

#### Apple tv

• Apple TV+ is a subscription-based streaming service launched by Apple Inc. in November 2019. It focuses on producing high-quality, original content, including TV shows and movies. The service aims to provide a premium viewing experience with a curated selection of exclusive content.





#### Market overview

- The streaming industry is highly competitive, with major players like Netflix, Amazon Prime Video, Hulu, and Disney+. These services offer a wide range of content, including original productions and licensed content from various studios and networks.
- The industry is characterized by rapid growth, with increasing demand for diverse and engaging content.

#### Problem statement

Despite investing heavily in original content, Apple TV+ faces challenges in attracting and retaining subscribers. The service has not seen significant growth in viewership, with only 0.2% of total TV viewing in the U.S. and high churn rates compared to competitors

#### Perceptual mapping

To address this issue, we will use perceptual mapping to understand how consumers perceive Apple TV+ in relation to its competitors. This will help identify gaps in the market and opportunities for differentiation.

#### Key Questions to Answer:

- How do consumers perceive Apple TV+ compared to other streaming services?
- What attributes are most important to consumers when choosing a streaming service?

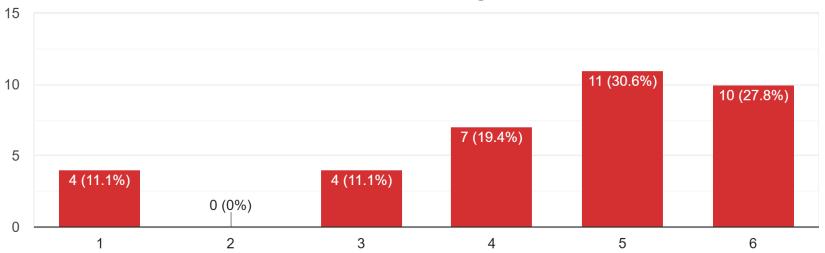
#### Conjoint Analysis

We will use conjoint analysis to determine the optimal combination of features and pricing that would make Apple TV+ more appealing to consumers.

Objective is to identify the most influential factors in consumer's decisions to subscribe to Apple TV+

What features (e.g., ad-supported tier, expanded content library) are most valued by consumers?

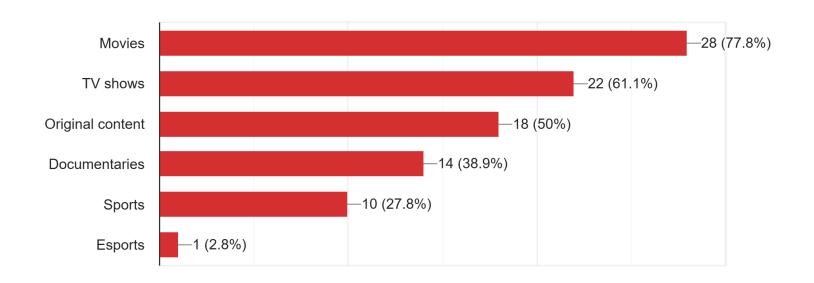
#### **Satisfaction Level with Current Streaming Services**



- **Finding:** Majority of respondents rate their satisfaction at 5 or 6 out of 6.
- **Insight:** High satisfaction levels indicate that users generally have positive experiences with their streaming services.
- Implication for Apple TV+: To compete effectively, Apple TV+ must maintain high satisfaction by focusing on quality content and user experience improvements.

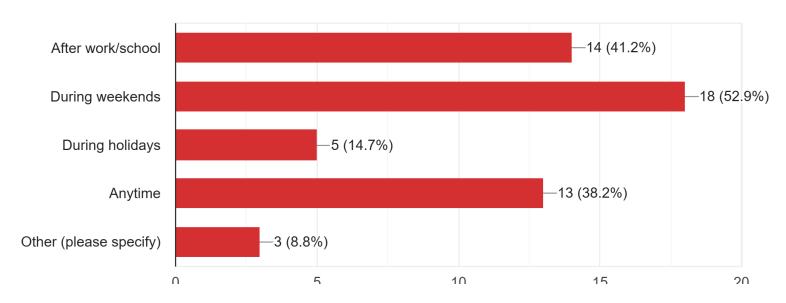
#### Survey Findings

#### **Content Preferences of Streaming Service Users**



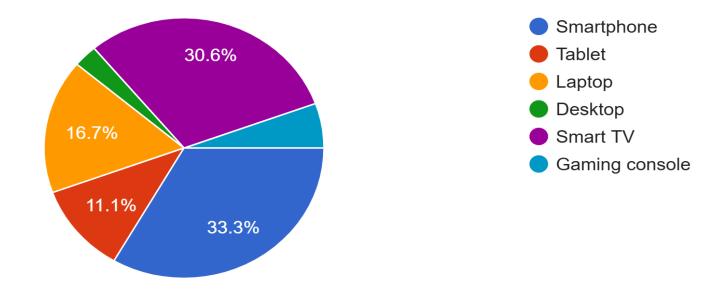
- Finding: Movies (77.8%) and TV Shows (61.1%) are top choices, with Original Content at 50%.
- **Insight:** High user interest in movies, TV shows, and exclusive original content.
- Implication for Apple TV+: Expand movie and TV show offerings and continue investing in original content to meet demand.

Occasions of Use: When do you typically use online streaming services? (Select all that apply) 34 responses



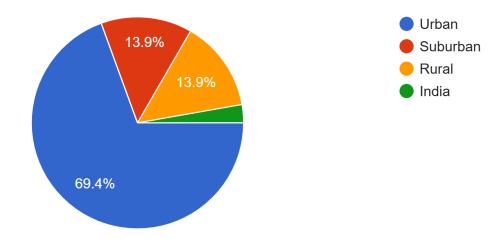
- **Finding:** Over half of users (52.9%) stream on weekends, with strong usage after work/school and anytime.
- Insight: Weekends are peak streaming times, showing a preference for leisure viewing.
- Implication for Apple TV+: Focus on weekend releases and promotions to capture peak engagement.

#### **Device Preference for Streaming Services**



- **Finding:** Smart TVs (30.6%) and Smartphones (33.3%) are the top devices for streaming.
- **Insight:** Users value large screens (Smart TVs) and convenience (Smartphones) for viewing.
- Implication for Apple TV+: Prioritize high-quality streaming on both Smart TVs and Smartphones, and optimize the mobile app to engage smartphone users.

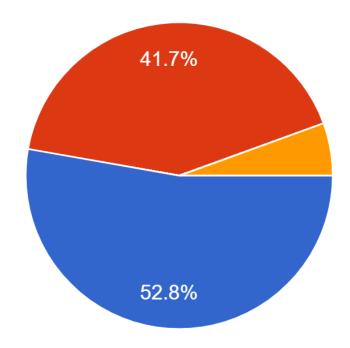
#### What is your current location? 36 responses



- Finding: Most users (69.4%) are in urban areas.
- **Insight:** Urban users dominate, indicating a tech-savvy, trend-focused audience.
- Implication for Apple TV+: Focus marketing on urban areas with high streaming adoption and consider location-specific content for urban viewers.

#### What is your gender?

36 responses

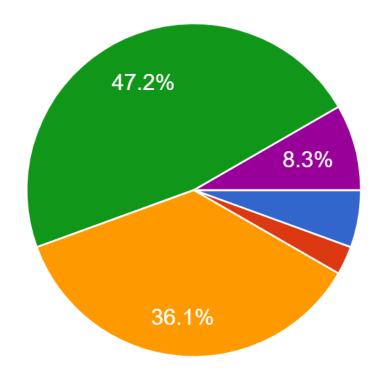








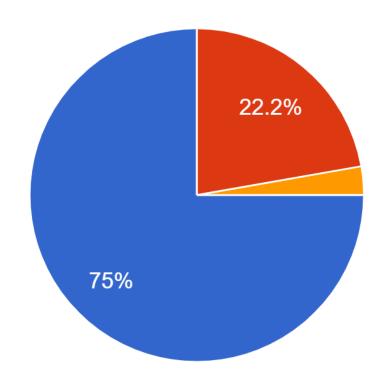
#### What is your highest level of education? 36 responses



- High school or equivale
- Some college
- Bachelor's degree
- Master's degree
- Doctoral degree
- Other (please specify)

#### What is your marital status?

36 responses





#### **Brands**

- Netflix
- Amazon Prime
- Hulu
- Paramount Plus
- Disney Plus
- Youtube TV
- Apple TV
- Cruncyroll
- Tubi
- Peacock



#### Attributes

- Large content library
- Good Streaming Quality
- Low Subscription Price
- High Device Compatibility
- Language Restriction
- Good Customer Support
- Easy Searchability
- No of Ads

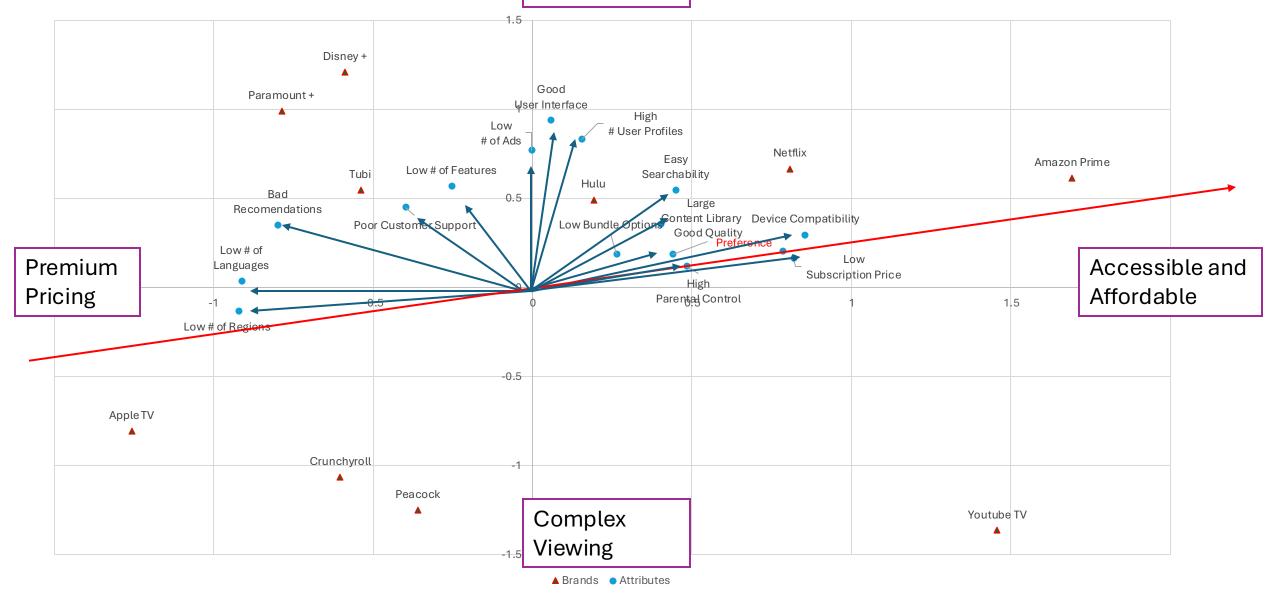
- Good User Interface
- High Degree of Parental Control
- No of Users per profile
- Good
   Recommendations
- Additional Features
- Bundling offers
- Preference

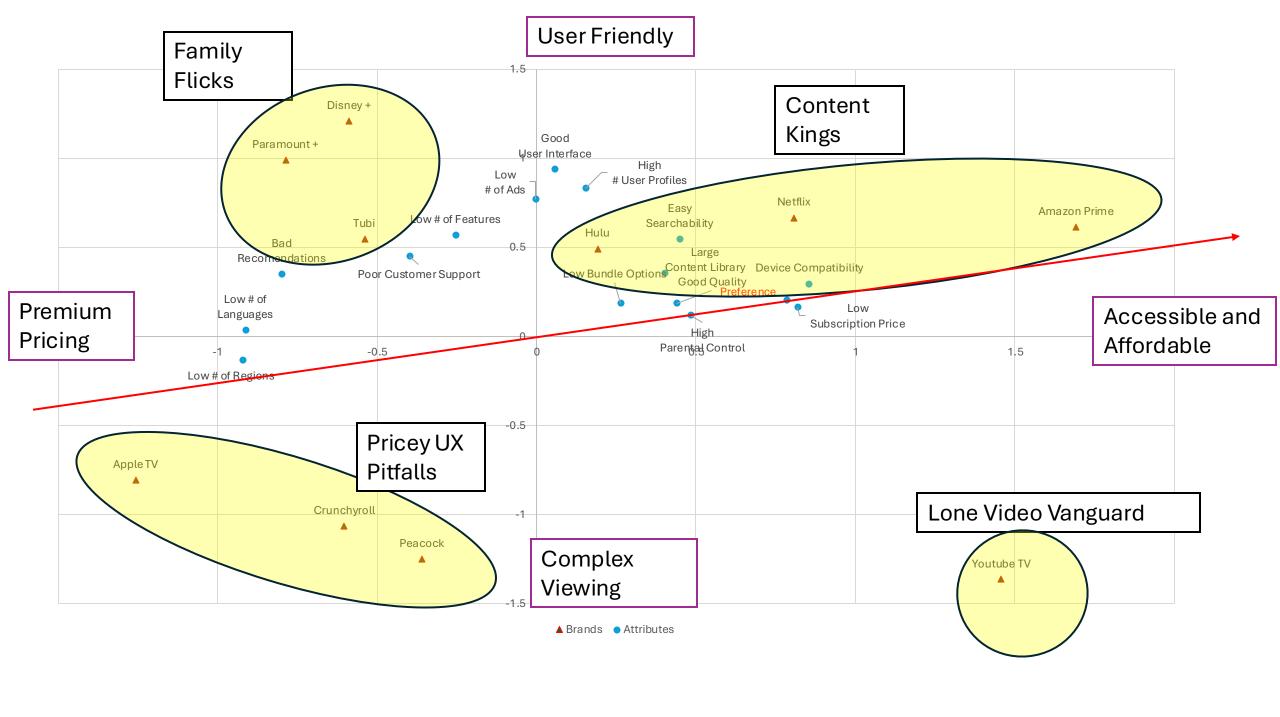
#### **SPSS Output**

			Total Va	ariance Ex	plained					
Initial Eigenvalues				Extraction	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
Large Content Library	6.461	38.008	38.008	6.461	38.008	38.008	5.332	31.362	31.362	
High Device Compatibility	3.104	18.258	56.266	3.104	18.258	56.266	4.234	24.904	56.266	
Low Subscription Price	2.558	15.046	71.312							
Low Region Restriction	1.896	11.154	82.466							
Poor Customer Support	1.316	7.743	90.208							
Easy Serchability	.752	4.421	94.630							
Low Nunber of Ads	.463	2.721	97.350							
Good User Interface	.302	1.777	99.128							
Offline Access	.148	.872	100.000							
Low No. User Profiles	6.817E-16	4.010E-15	100.000							
High Parental Control	2.841E-16	1.671E-15	100.000							
Bad Recomendations	1.721E-16	1.012E-15	100.000							
Low Additional Features	-8.242E-17	-4.848E-16	100.000							
Low Bundle Options	-1.414E-16	-8.317E-16	100.000							
Low # of Languages	-1.505E-16	-8.853E-16	100.000							
Good Streaming Quality	-3.715E-16	-2.185E-15	100.000							
Prefrence	-8.725E-16	-5.132E-15	100.000							
Extraction Method: Principa	al Component A	Analysis.								

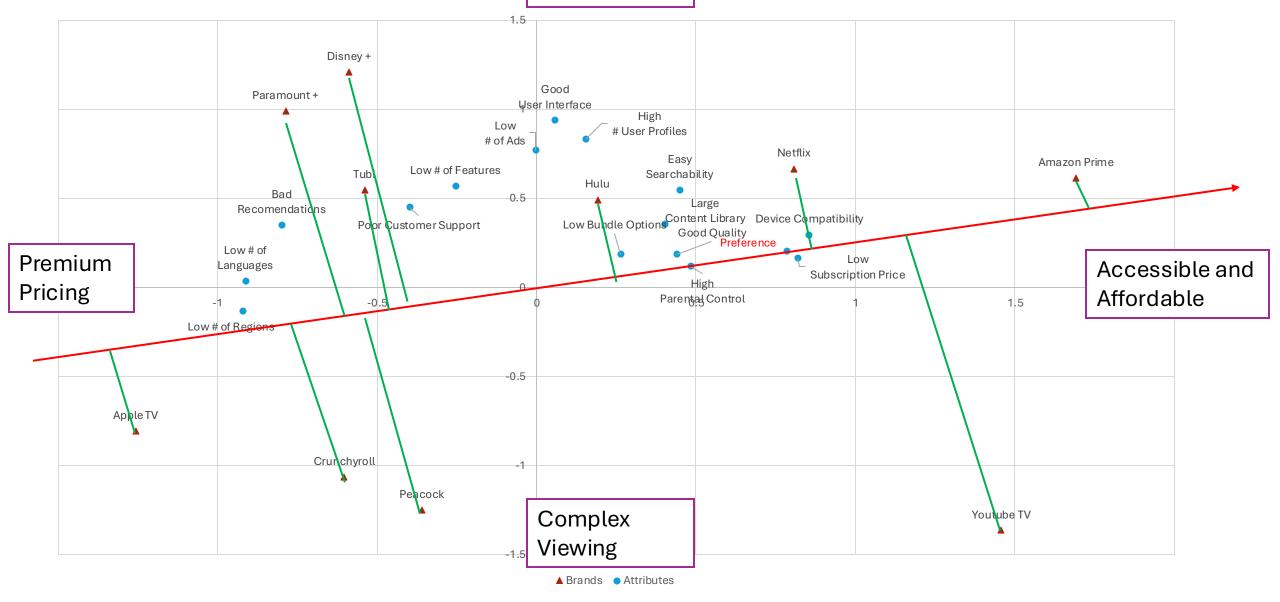
Content Library, Device Compatibility, and Subscription Price make up 71% of the variance

**User Friendly** 



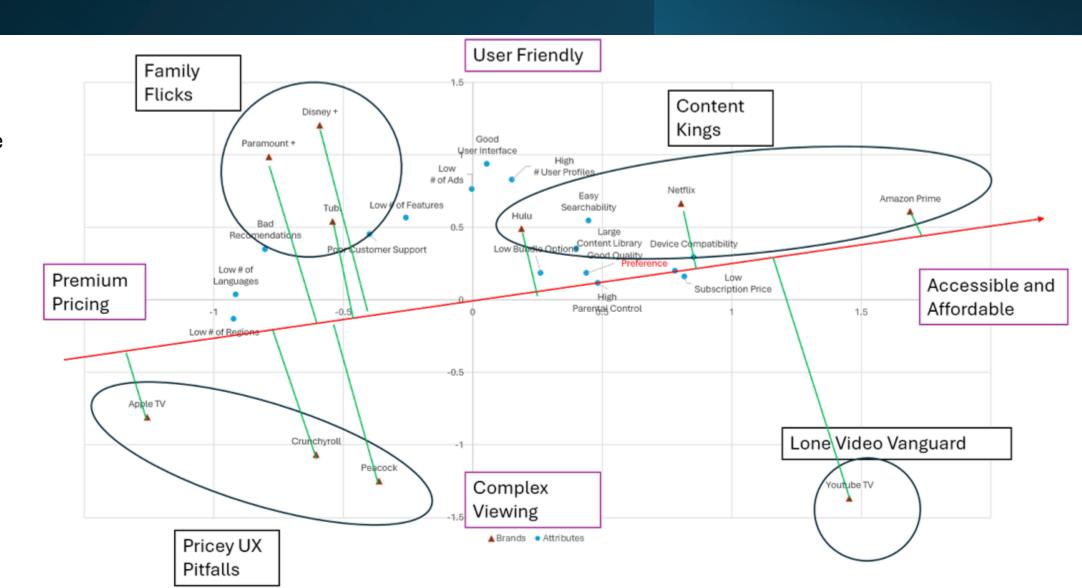


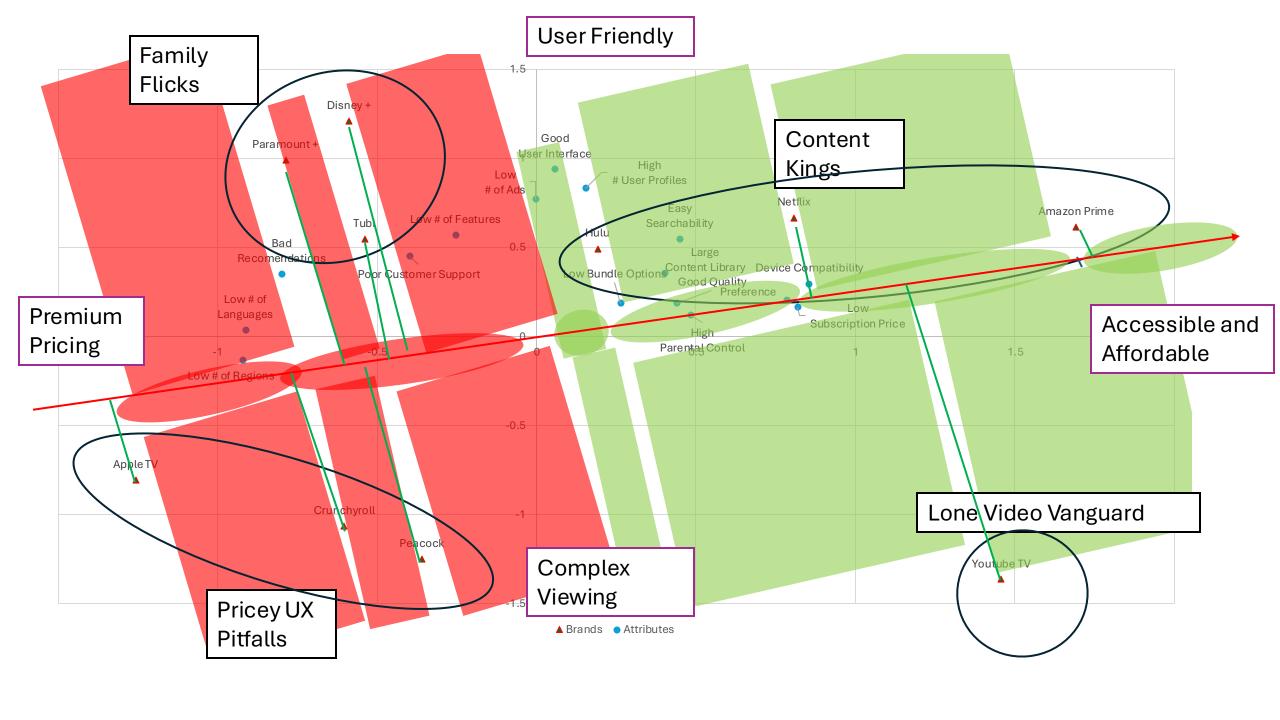
**User Friendly** 

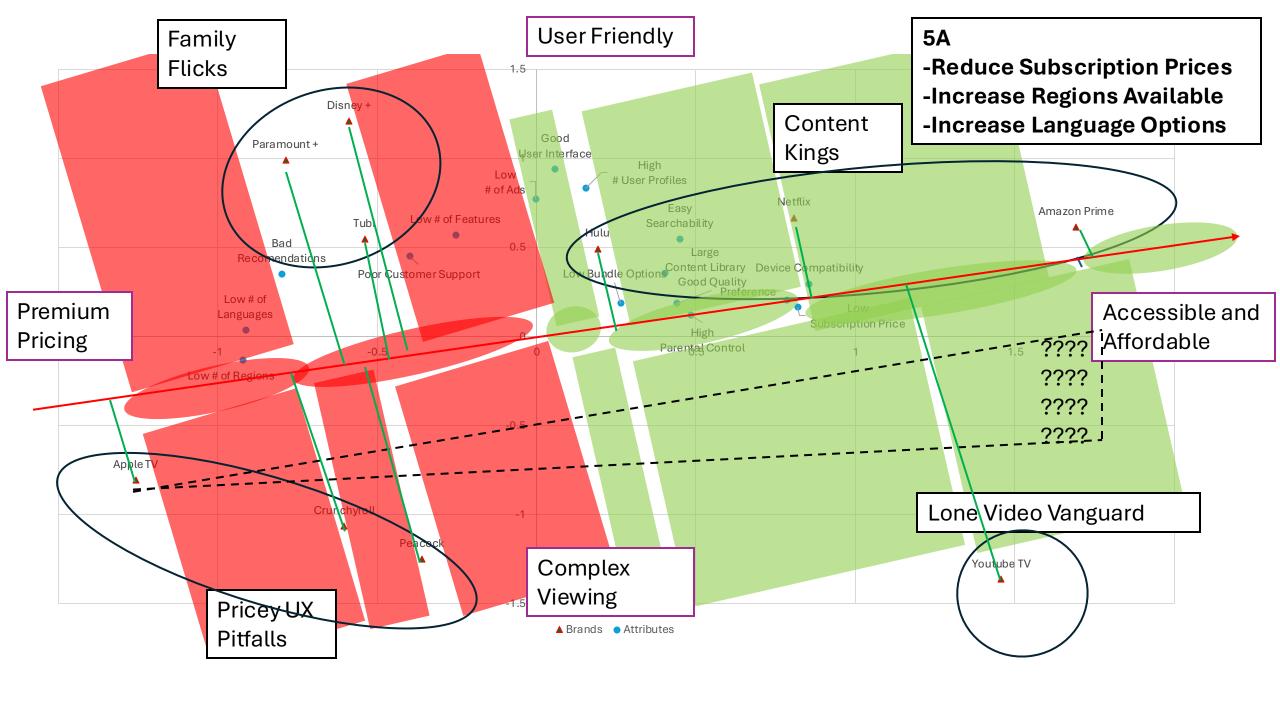


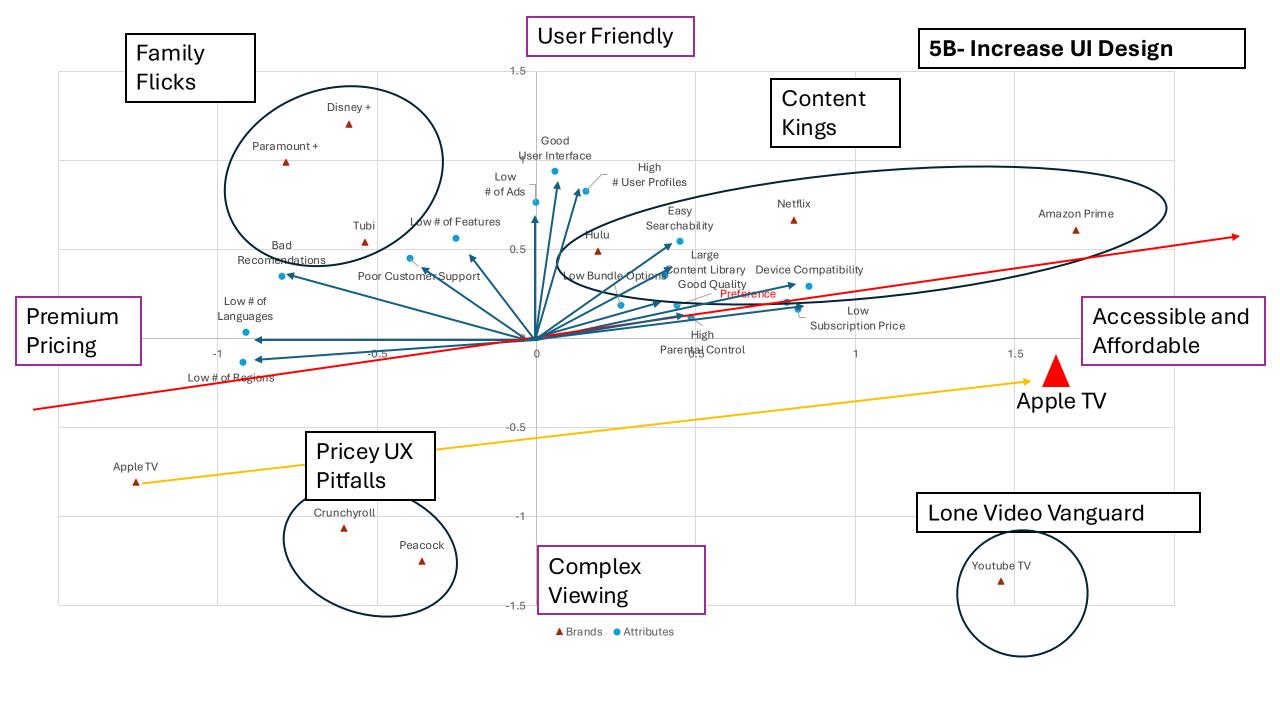
#### Order of Preference

- 1.) Amazon Prime
- 2.) Youtube TV
- 3.) Netflix
- 4.) Hulu
- 5.) Disney +
- 6.) Tubi
- 7.) Peacock
- 8.) Paramount +
- 9.) Crunchyroll
- 10.) Apple TV









#### Repositioning (5A)

- Apple TV needs to increase their number of streamers by reducing their subscription price-5A
  - Apple TV-\$10 monthly, Amazon Prime-\$9 monthly, Netflix-\$7 monthly
  - Apple TV promo for \$7 a month for first 3 months
- Increase perception of regions and languages available
  - Make more content that is based in more cultures rather than American
  - Do more promo of international content

#### Repositioning (5B)

- Streamline the Apple TV UI to make navigation more intuitive. Key changes should include:
  - Clearer categorization of content.
  - Improved search functionality with predictive text and filters.
  - Reduced screen clutter to focus on high-demand content.

# Conjoint analysis

#### Attributes and levels

#### 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

### Regression output

Regression S	tatistics							
Multiple R	0.173018884							
R Square	0.029935534							
Adjusted R Square	0.004067148							
Standard Error	1.257670644							
Observations	540							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	14	25.62592593	1.83042328	1.157224668	0.305041803			
Residual	525	830.4111111	1.58173545					
Total	539	856.037037						
		0. 1.15						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	3.15	0.209611774	15.02778178	1.02834E-42	2.738219168	3.561780832	2.738219168	3.561780832
x1	0.033333333	0.132570126	0.251439252	0.801572911	-0.227099732	0.293766399	-0.227099732	0.293766399
x2	0.24444444	0.132570126	1.843887848	0.065762797	-0.015988621	0.50487751	-0.015988621	0.50487751
x3	-0.09444444	0.132570126	-0.712411214	0.476526656	-0.35487751	0.165988621	-0.35487751	0.165988621
x4	0.25555556	0.132570126	1.927700932	0.054431437	-0.00487751	0.515988621	-0.00487751	0.515988621
x5	0.04444444	0.132570126	0.335252336	0.737568661	-0.215988621	0.30487751	-0.215988621	0.30487751
хб	-0.06666667	0.132570126	-0.502878504	0.615260584	-0.327099732	0.193766399	-0.327099732	0.193766399
x7	0.016666667	0.132570126	0.125719626	0.900001994	-0.243766399	0.277099732	-0.243766399	0.277099732
x8	-0.03888889	0.132570126	-0.293345794	0.769373773	-0.299321954	0.221544177	-0.299321954	0.221544177
x9	0.15	0.132570126	1.131476634	0.258371099	-0.110433065	0.410433065	-0.110433065	0.410433065
x10	-0.03888889	0.132570126	-0.293345794	0.769373773	-0.299321954	0.221544177	-0.299321954	0.221544177
x11	0.083333333	0.132570126	0.62859813	0.529885562	-0.177099732	0.343766399	-0.177099732	0.343766399
x12	0.111111111	0.132570126	0.83813084	0.402338634	-0.149321954	0.371544177	-0.149321954	0.371544177
x13	0.016666667	0.132570126	0.125719626	0.900001994	-0.243766399	0.277099732	-0.243766399	0.277099732
x14	0.111111111	0.132570126	0.83813084	0.402338634	-0.149321954	0.371544177	-0.149321954	0.371544177

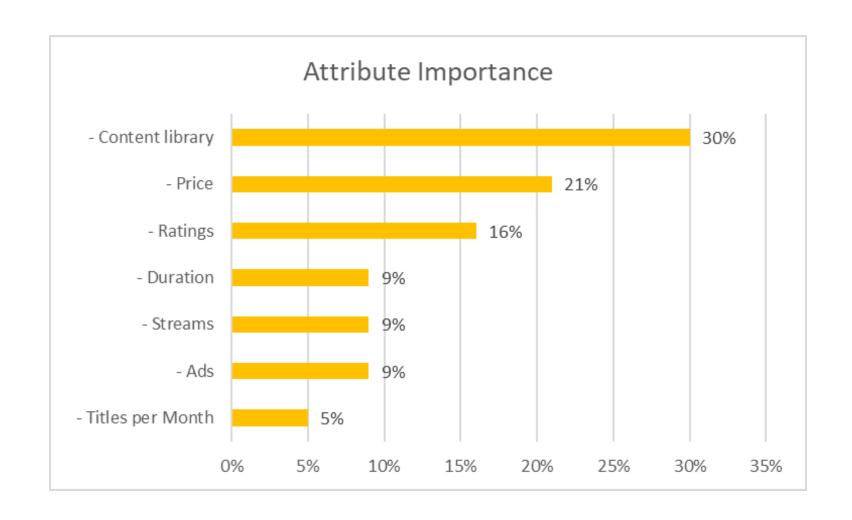
#### Utility Rescaling

Feature	Feature Name	Coefficient/Utility	Re-Scale
	Intercept	3.15	1.00
x1	<50	0.033333333	0.04
x2	100-150	0.24444444	0.10
x15	>150	0	0.03
<b>x</b> 3	under 500	-0.094444444	0.00
x4	500-2000	0.25555556	0.11
x16	>2000	0	0.03
x5	no ads	0.04444444	0.04
x6	occasional interruptions	-0.066666667	0.01
x17	frequent interruptions	0	0.03
x7	<5 titles per month	0.016666667	0.03
x8	5-20 titles	-0.038888889	0.02
x18	>20 titles per month	0	0.03
x9	<3 stars	0.15	0.08
x10	3-4.5 stars	-0.038888889	0.02
x19	>4.5	0	0.03
x11	<30 min	0.083333333	0.05
x12	30-90	0.111111111	0.06
x20	>90	0	0.03
x13	1 stream	0.016666667	0.03
x14	2-3 streams	0.111111111	0.06
x21	>3 streams	0	0.03

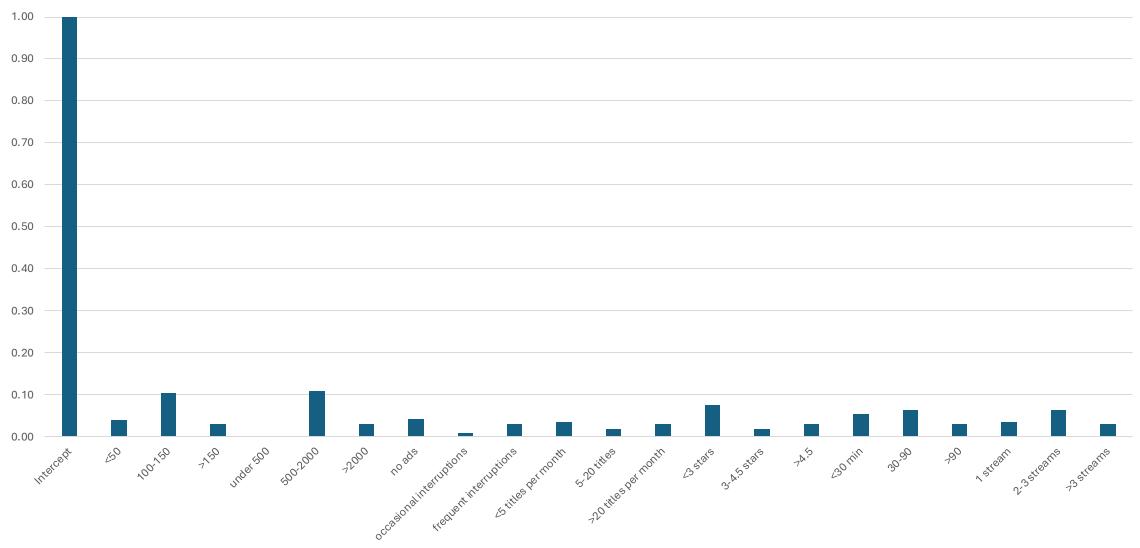
#### Optimum Product Attributes

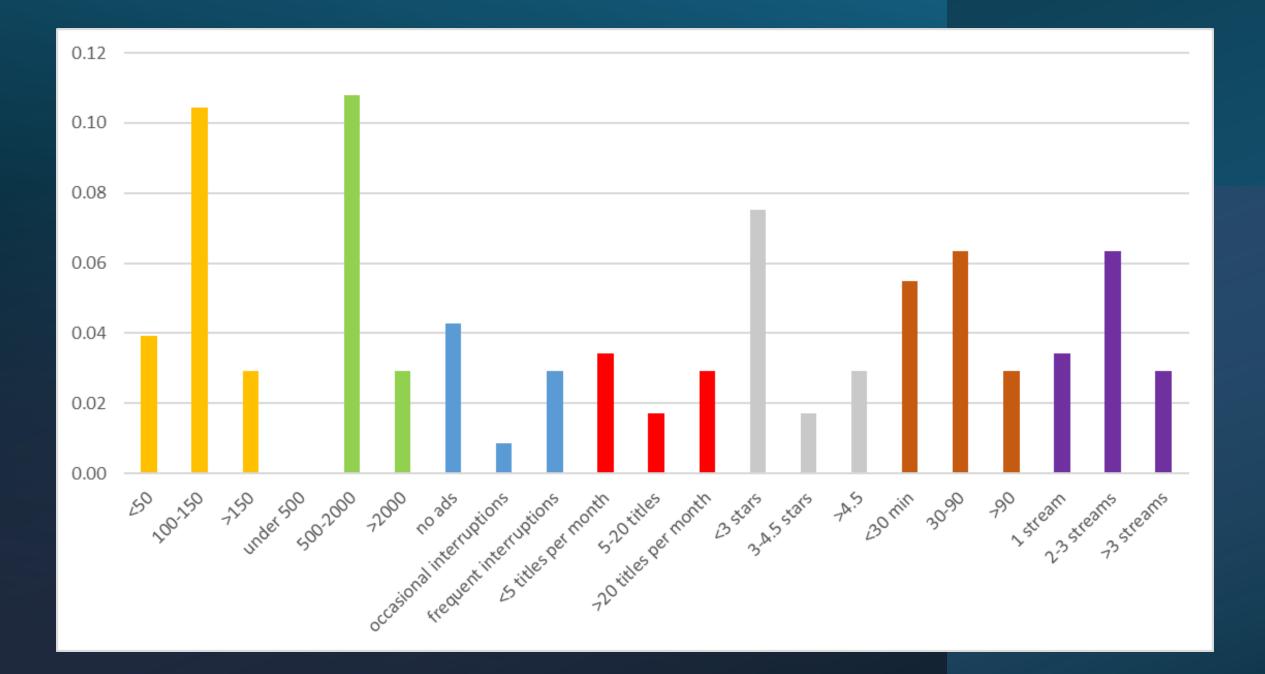
OPTIMUM PRODUCT ATTRIBUTES		
- Price	\$100 -\$150	0.10
- Content library	500 - 2000 titles	0.11
- Ads	no ads	0.04
- Titles per Month	< 5 titles per month	0.03
- Ratings	<3.0 stars	0.08
- Duration	30-90 minutes	0.06
- Streams	2 - 3 Streams	0.06
		0.49

## Attribute and their importance Order









#### High Quality Content

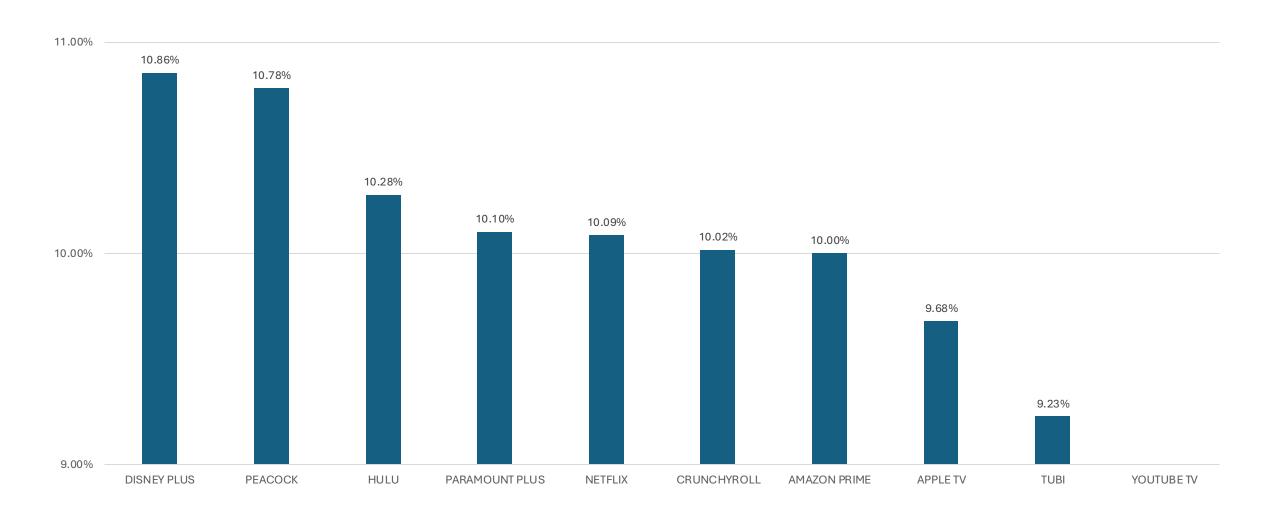
# BEST AND WORST PRODUCT

Subscription	\$100 -\$150	0.104452055
Content Library	500 - 2000 titles	0.107876712
Ad frequency	Frequent interruptions	0.029109589
Content Release	< 5 titles per month	0.034246575
User Rating	>4.5 stars	0.029109589
Average Content Duration	<30 minutes	0.054794521
No. of Streams	>3 Streams	0.029109589

Low Quality Content

Subscription	<\$50	0.039383562
Content Library	<500 titles	0
Ad frequency	Occasional Interruptions	0.008561644
Content Release	>20 titles per month	0.029109589
User Rating	3-4.5 stars	0.017123288
Average Content Duration	>90 minutes	0.029109589
No. of Streams	>3 Streams	0.029109589

## Product and its Market Share



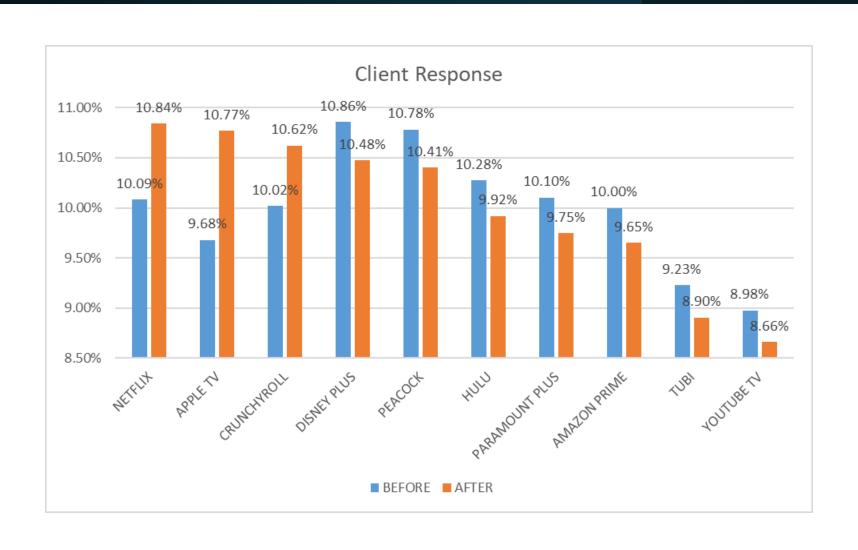
## **Market Simulation**

APPLE TV		
Subscription	\$100 -\$150	0.10445
Content Library	<500 titles	0
Ad frequency	Occasional Interruptions	0.00856
Content Release	< 5 titles per month	0.03425
User Rating	3-4.5 stars	0.01712
<b>Average Content Duration</b>	30-90 minutes	0.06336
No. of Streams	>3 Streams	0.02911
		0.25685
NETFLIX		
Subscription	\$100 -\$150	0.10445
Content Library	>2000 titles	0.02911
Ad frequency	Occasional Interruptions	0.00856
Content Release	>20 titles per month	0.02911
User Rating	>4.5 stars	0.02911
<b>Average Content Duration</b>	30-90 minutes	0.06336
No. of Streams	1 Stream	0.03425
		0.29795
CRUNCYROLL		
Subscription	<\$50	0.03938
Content Library	500 - 2000 titles	0.10788
Ad frequency	Occasional Interruptions	0.00856
Content Release	5 - 20 titles per month	0.01712
User Rating	>4.5 stars	0.02911
<b>Average Content Duration</b>	<30 minutes	0.05479
No. of Streams	1 Stream	0.03425
		0.2911



		TPU
APPLE TV - 2		
Subscription	\$100 -\$150	0.10445
Content Library	500 - 2000 titles	0.10788
Ad frequency	no ads	0.04281
Content Release	< 5 titles per month	0.03425
User Rating	3-4.5 stars	0.01712
Average Content Duration	30-90 minutes	0.06336
No. of Streams	>3 Streams	0.02911
		0.39897
NETFLIX - 2		
Subscription	\$100 -\$150	0.10445
Content Library	500 - 2000 titles	0.10788
Ad frequency	no ads	0.04281
Content Release	>20 titles per month	0.02911
User Rating	>4.5 stars	0.02911
Average Content Duration	30-90 minutes	0.06336
No. of Streams	>3 Streams	0.02911
		0.40582
CRUNCYROLL - 2		
Subscription	\$100 -\$150	0.10445
Content Library	500 - 2000 titles	0.10788
Ad frequency	no ads	0.04281
Content Release	5 - 20 titles per month	0.01712
User Rating	>4.5 stars	0.02911
Average Content Duration	<30 minutes	0.05479
No. of Streams	>3 Streams	0.02911
		0.38527

## Market share after Round 1





# Market Simulation – 2 (Competitor's response)

AMAZON PRIME	
Subscription	\$100 -\$150
Content Library	>2000 titles
Ad frequency	frequent interruptions
Content Release	5 - 20 titles per month
User Rating	3-4.5 stars
Average Content Duration	30-90 minutes
No. of Streams	>3 Streams

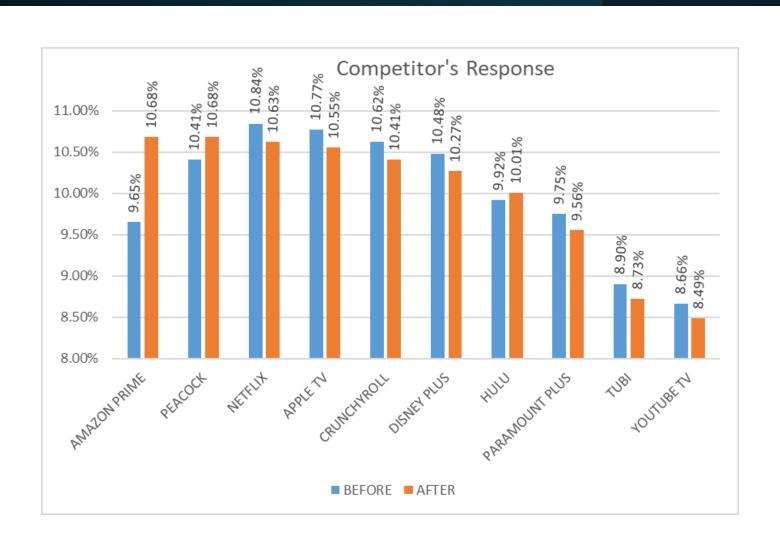
HULU	
Subscription	<\$50
Content Library	500 - 2000 titles
Ad frequency	Occasional Interruptions
Content Release	5 - 20 titles per month
User Rating	3-4.5 stars
Average Content Duration	30-90 minutes
No. of Streams	2 - 3 Streams

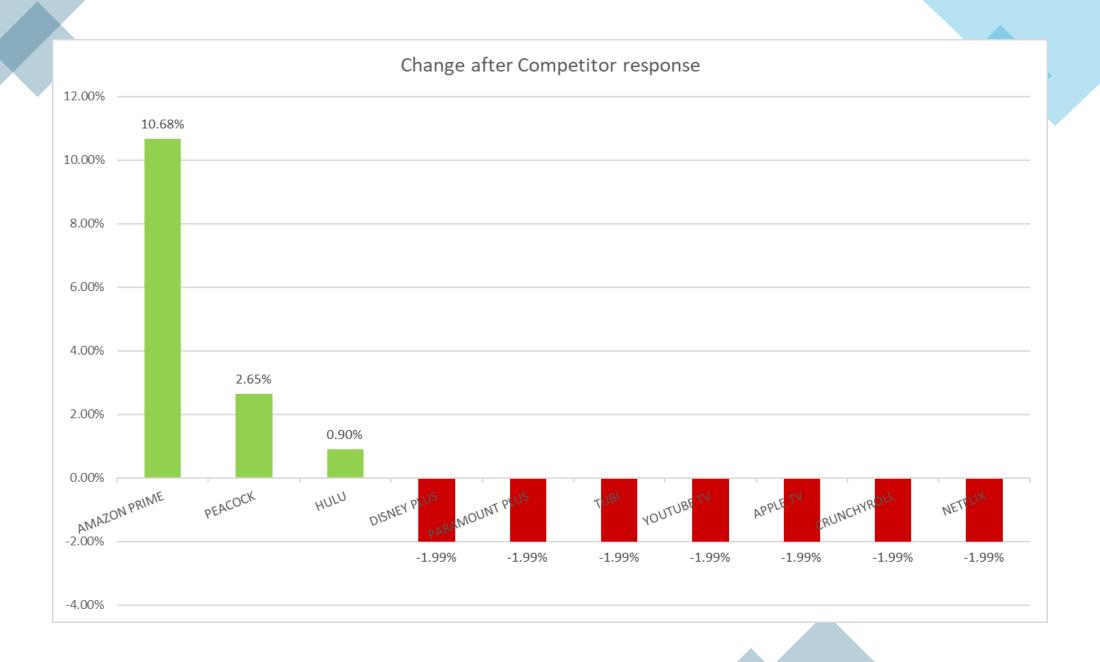
PEACOCK	
Subscription	\$100 -\$150
Content Library	500 - 2000 titles
Ad frequency	Occasional Interruptions
Content Release	< 5 titles per month
User Rating	3-4.5 stars
Average Content Duration	30-90 minutes
No. of Streams	>3 Streams



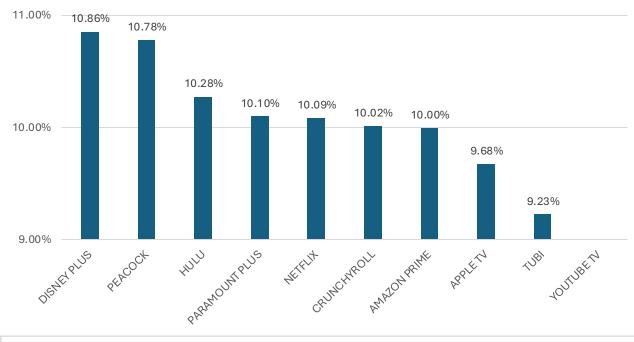
AMAZON PRIME	
Subscription	\$100 -\$150
Content Library	500 - 2000 titles
Ad frequency	no ads
Content Release	< 5 titles per month
User Rating	>4.5 stars
Average Content Duration	30-90 minutes
No. of Streams	>3 Streams
ници	
Subscription	<b>&lt;</b> \$50
Content Library	500 - 2000 titles
Ad frequency	no ads
Content Release	< 5 titles per month
User Rating	>4.5 stars
Average Content Duration	30-90 minutes
_	30-90 minutes >3 Streams
Average Content Duration	
Average Content Duration No. of Streams	
Average Content Duration No. of Streams PEACOCK	>3 Streams
Average Content Duration No. of Streams  PEACOCK Subscription	>3 Streams \$100 -\$150
Average Content Duration No. of Streams  PEACOCK Subscription Content Library	>3 Streams \$100 -\$150 500 - 2000 titles
Average Content Duration No. of Streams  PEACOCK Subscription Content Library Ad frequency	>3 Streams \$100 -\$150 500 - 2000 titles no ads
Average Content Duration No. of Streams  PEACOCK Subscription Content Library Ad frequency Content Release	\$100 -\$150 500 - 2000 titles no ads < 5 titles per month
Average Content Duration No. of Streams  PEACOCK Subscription Content Library Ad frequency Content Release User Rating	>3 Streams \$100 -\$150 500 - 2000 titles no ads < 5 titles per month >4.5 stars

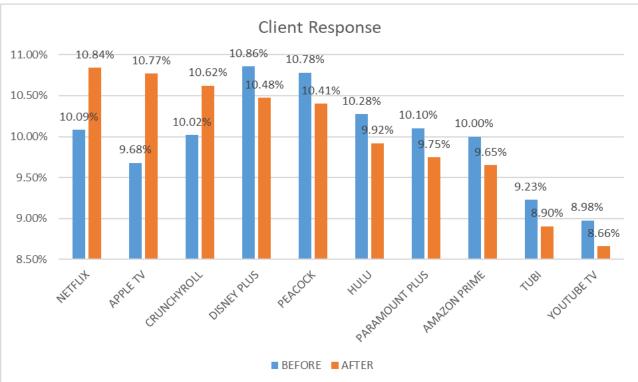
## Market Share after Round 2

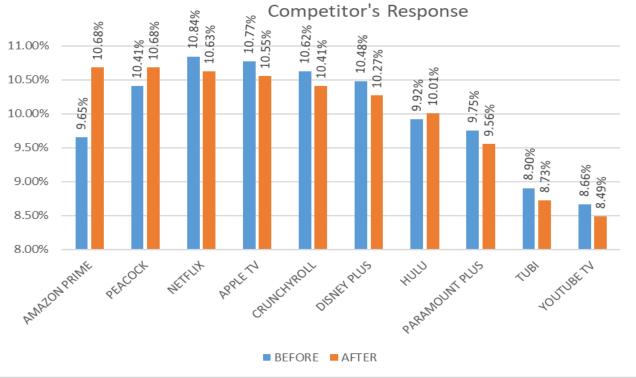




## Changes in Market Share







# Intercept Interpretation

- We have large intercept value which typically indicate minimum acceptable product for the target market is very high.
- To gain entry into market requires the product to provide high value to customers compared to the products in current market.

### Recommendations

- **1. Product Design**: Design products with the optimal attributes identified (e.g., Affordable subscription price, 500-2000 titles, no ads, less than 5 titles per month, ratings less than 3 stars, 30 90 minutes duration, and 2 3 streams).
- **2. Content Library Expansion**: Invest in expanding the content library to 500 2000 titles to meet consumer preferences.
- 3. Ad Strategy: Implement an ad free strategy to align with consumer preferences.
- **4. Content Release Strategy**: Focus on quality over quantity, releasing fewer than 5 titles per month to meet consumer preferences.
- **5. Market Positioning**: Position products to provide high value to customers, given the large intercept value indicating a high minimum acceptable product standard.

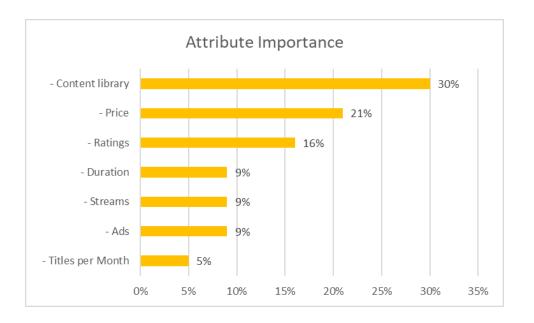
## Conclusion PM vs CA

- Subscription price and quantity of content show high importance for both the PM and CA
- PM and CA shows # of ads has an affect on the customer but not the most important factor
- PM shows streaming quality as not important

#### PM-Total Variance Explained

	Initial Eigenvalues			
Component	Total	% of Variance	Cumulative %	
Large Content Library	6.461	38.008	38.008	
High Device Compatibility	3.104	18.258	56.266	
Low Subscription Price	2.558	15.046	71.312	
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Good Streaming Quality	-3.715E-16	-2.185E-15	100.000	
Prefrence	-8.725E-16	-5.132E-15	100.000	

#### **CA-Attribute Importance**



## Summary of Recommendations

#### Increase

 Apple TV needs to increase their number of streamers by reducing their subscription price (Strong)

#### Increase

 Increase the amount of content to attract more streamers (Strong)

#### Decrease

Decrease # of ads (Strong)

#### Increase

 Increase Language Options and perception of regions available to cater to diverse audiences (Weak)

#### Increase

Increase the UI
 accessibility with
 predicative text and less
 cluttered screens (Weak)

## Learning Memo

- Update the attributes used for Perceptual Mapping and Conjoint Analysis to have more overlap
  - Easier to compare results when attributes match
- Change the levels of Price Attributes to free, affordable, expensive
- Design of the Survey



## Code sheet

x1	<50
x2	100-150
<b>x</b> 3	under 500
x4	500-2000
<b>x</b> 5	no ads
<b>x</b> 6	occasional interruptions
x7	<5 titles per month
<b>8x</b>	5-20 titles
<b>x</b> 9	<3 stars
x10	3-4.5 stars
x11	<30 min
x12	30-90
x13	1 stream
x14	2-3 streams
x15	>150
x16	>2000
x17	frequent interruptions
x18	>20 titles per month
x19	>4.5
x20	>90
x21	>3 streams
Intercept	intercept

# OUTPUT 2: OVERALL FEATURE IMPORTANCE CALCULATIONS

Attributes	Re-Scale	Range	Feature Importance
<50	0.04	0.08	21%
100-150	0.10	0.08	21%
>150	0.03	0.08	21%
under 500	0.00	0.11	30%
500-2000	0.11	0.11	30%
>2000	0.03	0.11	30%
no ads	0.04	0.03	9%
occasional interruptions	0.01	0.03	9%
frequent interruptions	0.03	0.03	9%
<5 titles per month	0.03	0.02	5%
5-20 titles	0.02	0.02	5%
>20 titles per month	0.03	0.02	5%
<3 stars	0.08	0.06	16%
3-4.5 stars	0.02	0.06	16%
>4.5	0.03	0.06	16%
<30 min	0.05	0.03	9%
30-90	0.06	0.03	9%
>90	0.03	0.03	9%
1 stream	0.03	0.03	9%
2-3 streams	0.06	0.03	9%
>3 streams	0.03	0.03	9%
		0.36	100%

## MARKET SHARE CALCULATION

PRODUCT	▼ TPU ▼	EXPONENTIAL VALUE - BEFO	RE 📲 AFTER 💌
DISNEY PLUS	0.371575342	1.45001709	10.86% 10.48%
PEACOCK	0.364726027	1.440119401	10.78% 10.41%
HULU	0.316780822	1.372701673	10.28% 9.92%
PARAMOUNT PLUS	0.299657534	1.349396606	10.10% 9.75%
NETFLIX	0.297945205	1.347087973	10.09% 10.84%
CRUNCHYROLL	0.29109589	1.337892869	10.02% 10.62%
AMAZON PRIME	0.289383562	1.335603917	10.00% 9.65%
APPLE TV	0.256849315	1.292850299	9.68% 10.77%
TUBI	0.20890411	1.232326825	9.23% 8.90%
YOUTUBE TV	0.181506849	1.199022749	8.98% 8.66%
		13.3570194	