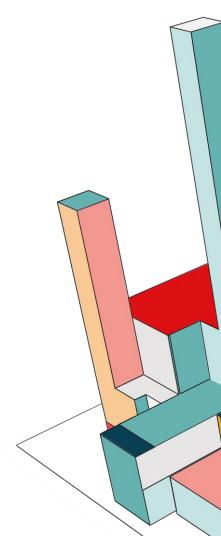


DATA ANALYSIS FOR APEX GAMES

PRESENTED BY: THERESA KIM (19926), SENIT GHEBREAGZIABHER (20050)

AGENDA

- Introduction
- Project Objectives
- Data Analysis
 - Retention Rates
 - In-Game Purchases
 - Player Behavior
- Final tips & takeaways



EMBERVEIL: THE HIDDEN EMPIRE

- Apex Games: A leader in RPG development known for immersive worlds and complex narratives.
- **Game Launch**: *Emberveil* quickly gained a following with its dark, open-world setting and intricate lore.
- Advisory Role: As an external team, we provide player analytics to support *Emberveil's* ongoing success.



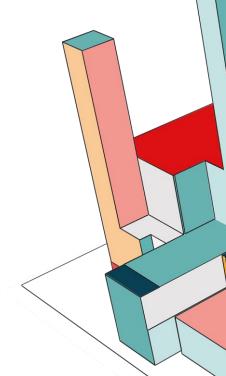
PROJECT SCOPE AND OBJECTIVES

- Retention Rates: Focus on player retention, especially in the first 30 days.
- In-Game Purchases: Assess spending behaviors and trends.
- Development Suggestions: Offer recommendations for future improvements and player engagement.



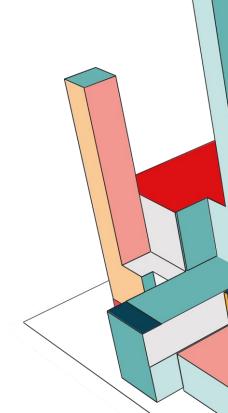
OUR METHODS

- Data Cleaning: Ensuring accuracy and consistency for reliable insights.
- **Statistical Analysis**: Using analytical methods to reveal patterns and behaviors.
- **Visualizations**: Clear graphs for easy interpretation.
- **Recommendations**: Converting insights into actionable strategies.



DATASET

- Dataset includes 16 columns
- Activity ranges from 9/1/2024 9/6/2024, total of 35 players
- Data Cleaning
 - D15 from "eleven" to 11
 - G20 from blank to "0"
 - J9 from "Japan_Osaka" to "Japan"
 - E31 from "12500" to "43" (average of all) purpose





RETENTION RATE ANALYSIS

Confidence-building strategies

OVERALL RETENTION RATE



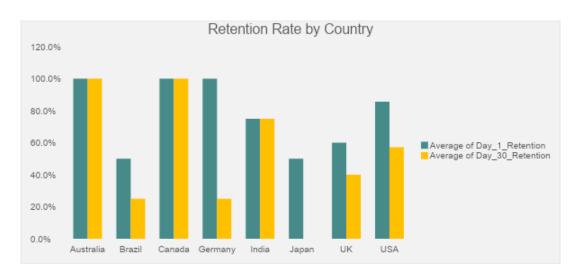
Implication: keeping players engaged over a longer period remains a challenge.

Recommendation:

Consider enhancing midto-late-game content and progression incentives to sustain player interest beyond the initial period.



RETENTION RATE BY COUNTRY

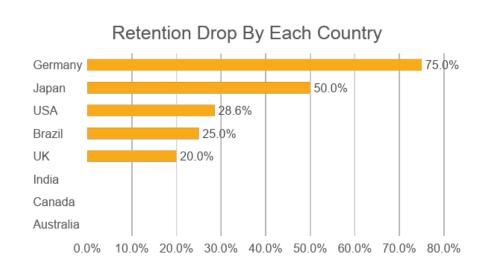


High Day 1 and Day 30 Retention: Germany, Canada, and Australia.

Low Retention: Brazil and Japan:

Recommendation: Localized Content or Events

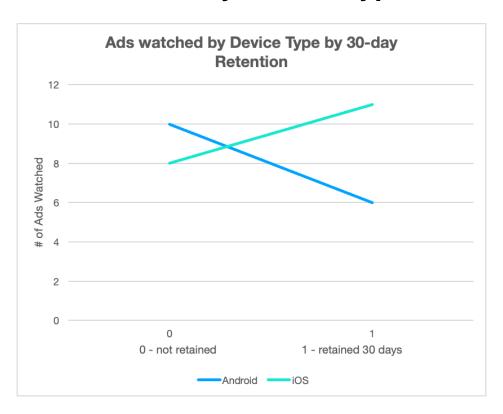
RETENTION RATE BY COUNTRY



Overall Recommendation

- Enhanced Onboarding and Tutorial Features: Address regions with high drop-off rates by improving the early gameplay experience
- Regular Content Updates: To keep highengagement regions interested, offer periodic updates, events, or content expansions targeted to these markets.
- Incentivize Long-Term Play: Introduce rewards for long-term engagement

Ads watched by Device Type

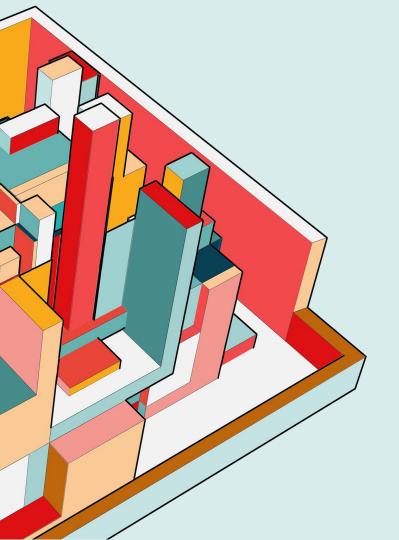


Retained for 30 days:

- Android Users, watch less ads
- iOS Users, watch more ads

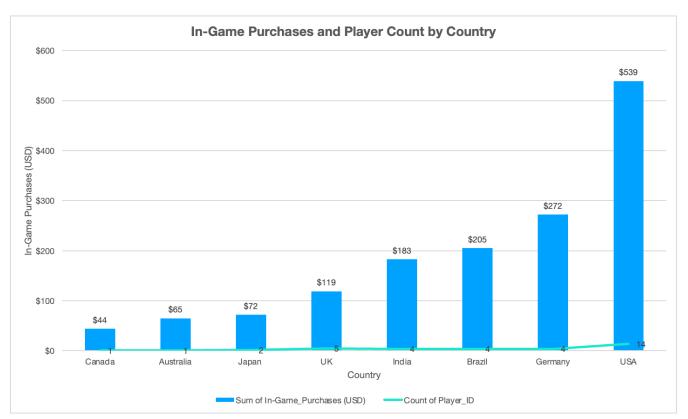
Recommendation:

Determine value of ads watched

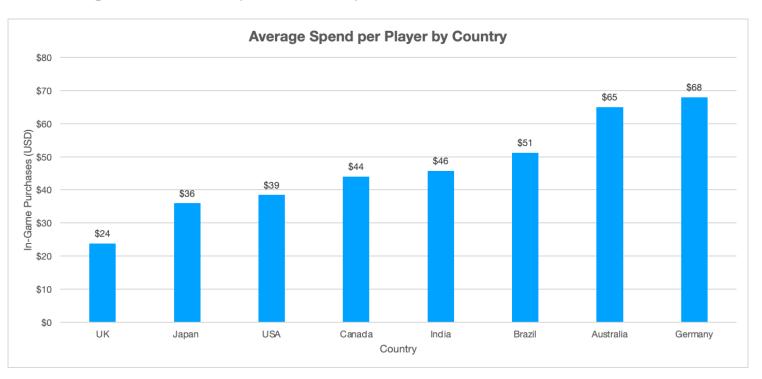


In-Game Purchases

Purchasing Habits by Country

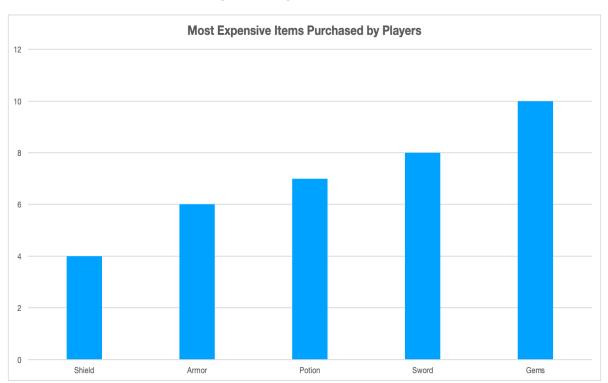


Average spend by Country



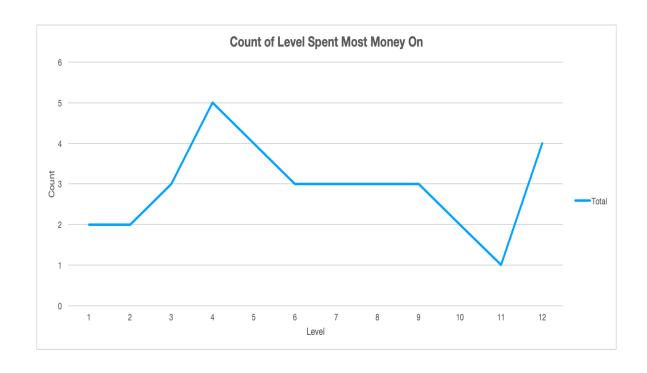
Most Expensive Items Purchased by Players

- -Gems
- -Swords
- -Crucial data needed (price)
- -What level purchased?
- -Frequency of purchase?



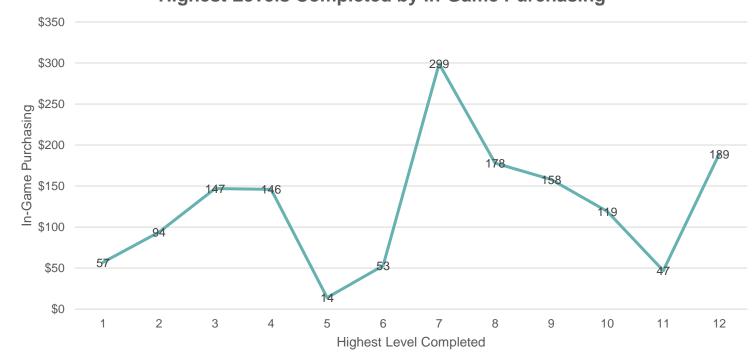
Levels Most Players Spent Most Money on

- -Spike in spending activity
 Level 4
- -Falls down at level 6
- -plateaus until level 9
- -declines at level 11
- -spikes at level 12

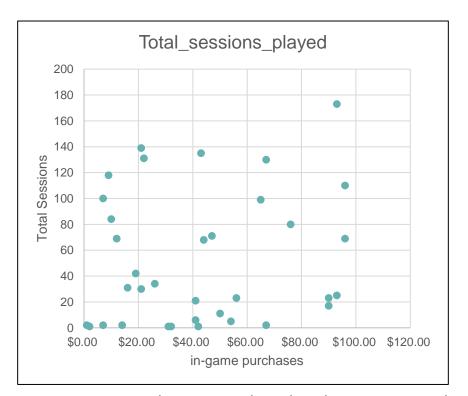


Highest levels completed by in-game purchasing





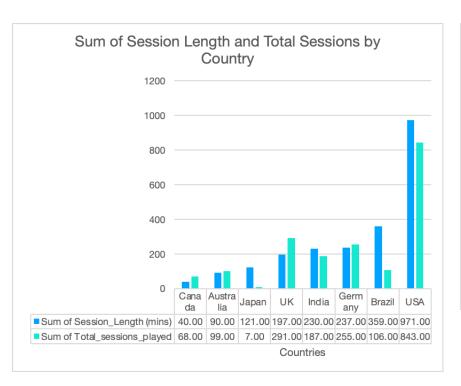
Purchasing Habits - Scatter Plots

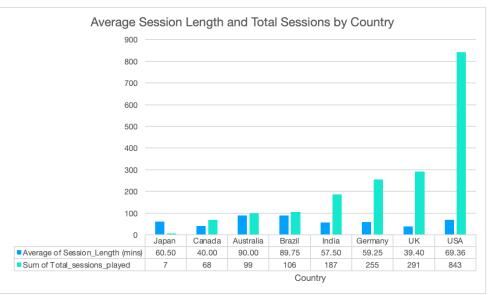




- Total Sessions Played and In-Game Purchases no correlation
- In-Game Purchases and Session Length no correlation

Player Behavior by Country





• Compare session length and total sessions

Shows activity potential by country

Recommendations



Final Take Aways

- Data sample is small, only 35 players
- Retention Rate:
 - Retention goes from 77% to 48.6%
 - Brazil and Japan have lowest retention
- In-Game Purchases
 - All 35 players spent some amount of money
 - USA, Australia, and Germany are biggest spenders
- Player Behavior
 - Find out which items are being purchased at what levels

