## 2023 Overall Productivity Trends



## Data Science Team

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o Prodoscore

## Mean-Time Approach

## Start/End Time Trends (Overall)




## Mean-Time Approach

Start/End Time Trends (Remote vs. In-Office)*


## Median-Time Approach

Start/End Time Trends (Overall)


## Median-Time Approach

Start/End Time Trends (Remote vs. In-Office)*



## Weekday Productivity

## Weekday Analysis \& Significance Testing

Organizations: 108
Employees: 5,291
Datapoints: 637,051
Date Range: February 01, 2023 October 20, 2023

| Weekday | Avg Start <br> Time | Avg End <br> Time |
| :---: | :---: | :---: |
| Monday | 8:31am | $5: 52 \mathrm{pm}$ |
| Tuesday | $8: 20 \mathrm{am}$ | $5: 59 \mathrm{pm}$ |
| Wednesday | $8: 19 \mathrm{am}$ | $5: 58 \mathrm{pm}$ |
| Thursday | $8: 21 \mathrm{am}$ | $5: 55 \mathrm{pm}$ |
| Friday | $8: 30 \mathrm{am}$ | $5: 10 \mathrm{pm}$ |

Productivity by Day of the Week


## GPT-4 Driven Explanation

The ANOVA (Analysis of Variance) test revealed that the weekday variable significantly impacts productivity, ignoring individual differences. The F value (<0.001), being very small, tells us that the differences in productivity across the weekdays are statistically significant, and not due to random variations within the data.

Next, the TukeyHSD post-hoc test gives us a detailed look into pair-wise comparisons of productivity across the weekdays. This test is crucial because it tells you where exactly these differences that the ANOVA indicated lie.

The results from the TukeyHSD test showed that not only does productivity vary significantly across the weekdays, but every day of the week has a significantly different average productivity score from every other day.

Here's an overview of how productivity changes during the week:

- Mondays typically see the lowest productivity.
- There is a significant increase on Tuesday through Thursday compared to Monday.
- Friday sees a significant drop compared to every other weekday.

So, from a business perspective, these results provide critical insight into employee productivity patterns during the weekdays. To potentially increase productivity, the business might want to explore what causes the dip on Fridays and the rise on Tuesdays through Thursdays.

For instance, could it be the case that employees are more rested and thus more productive at the start of the workweek (Tuesday)? What factors contribute to the drop in productivity on Friday? Could it be fatigue from the workweek or anticipation for the weekend?

Understanding the reasons behind these trends can guide interventions aimed to boost productivity, like changing work schedules, adjusting workloads, or implementing wellness programs. However, it would help if you also considered individual differences in productivity, as suggested by the Linear Mixed Model results. These differences could be due to personal circumstances, work styles, or other individual-specific factors. Personalizing work schedules or work environments might be beneficial to account for individual variations.

## ACTIVITY ACROSS 24-HRS

INITIAL RESULTS ARE SUGGESTING AN 8-13 \% INCREASE IN ACTIVITY WHEN HYBRID EMPLOYEES ARE IN-OFFICE VS AT HOME

