

1. Metrics and Definitions

The analyses focus on critical metrics and measures to develop strategies for international markets:

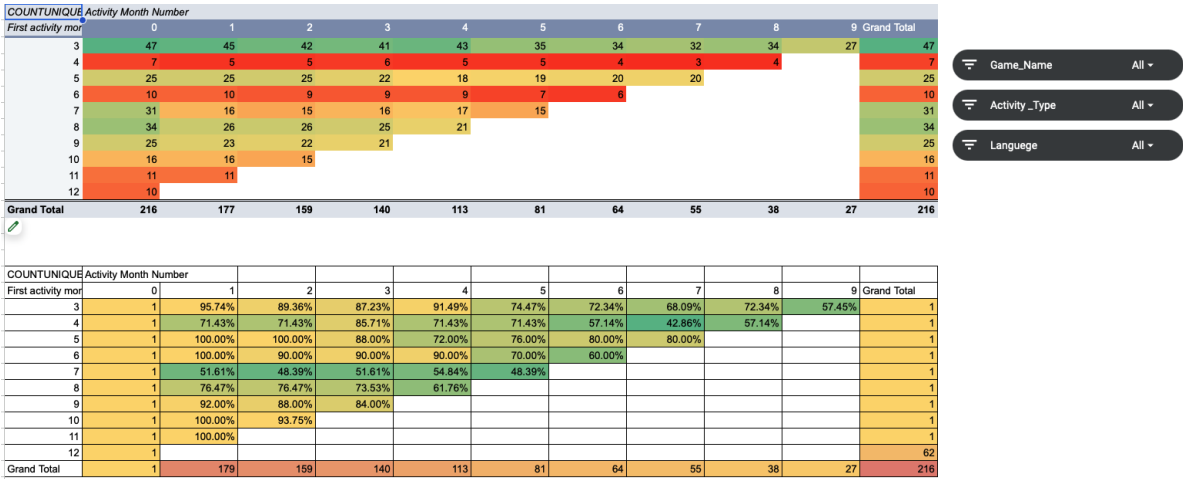
- **Total Revenue:** Assessment of regional revenues and global game sales.
- **CR to Paid (Conversion Rate):** The percentage of users transitioning from free to paid users, analyzed across regions and languages.
- **ARPPU (Average Revenue Per Paid User):** The average revenue per paying user, a key indicator of market profitability.
- **Language-Based User Analysis:** Measuring the impact of language groups on revenue.
- **Regional Device Usage:** Examining the impact of older device users on product accessibility and performance.
- **Retention Rate:** Understanding regional user loyalty by analyzing retention rates based on user acquisition periods.

2. Analytical Techniques

The data from the game company was analyzed using the following techniques:

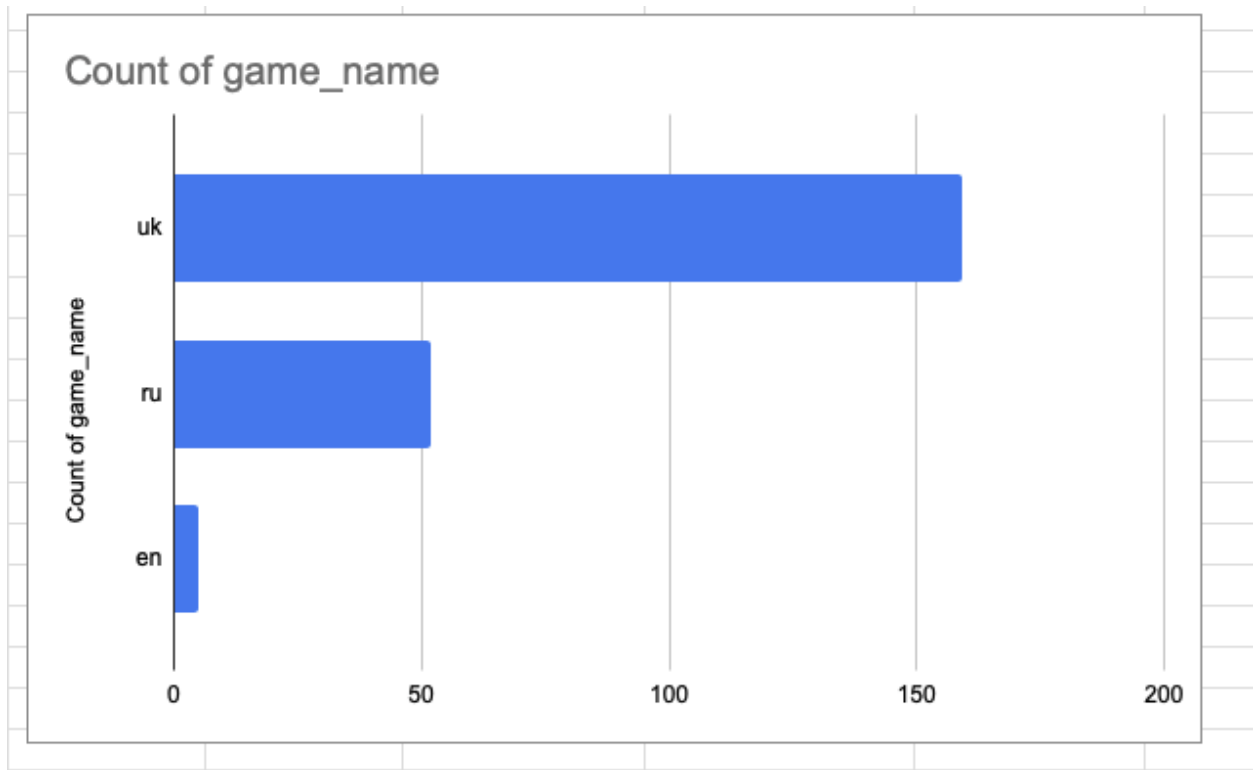
1. Regional Pivot Tables and Revenue Analysis

- Techniques:
 - Comparing game revenues and user loyalty across different regions.
 - Segmenting users to tailor strategies for each market.
- Visual Example:
 - The cohort table at the top visualizes unique user counts by activity month, helping to analyze regional retention trends.

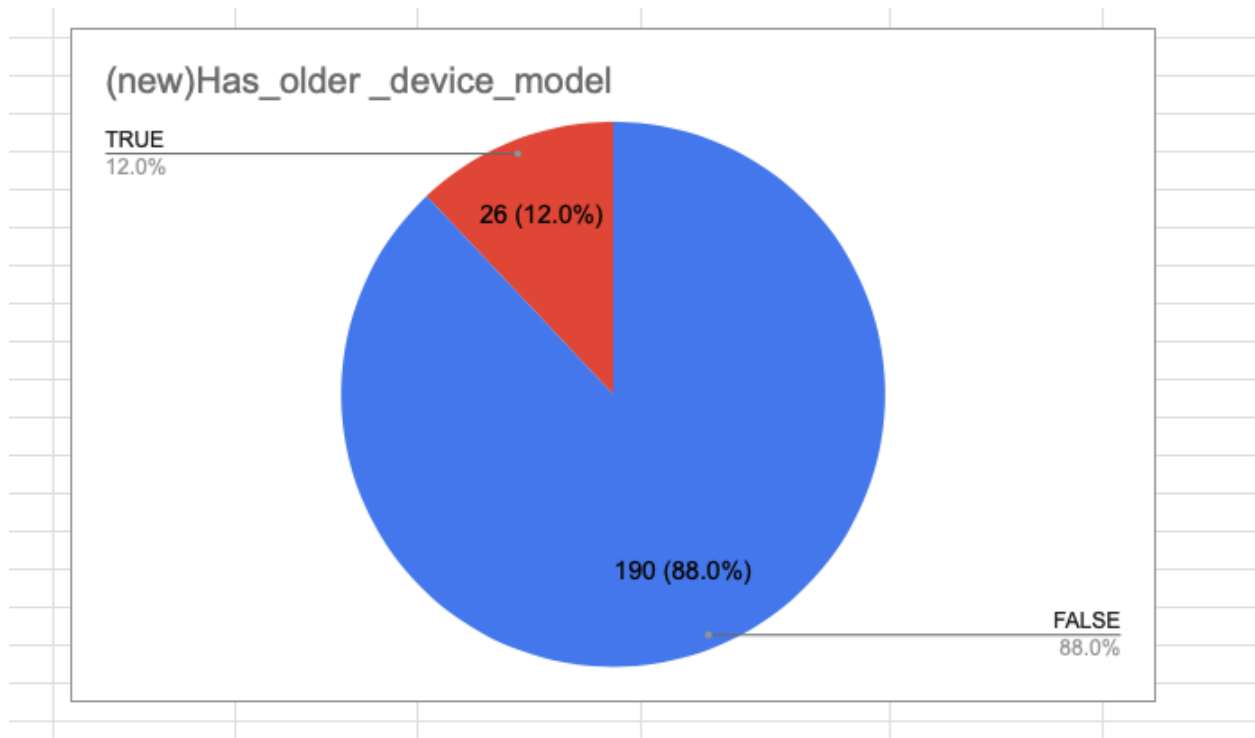


2. Global Data Visualization with Charts

- Bar Charts: Visualizing regional revenues.
 - Example: The bar chart visualizes the count of users by language, providing insights into region-specific engagement.



- **Pie Charts:** Showing the proportion of users with older device models.
- **Example:** The pie chart in **6th Image** highlights the percentage of users with older devices, critical for targeting accessibility improvements.



- **Trend Graphs:** Analyzing weekly active user trends and DAU/WAU ratios.
- **Example:** The trend graph in **9th Image** displays WAU (Weekly Active Users) and DAU/WAU ratios over time, essential for understanding stickiness.

Activity Name	Activity Type
Main campaign	Campaign
Special events	Special Events
Battle pass challenges	Challenges
Campaign	Campaign
Special events and challenges	Special Events
Mini-games	Mini Games
Clan activities	Clan Game
Clan multiplayer	Clan Game

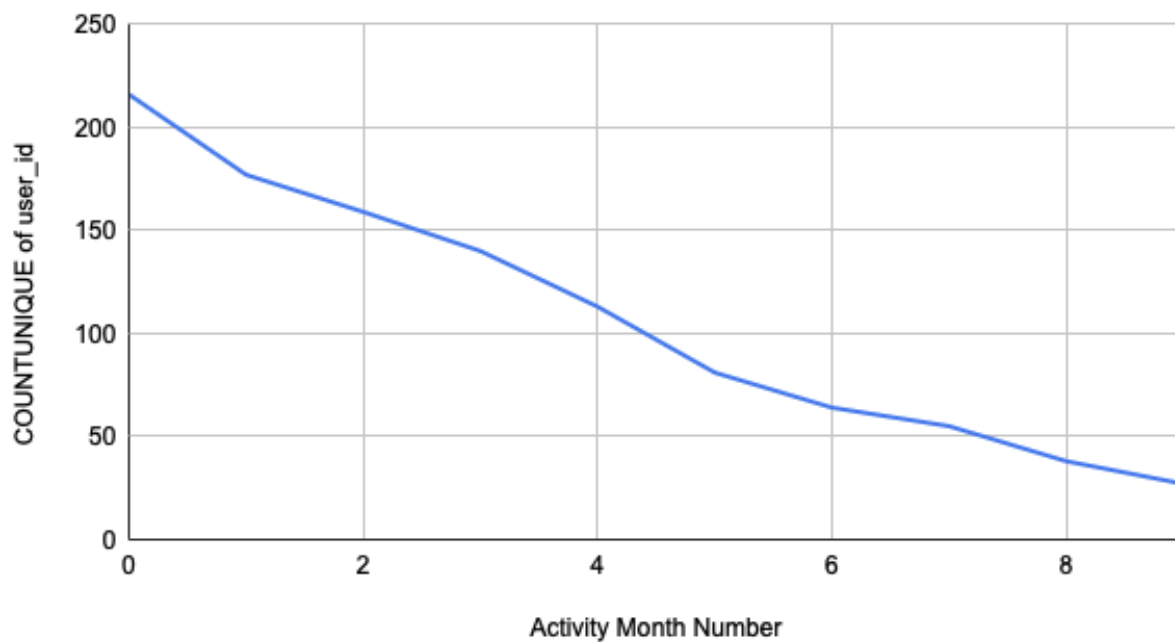
3. Statistical Measurements

- **Techniques:**
 - Evaluating regional differences in user age distributions through averages, medians, standard deviations, and percentiles.
 - Using interquartile range (IQR) to analyze market segmentation.
- **Example:**
 - The line graph in **5th Image** shows unique user counts decreasing over time, revealing insights about user retention by cohort.

Activity Month Number	COUNTUNIQUE
	0
0	216
1	177
2	159
3	140
4	113
5	81
6	64
7	55
8	38
9	27
Grand Total	216



COUNTUNIQUE of user_id vs. Activity Month Number



4. Cohort Analysis

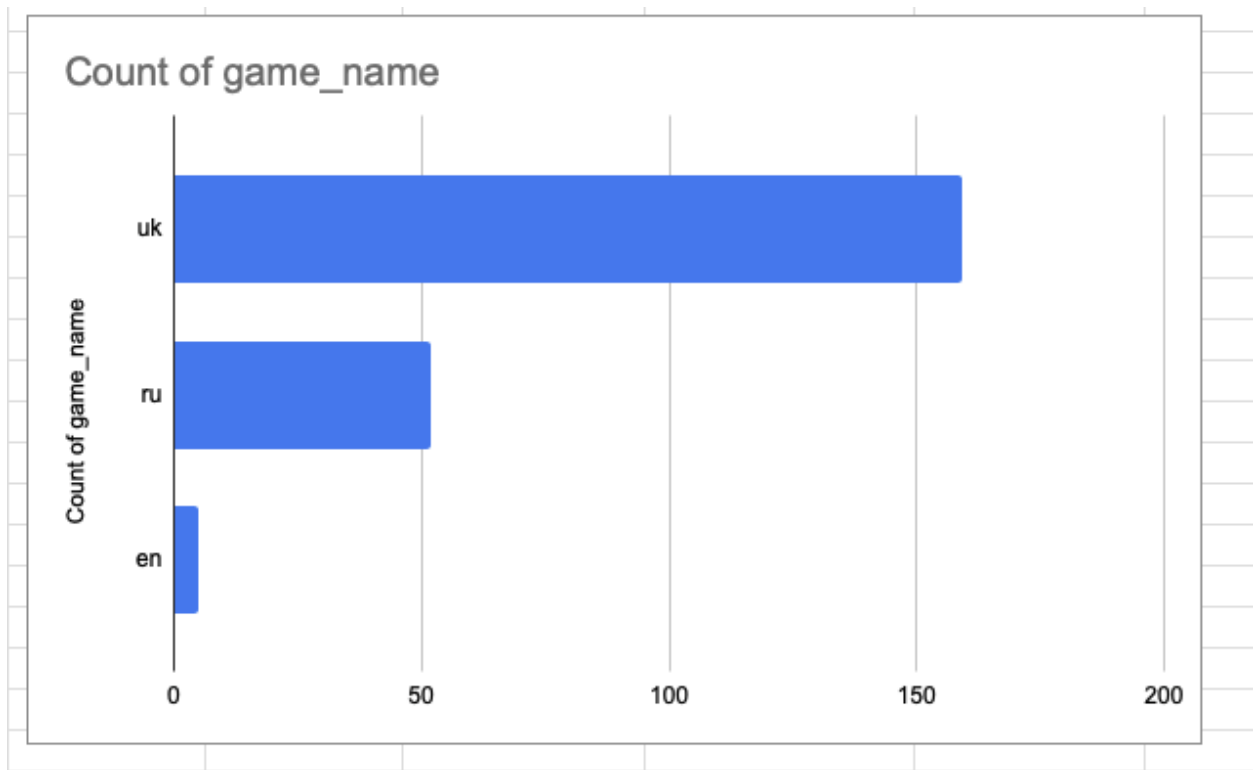
- Techniques:

- Evaluating user return rates (retention rates) across regions.

- Analyzing user behavior based on the first activity month.

5. Revenue and User Segmentation

- **Techniques:**
 - Identifying which game packages and regions contribute the most revenue.
 - Segmenting users by language and device preferences.
- **Example:**



- **3rd Image:** Language-based user counts help identify regions that drive the most revenue.

3. Example Project Studies

Project 1: Global Revenue and Conversion Analysis

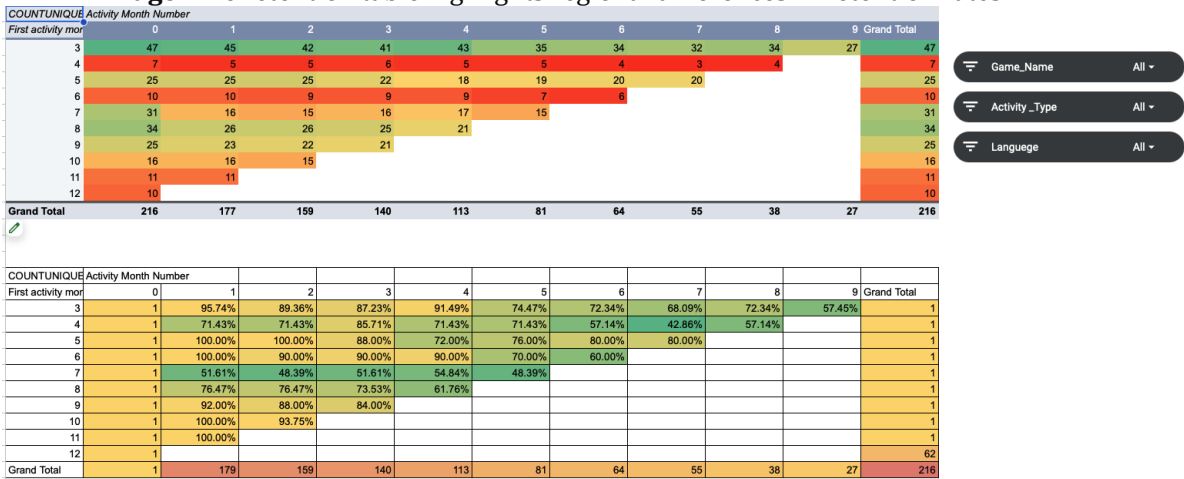
- **Objective:** To analyze the impact of game packages and pricing on user behavior across different regions.
- **Sample Analysis:**
 - Comparing revenue rates based on language (e.g., English, Spanish-speaking users).
 - Exploring regional differences in conversion rates (CR to Paid) and forming hypotheses.
- **Recommendations:**
 - Revising pricing strategies in emerging markets.
 - Positioning premium game packages to target high-income segments.

Project 2: Regional Stickiness and User Behavior

- **Objective:** To measure regional user engagement (stickiness) and active user behavior.
- **Sample Analysis:**
 - Calculating DAU, WAU, and DAU/WAU metrics for various regions.
 - Developing strategies to increase user engagement in specific regions.
- **Graph:**
 - **9th Image:** The graph displays WAU and DAU/WAU metrics over time, critical for understanding regional stickiness.

Project 3: Cohort Analysis for Regional User Retention

- **Objective:** To understand global user retention rates.
- **Sample Analysis:**
 - Calculating retention rates based on the first activity month.
 - Evaluating how retention rates vary across regions and influence acquisition strategies.
- **Table and Graph:**
 - **Image:** The retention table highlights regional differences in retention rates.



Project 4: Language and Device-Based Segmentation

- **Objective:** To analyze user segments by region and language to improve product accessibility.
- **Sample Analysis:**
 - Identifying the proportion of older device users in different regions.
 - Analyzing language-based user revenues and in-game activities.
- **Technique:** Using functions like VLOOKUP and MINIFS for data processing and segmentation.
-

4. International Trade Perspective

The analyses provide actionable insights to support the company's strategic goals in international trade:

1. Export Strategies

- Positioning products based on user language, device, and age preferences in different regions.
- Identifying target markets for high-performing game packages to expand global reach.

2. Import Strategies

3.

- Understanding purchasing behaviors in regional in-game transactions to acquire the necessary infrastructure (e.g., payment systems).
- Procuring technologies that facilitate user behavior analysis.

3. Marketing Strategies

- Adjusting pricing and language adaptation for emerging markets.
- Creating exclusive content for premium segment users to maximize revenue.

5. Conclusion

This portfolio provides a comprehensive framework for integrating game company data analyses into international trade strategies. By considering regional differences and global user behavior, the findings can guide the development of effective export strategies and revenue optimization. The replicable nature of the analyses ensures that the company can continue to leverage data-driven insights to grow in international markets.