Wearable Fitness Tracker Usage Trends & Insight

(For The Executive level)

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Agenda

1. **Goals**

2. **Data limitations**

3. **Analyzed Trends in User Behavior & Proposal**
   a. Average Active Intensity in a Week
   b. Users' Wearing Frequency
   c. Consistency of Heart Rate Tracking Percentage

4. **Summary**

5. **Next steps**

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1. Goals

Identify user behavior trends that can help influence Bellabeat's marketing strategy **to promote scalability** by empowering users with knowledge about their health, activity, sleep, stress, and mindfulness habits.

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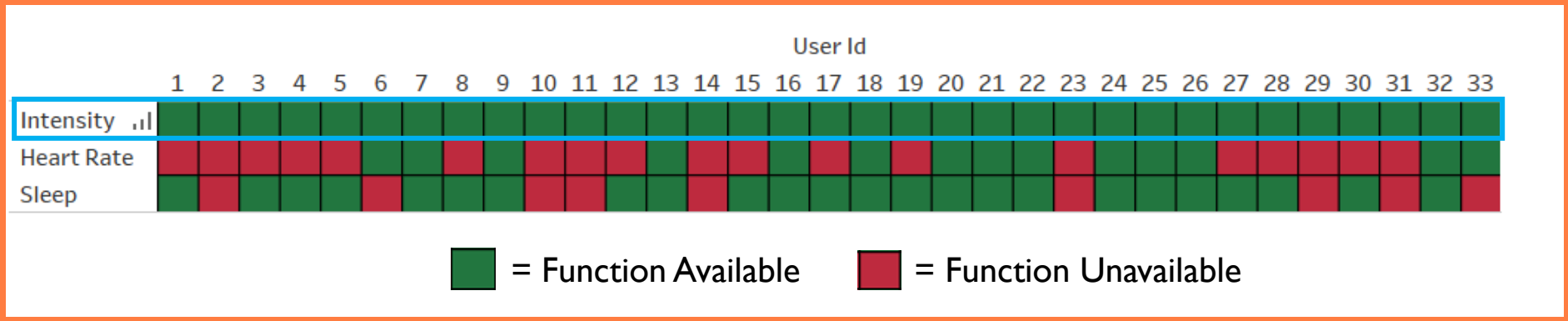
2. Data limitations

- Data source: FitBit Fitness Tracker Data
  (CC0: Public Domain, dataset made available through Mobius)
- Survey Participants: **33 people**
- Survey Period: 12 April 2016 – 12 May 2016 **(31 days)**
- Survey Functions
  1. **Daily Activity (Intensity)**
  2. **Heart Rate**
  3. **Sleep**
- Survey Tracker Model: **Not specified**

Verify Functionality on Each User Device



Given the varying tracker models, the main focus will be on the 'Daily Activity (Intensity)' function for understanding consistency, usage trends, and promoting the marketing campaign.

The dataset would have been more valuable if the required function(s) had been defined prior to conducting the survey

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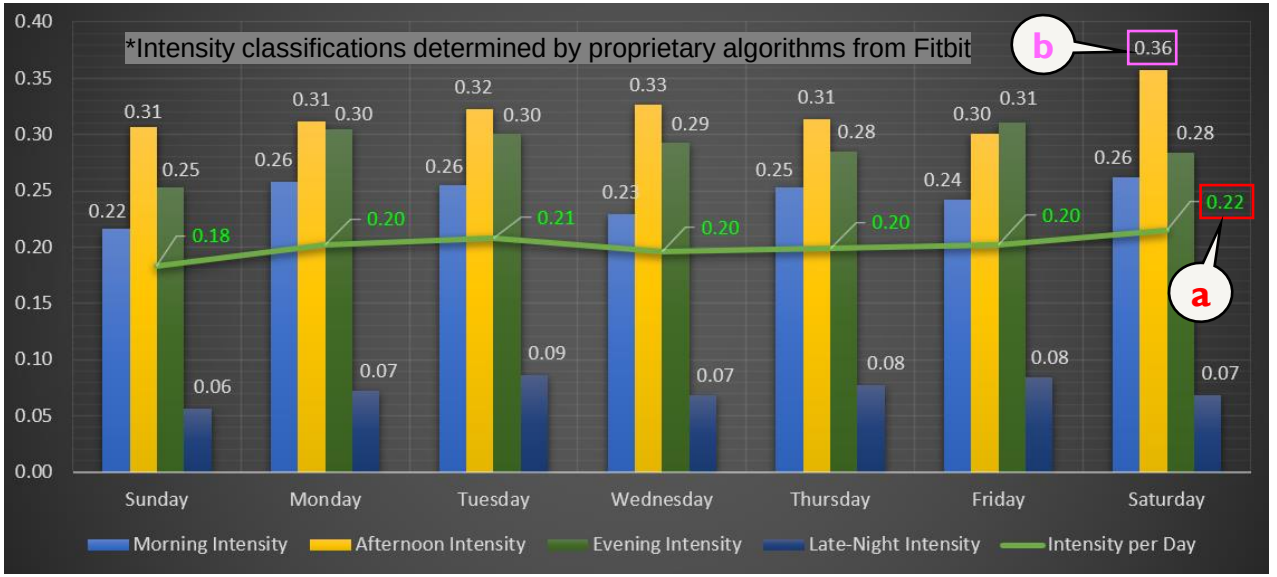
3. Analyzed Trends in User Behavior (a)

Average Active Intensity Distribution in a week



Conclusion: The most average active intensity period happens on Saturday(a), especially in Afternoon(b).

Propose Marketing Campaign

Introducing the 'Intensity Scoring System,' which customers can redeem for discounts when purchasing Bellabeat products.

- The campaign starts recording every Saturday.
- Extra scores will be given for activities performed on Saturday afternoon

With the 'Intensity Scoring System,' we expect to gain market share from current Fitbit users.

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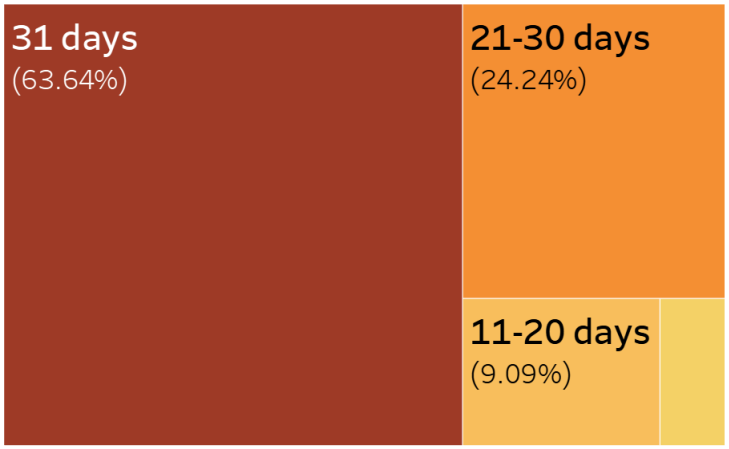
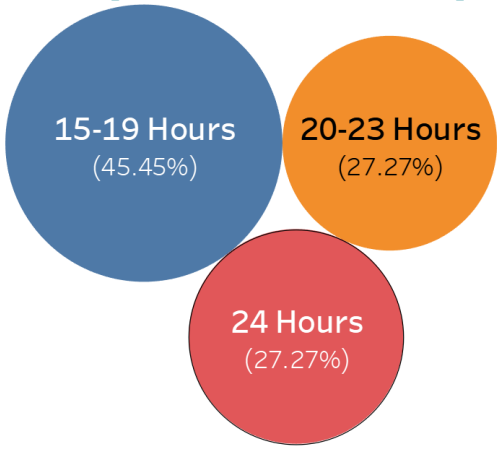
3. Analyzed Trends in User Behavior (b)

Users' Wearing Frequency

by Days in a Month



by Hours in a Day



Conclusion: The majority of users wear the tracking device 31 days for approximately 15-19 hours a day

Hypotheses on Different Users' Wearing Patterns

1. **Some users do not wear the tracker every day due to conflicts with their outfits or specific occasions.**
2. **Some users do not wear the tracker during sleep due to comfort-related issues.**

Problem: Unable to provide suggestions for improving sleep quality based on users' sleeping habits.

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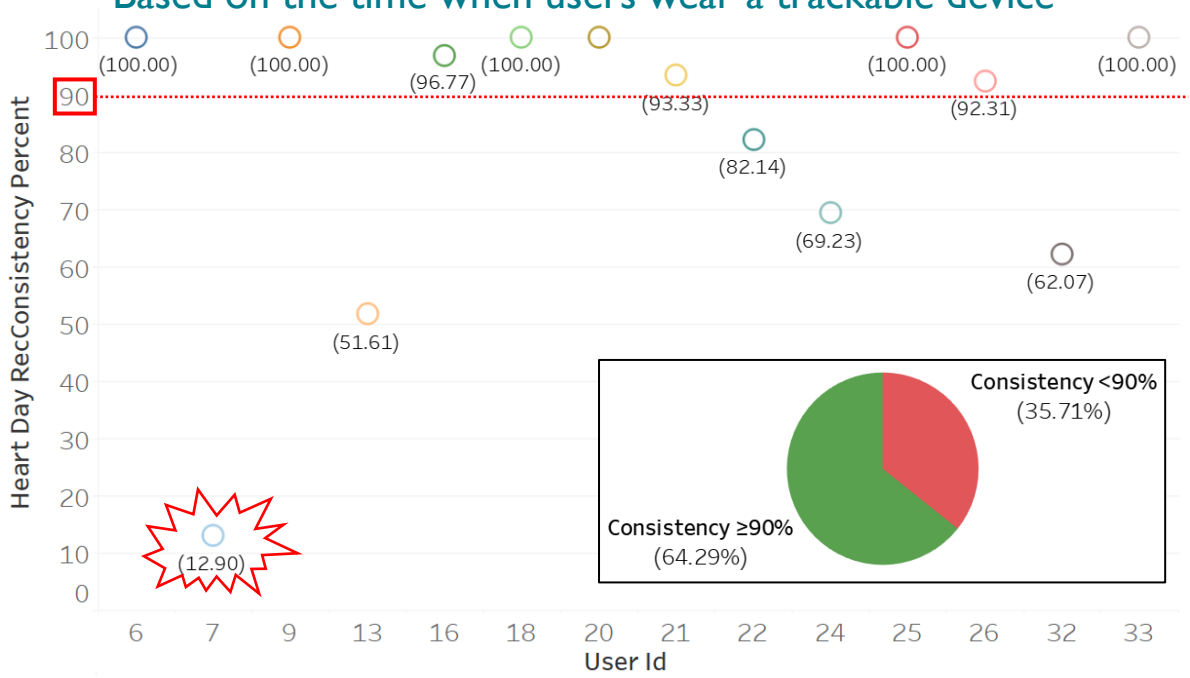
3. Analyzed Trends in User Behavior (c)

Consistency of Heart Rate Tracking Percentage

Based on the time when users wear a trackable device



Conclusion: Although most of devices have consistency over 90% but some device had the tracking consistency just 13%

Hypotheses on Consistency of Heart Rate Falling Below 90%

1. **This inconsistency may be caused by users' wearing habits that hinder the tracking sensors.**
2. **Another possible factor could be device failures due to production problems."**

Problem: Inability to properly monitor stress due to unstable tracking of Heart Rate Variability (HRV) sensors.

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4. Summary

1. Introducing the 'Intensity Scoring System' campaign to gain market share based on customers' behaviors.

2. Focusing on improving sleep quality by designing more comfortable devices for wearing during sleep.

3. Aiming to increase the consistency of heart rate tracking in order to monitor users' stress and warnings properly.

5. Next Steps

1. Further Study of the Intensity Scoring System:

- Discuss the campaign's details with the relevant departments.
- Calculate market share and ROI, with expected results to be shared by dd-mm-yy.

2. Improve Users' Wearing Frequency:

- Contact targeted users to confirm hypotheses.
- Collaborating with the design team to explore a wider range of product varieties while ensuring continuous tracking capabilities through user IDs.
- Address comfort-related issues during sleep by incorporating user feedback into product improvements."

3. Improve Consistency of Heart Rate Tracking

- Contact targeted users to confirm hypotheses.
- Collaborating with the engineering team to improve sensor consistency and prevent production failures, if any.

Thank you

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