group: Turn on Notification
Original No Notification	6 participants	6 participants
Original With Notification	6 participants	7 participants

Results

		Before Experiment Avg.	After Experiment Avg.	Before / After Difference	Difference in Difference
Control Group: Assign Off	Current Off	24.33	25.29	0.96	
	Current On	39.33	30.63	-8.70	
	Total	31.83	27.96	-3.87	
Treatment Group: Assign On	Current Off	20.17	22.48	2.31	1.35
	Current On	27.00	25.65	-1.35	-7.36
	Total	23.85	23.89	0.04	



From the Experiment, **Notifications On/Off Impacts App Usage.**



Turn Off Notifications

Decrease 7.36 Minutes App Usage on daily average



Turn On Notification

Increase 1.35 Minutes App Usage on daily average

Results

	Light User	Medium / Heavy User
Turn On	5.50	-4.07
Continue On	0.05	-2.39
Turn Off	-6.04	-10.04
Continue Off	8.03	-13.18
Difference in Difference	-2.53	9.11
Difference in Difference	-6.08	-7.64

Light User

Turn off notification on average decreases 6.08 minutes daily usage



Medium / Heavy User

Turn on notification on average increase 9.11 minutes daily usage



Turn off notification on average decreases 7.64 minutes daily usage

Takeaways

