

STRAVA FITNESS DATA ANALYTICS WITH TABLEAU

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15th May 2 months Internship program

Daily Data - Dashboard

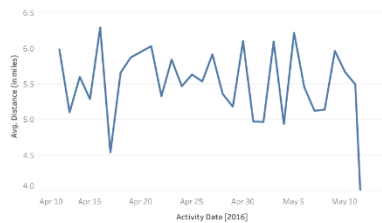
Daily Insights dashboard

Average Distance
(per day) : 5.490 miles

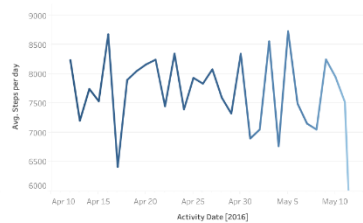
Total Steps: 7,179,636

Average Calories Burnt : 2,304

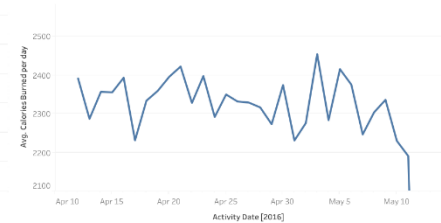
<Distribution of Total Distance Traveled>



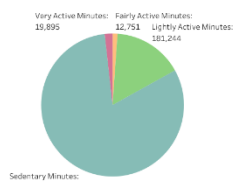
Distribution of Total Steps



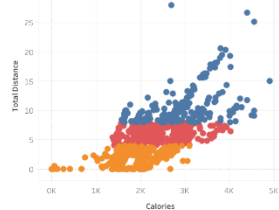
<Distribution of Calories>



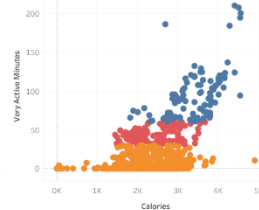
Pie Chart with Minutes data



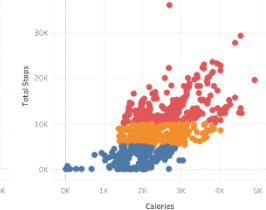
Total Distance Vs Calories burnt



Very Active Minutes Vs Calories burnt



Total Steps Vs Calories burnt



Summary Metrics

1. **Average Distance (per day):** 5.490 miles
2. **Total Steps:** 7,179,636
3. **Average Calories Burnt (per day):** 2,304

Summary

The dashboard presents an overview of daily physical activity, highlighting an average distance of 5.490 miles per day, a total of 7,179,636 steps taken, and an average of 2,304 calories burnt each day. These figures reflect a moderately active routine maintained over the observed period.

Trend Observations

The daily distance traveled fluctuates between approximately 4.0 and 6.3 miles, with a noticeable drop near May 10. Step counts vary from 6,000 to 9,000 steps per day, also showing a downward trend around the same date. Calorie expenditure remains

relatively steady at around 2,300 calories daily but begins to decline slightly toward the end of the timeline.

Activity Distribution

A large portion of time is spent in sedentary behavior, with 931,738 sedentary minutes recorded. In contrast, lightly active minutes total 181,244, fairly active minutes are 12,751, and very active minutes are 19,895. This distribution suggests that while some activity is present, most of the day is inactive, indicating a potential area for improvement.

Correlations and Relationships

There is a clear positive correlation between distance and calories burnt—more distance generally leads to higher calorie expenditure. Very active minutes also show a strong link with calorie burn, suggesting that intensity contributes significantly to energy usage. A similar trend is observed between total steps and calories burnt, with some days showing high step counts corresponding to high calorie output.

Conclusion

The data reflects a consistent and moderately active lifestyle with scope for increased high-intensity activity. Efforts to reduce sedentary time and boost very active minutes may lead to improved overall health and greater calorie expenditure. The noticeable dips in distance, steps, and calories near May 10 could indicate changes in routine or external factors that may need further analysis.

Key Takeaways

- The user maintains a consistent activity level, averaging about 5.5 miles per day.
- There is a significant amount of sedentary time compared to active time.
- Calories burnt are strongly tied to both step count and physical intensity.
- Improving very active minutes may contribute to higher calorie expenditure.
- Notable drop-offs in activity and calories burned should be examined, especially around May 10.

Hourly Data - Dashboard

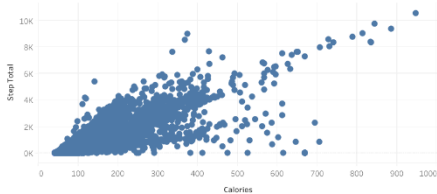
Hourly Data Dashboard

Avg calories burnt per Hour : 97.39

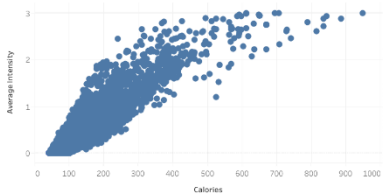
Avg Steps taken per Hour : 320.2

Avg Intensity per Hour : 12.04

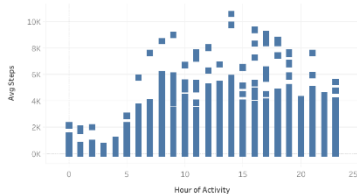
Calories Vs Total Steps



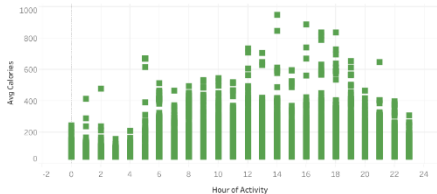
Calories Vs Avg Intensity



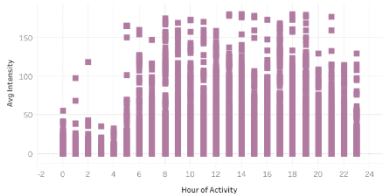
Avg Steps taken per hour



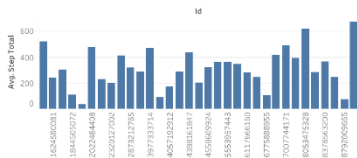
Avg Calories per hour



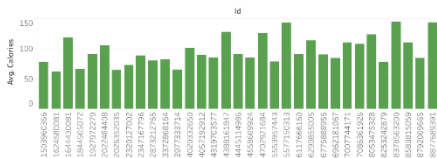
Avg Intensity per hour



Avg Steps taken per hour



Avg Calories burnt per hour



Avg Intensity of Id



KPI Summary

The Hourly Data Dashboard reports three key performance indicators: an average of 97.39 calories burnt per hour, 320.2 steps taken per hour, and an average intensity score of 12.04 per hour. These values suggest a steady level of physical activity throughout the day.

Hourly Patterns

The scatter plots demonstrate a clear positive correlation between calories burnt and total steps taken, as well as between calories and average intensity. This indicates that higher step counts and greater activity intensity directly contribute to increased calorie expenditure.

Hourly trends across the day show a low level of activity in the early morning hours, followed by a sharp rise starting around 6 AM. Step counts, calorie burn, and intensity peak between 12 PM and 6 PM, suggesting that most physical effort occurs during midday and afternoon hours. Activity levels taper off again in the evening, consistent with typical daily routines.

Individual Variations

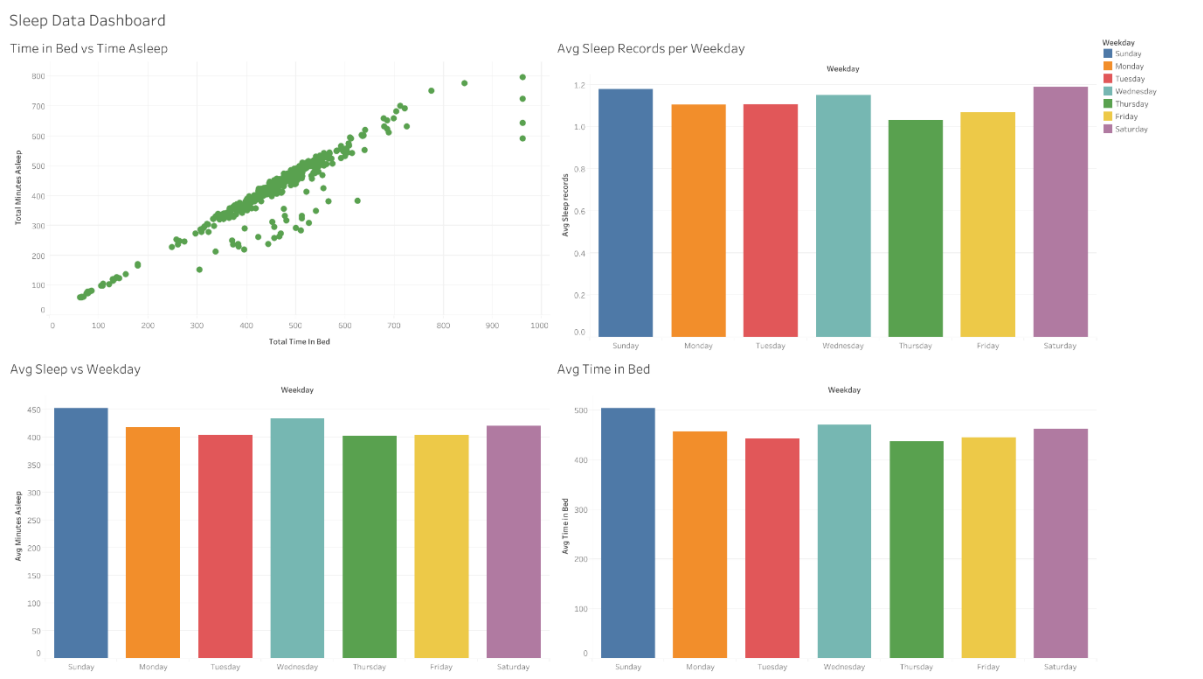
When comparing data across different individuals, there is noticeable variation in

performance. Some users exhibit consistently higher step counts, calorie burns, and intensity levels, while others remain relatively lower across all metrics. These differences likely stem from unique daily habits, activity schedules, or lifestyle choices.

Key Takeaways

- Physical activity increases significantly during the day, especially from morning to evening.
- Calorie burn is strongly influenced by both step count and intensity of movement.
- Most users show peak performance during the afternoon hours.
- There is a wide range of activity levels across individuals, suggesting the need for personalized fitness recommendations.
- Maximizing physical activity during peak hours may lead to more efficient calorie expenditure.

Sleep Data - Dashboard



Sleep Efficiency

The scatter plot comparing time in bed with time asleep shows a tightly clustered diagonal trend, suggesting that individuals are generally making good use of their time in bed. Most data points indicate a consistent conversion of time in bed to actual sleep, with only a few outliers showing significant differences.

Weekday Sleep Trends

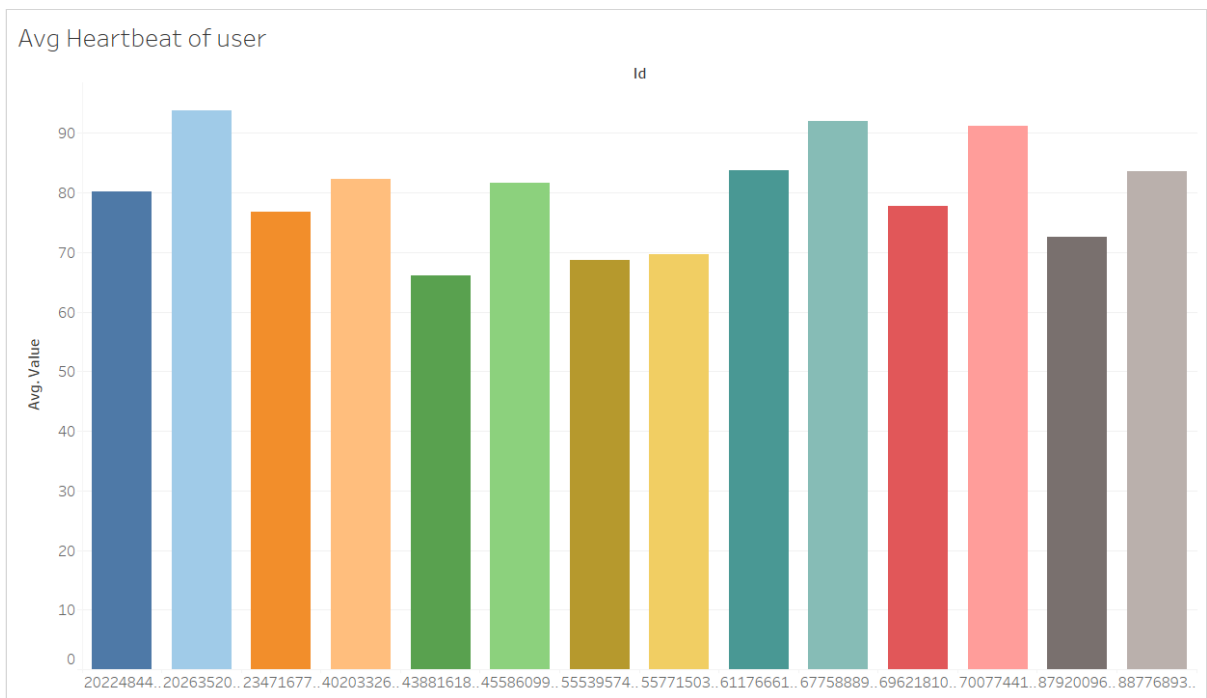
Average sleep records per weekday reveal that sleep is most consistently tracked on Sundays and Wednesdays, with slightly lower averages on Thursdays and Fridays. This may point to more consistent sleep routines during weekends and mid-week.

In terms of average minutes asleep, Wednesday and Sunday show the highest values, indicating better rest on these days. Conversely, Thursday and Monday register the lowest average sleep durations. The average time spent in bed follows a similar pattern, with Sunday and Wednesday again showing longer durations compared to Thursday and Monday.

Key Takeaways

- There is a high correlation between time in bed and time asleep, suggesting overall efficient sleep habits.
- Sunday and Wednesday tend to have the longest and most restful sleep durations.
- Sleep duration and time in bed decrease slightly on weekdays like Monday and Thursday.
- Users appear to have more consistent sleep tracking on weekends, likely due to more regular routines or fewer disturbances.
- Optimizing weekday sleep patterns could help maintain balanced rest throughout the week.

Average Heartbeat of a user



The bar chart shows the average heart rate of different users. Most users have heart rates within a healthy range (66–94 bpm). A few users, like those ending in **20263520** and **69621810**, have higher average rates above 90 bpm, which might suggest higher activity levels or stress. Others, such as **43881618**, have lower averages around 66 bpm, possibly indicating better cardiovascular fitness. Overall, the variation reflects differing health, fitness, or lifestyle patterns among users.