**Conjoint Analysis Consulting Report**

**Executive Summary**

This report addresses the need to understand consumer preferences for key product attributes and recommend actionable strategies for increasing market share. Based on the conjoint analysis critical attributes that drive customer decisions and how product offerings can be adjusted for optimal market performance were identified. The current product offerings do not fully align with consumer preferences, leading to potential market share loss.

The following recommendations focus on leveraging the most impactful product attributes, enhancing marketing spend efficiency, and applying targeted strategies to capture a greater market share.

Main Recommendations:

1. Optimize product configuration towards optimal product
2. Enhance Product based on feature importance
3. Conduct regular market simulation and Trend Analysis

**1.Optimize product configuration towards optimal product**

Our Optimal Product had the following attributes and levels.

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Based on our current survey we found that the target market values these attributes and its levels more compared to other levels. With this we can change our product configuration to make it the optimal product for the target market. From this we can infer that the target market wants the price in between 100-150, with more content library but the duration should be less than 30 minutes, they need private stream which they don’t want to share with others. Release frequency should be less they should not be bombarded with continuous inflow new releases. They don’t seem to mind the ads. They prefer to have better app rating.

The Company should take steps towards improving the rating of the app by means of

* customer feedback
* Improve App quality
* Offer incentives for reviews
* Leverage external channels - influencer marketing, social media
* Engage with Users
* Build a community

**2.Enhance Product based on feature importance**

Based on the analysis of optimal product attributes and their importance to the target market, the following strategies are recommended to enhance the app:

1. **Price Optimization**
   * **Importance: 29.20%**
   * Maintain competitive pricing between $100-$150. Consider introducing promotional offers or tiered pricing to increase accessibility and perceived value.
2. **Enhance User Ratings**
   * **Importance: 19.71%**
   * Focus on gathering user feedback to improve features that directly impact user satisfaction. Implement changes based on reviews to boost ratings within the 3-4.5 star range.
3. **Content Duration Management**
   * **Importance: 18.98%**
   * Ensure content is engaging and concise, with a duration of less than 30 minutes, aligning with user preferences for shorter content.
4. **Improve Streaming Quality**
   * **Importance: 18.25%**
   * Enhance streaming capabilities to ensure seamless playback with minimal interruptions, maintaining a single high-quality stream.
5. **Increase Titles per Month**
   * **Importance: 8.03%**
   * Although less critical, consider offering up to five new titles per month to keep content fresh and engaging for users.
6. **Content Library Expansion**
   * **Importance: 3.65%**
   * Gradually expand the content library beyond 2000 items to provide more variety, catering to diverse interests.
7. **Ad Management**
   * **Importance: 2.19%**
   * While ads have the least importance, reducing their frequency or offering an ad-free experience could enhance user satisfaction and retention.

By prioritizing these strategies according to their importance, the company can effectively align its app offerings with market demands and improve overall user experience.

**3.Market Simulation and Trend Analysis**

To stay competitive in a dynamic market, it is crucial for the company to continuously monitor and adapt to changing consumer preferences. Here's how the company can effectively conduct market simulations:

1. **Trend Identification**
   * Regularly analyze current purchase patterns and conduct focus groups to gather insights into evolving consumer tastes. This helps in understanding the direction in which preferences are moving**.**
2. **Data Utilization**
   * Use the gathered data to identify optimal product attributes and their order of importance. This ensures that the product configurations align with market demands.
3. **Simulation Execution**
   * Develop various product configurations based on the identified attributes. Conduct market simulations to evaluate potential performance and consumer acceptance of these configurations**.**
4. **Feedback Integration**
   * Use simulation results to refine product offerings, ensuring they meet or exceed consumer expectations. Adjust strategies based on feedback to enhance product-market fit.
5. **Market Entry Barrier Analysis**
   * Check if the product can gain entry into the market

**Analyst report**

**1. Introduction**

* **Background**:
  + Conjoint analysis is a methodology used to decompose an individual's value system for a product from overall judgment of the product.
  + It helps in understanding the value/utility of each product attribute at each attribute level.
  + The study used conjoint analysis to understand consumer preferences for a product and identified the optimal product configuration.
  + The methodology involved selecting attributes and levels, designing and conducting the experiment, data collection and analysis, and interpreting conjoint output.
* **Objective**:
  + The objective of this study is to use conjoint analysis to understand consumer preferences for a streaming platform and to identify the optimal product configuration.

**2. Methodology**

* **Step 1: Selecting Attributes and Levels**:
  + **Focus Groups**:
    - Conducted 4 focus groups to identify relevant attributes and levels.
    - Gather information required with the help of surveys
  + **Management Input**: Gathered input from management to ensure alignment with business goals.
    - Goals include identifying optimal product configurations for their target market.
  + **Competitive Analysis**: Conducted a competitive analysis to identify market trends and competitor offerings using perceptual map.
  + **Attributes and Levels**: Selected 7 attributes with 3 levels each:
    - Price: <50, 100 - 150, >150
    - Content Library: under 500, 500 - 2000, >2000
    - Ads: no ads, occasional interruptions, frequent interruptions
    - Content release Frequency: <5 titles per month, 5 - 20 titles, >20 titles per month
    - Ratings: <3 stars, 3 - 4.5 stars, >4.5
    - Duration: <30 min, 30 - 90, >90
    - Streams: 1 stream, 2 - 3 streams, >3 streams
* **Step 2: Choosing Stimulus Representation**:
  + **Full Profile**: Used full profile method to include all attributes in each profile.
* **Step 3: Designing and Conducting the Experiment**:
  + **Orthogonal Experimental Design**: Used orthogonal design to minimize the number of profiles while ensuring reliable estimation of utilities. Check Appendix A for the design.
  + **Profiles**: Created 18 profiles using Design Part A and Design Part B.
    - Part A is the Code Sheet (Appendix B)
    - Part B is the products we use
  + **Response Type**: Choose rating (1-7) as the response type there were 18 profiles only.
* **Step 4: Data Collection and Analysis**:
  + **Data Collection**: Collected rankings from focus group respondents.
  + **Regression Analysis**: Conducted multiple regression analysis using Excel to estimate utilities.(Appendix C)
* **Step 5: Interpreting Conjoint Output**:
  + **Re-scaling Utilities**: Re-scaled utilities between 0 and 1.(Appendix D)
    - Collected the regression coefficient data
    - Order utilities from largest to smallest
    - Include intercept in it
    - Include other levels which are not in code sheet in it
    - We took the levels not mentioned in the code sheet as baseline and gave their Coefficient as “Zero”.
    - Calculated range of the coefficients.
    - Apply Re-scale formula to the table; (Coefficient – lowest coefficient)/ range
  + **Optimal Product**: Identified the optimal product based on total utility.(Appendix E)
    - Identify the attributes and levels
    - Calculate the TPU
      * For each attribute, select the level with the highest utility
      * Sum these utilities to get the TPU for the optimal product.
      * Select Highest Utilities:

- Price: 100-150 = 0.808823529

- Subscribers: >2000 = 0.220588235

- Ads: frequent interruptions = 0.220588235

- Titles per Month: <5 titles per month = 0.382352941

- Ratings: 3-4.5 stars = 0.617647059

- Duration: <30 min = 0.602941176

- Streams: 1 stream = 0.367647059

* + - * Calculate TPU:
        + TPU = 0.808823529 + 0.220588235 + 0.220588235 + 0.382352941 + 0.617647059 + 0.602941176 + 0.367647059
        + TPU = 3.220588235
  + **Overall Feature Importance**: Calculate the importance of each feature by dividing its range by the sum of all features’ ranges. (Appendix F)
    - Calculate the Range of each attribute
    - Calculate Sum of all Ranges
    - Importance of Attributes = Range of each attribute / Sum of all Ranges
    - Overall Feature Importance:

- Price: 29.20%

- Subscribers: 3.65%

- Ads: 2.19%

- Titles per Month: 8.03%

- Ratings: 19.71%

- Duration: 18.98%

- Streams: 18.25%

* + **Market Share**: Estimated market share using the preference share formula.(Appendix G)
    - Calculate TPU for each product variation that means 18 TPU’s.
    - Calculate Market Share
      * Formula = Exp(TPU of Product)/ Exp(TPU of all Products)
    - The Calculation related to the computation of TPU and Market Share are in Appendix .
  + **Simulating the Market**: Tested the impact of feature changes on market share. (Appendix H)
    - Create Four hypothetical product variations
    - Calculate their TPU’s
    - Once again Compute market share of all products
    - Compare the before and after variation in the Market share
    - The Market share is increasing when we are changing lowest re-scale value to high value in particular attribute and decreasing when we move away from high re-scale value in attribute. In first three products, we changed their attributes containing high re-scale value to lower value. We can see that the percentage change after the market simulation is negative. Whereas in 4th product I have changed > 90 min to < 30 min average content duration because through our optimum product we found that market likes short content compared to long ones. We can see after the market simulation the percentage change is 34%.
    - Calculations are in the Appendix
  + **The Intercept**: Identified the minimum acceptable product based on the re-scaled intercept.

**3. Technical Details**

* **Sample Size**: 100 respondents participated in the study.
* **Analysis Tool**: Excel was used for multiple regression analysis.
* **Main Details**:
  + **Attributes**: 7 attributes with 3 levels each.
  + **Profiles**: 18 profiles were created using orthogonal design.
  + **Response Type**: Rating was used as the response type.

**Technical Appendix**

* **Appendix A: Orthogonal Design – Part A**:

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* **Appendix B: Code Sheet – Part B**:

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* **Appendix C: Regression Analysis**:

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* **Appendix D: Re-scaled Utilities**:

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* **Appendix E: Optimal Product**

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* **Appendix F: Overall feature important**

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* **Appendix G: Market share**

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* **Appendix H : Simulating the market**

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