Subject: Key Findings from Fetch Rewards Data Analysis

Hi [Leader's Name],

Hope you had a great weekend! I've been analyzing Fetch Rewards products, users, and transactions data to uncover user behavior trends and identify any data issues that could impact insights. I've wrapped up the data analysis for and wanted to share some key takeaways.

Data Quality Issues:

- **Referencing Problems:** Around **50K transactions** link to non-existent users, and **19K transactions** reference missing products. These issues likely stem from barcode mismatches or outdated product catalogs, which could skew sales and user insights.
- **Missing Data:** There are significant gaps in key fields—**product categories and brand details** are often incomplete, **transactions** are missing product links, and **user data** lacks language, birthdate, and gender information, limiting segmentation accuracy.
- **Data Type Issues:** Many columns are stored as text instead of numeric or datetime, which may cause calculation errors, slow processing, and incorrect filtering.

Key Questions(Support Needed):

- Should we exclude missing records from the analysis, or fill them with averages or other values?
- Are the product mismatches caused by outdated barcodes, or is there missing catalog data we need to address?
- For efficiency, should we remove columns that are mostly empty, or do they serve future purposes?

Interesting Insight:
Power users (top 20% of spenders with transactions on more than 1 day) contribute **32.35% of revenue**, but most of them only transact on **2 days**. This highlights an opportunity to boost engagement even among our most valuable users.

Next Steps (Support Needed):

- I'd appreciate support from **data engineering** to clean up references, duplicates, and address data type inconsistencies.
- It would be helpful to discuss with the **marketing team** on strategies to improve power user retention and engagement.

You can find more details in the slides I've shared. Let me know if you have any questions or need further insights. I'm happy to dive deeper into any area!

Best,
Yiwei