# Research on the Analysis of Disney+ Consumer Behavior and Marketing Strategy Based on R Language

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**Abstract.** This paper explores the current position of Disney+ within the fiercely competitive streaming market, emphasizing its rapid growth and significant impact on both the Walt Disney Company and the broader industry. While existing research has primarily focused on the critical role of content and technology in the success of Disney+, this study goes further by developing a comprehensive research framework to analyze the platform's strategic approach, market segmentation, and potential avenues for future development. Despite its achievements, Disney+ has faced considerable challenges since 2023, including a noticeable decline in subscribers within key markets and the negative repercussions of recent subscription price hikes. These issues are compounded by intensified competition from other streaming services, making it imperative for Disney+ to adapt its strategies. To address these challenges, this paper employs R language to predict user churn through logistic regression, offering a deeper understanding of customer purchasing behavior. The findings suggest that targeted market segmentation, along with more flexible pricing strategies, could be effective in mitigating subscriber losses and enhancing customer retention. By analyzing customer data and identifying potential problem areas, this research provides actionable insights that could help Disney+ navigate its current challenges and sustain its growth in an increasingly saturated market.

## 1 Introduction

### 1.1 Disney+'s current status in the streaming market

Disney+ is a subscription video-on-demand over-the-top streaming media service launched by The Walt Disney Company in November 2019. It is managed and operated by the Disney Media and Entertainment Distribution Division of The Walt Disney Company. The platform will focus primarily on film and television content from the Walt Disney Studios Group and the Walt Disney Television Group, including films from Pixar, Marvel, Star Wars, and National Geographic, as well as TV shows. At the same time, it also develops existing and new original programming.

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Disney+ is not only a new business unit for the Walt Disney Company but also a key tool for the company to cope with industry changes and achieve future strategic goals. Through Disney+, Walt Disney is able to achieve revenue diversification and digital transformation and realize data-driven decision-making through data collected by the platform, thereby improving the scientific accuracy of the company's decision-making. Therefore, Disney+ plays an indispensable role in the overall development of the company and becomes an important engine for the company's future growth and innovation.

Disney+ has seen user growth far faster than expected since its launch in 2019. Less than two years after its launch, Disney+ has amassed 100 million subscribers worldwide, a major milestone - a number that's all the more impressive considering the company originally set a goal of having 60 million to 90 million subscribers by 2024. However, Disney+ did experience a period of slowing or even declining subscriber growth between 2023 and 2024. By the end of 2023, the number of subscribers was about 150 million, a slight decrease from the 164 million subscribers at the end of 2022. Even by mid-2024, Disney+'s global subscribers had risen to about 153 million [1]. In contrast, although Netflix's and Amazon Prime Video's growth rate has slowed down slightly, it still maintains a steady growth momentum.

### 1.2 Main focus of existing research: content and technology

Many scholars have given different opinions on how to expand the market and increase market share. For example, JK Chalaby and Alzub proposed that streaming platforms need to continue enriching their content libraries[2,3]. This means that Disney needs to not only increase the original classic Disney content but also add more types of original content, such as documentaries, reality shows, independent films, and short films, to attract users with different interests and age groups. What's more, A scholar named Zoubi believes that technology is the premise for traditional media to shift to digital media [4]. This advocates that Disney should continuously optimize its platform technology, provide a high-quality streaming media experience, and enhance user satisfaction and loyalty by optimizing the user interface, simplifying the subscription and cancellation process, and providing a seamless multi-device experience.

Most scholars have predominantly focused their research on content creation and technological advancements within the streaming industry. However, I posit that a more thorough investigation into target market segmentation and the optimization of pricing strategies is essential. Such an approach is pivotal not only for expanding Disney+'s market share but also for significantly enhancing customer satisfaction, thereby ensuring sustained growth and competitive advantage in an increasingly saturated market.

### 1.3 Research framework

Firstly, this research employs the SWOT model to provide a comprehensive analysis of Disney+'s foundational status and current development trajectory. By examining its strengths, weaknesses, opportunities, and threats, this paper aims to achieve a nuanced understanding of its strategic positioning and competitive dynamics within the streaming industry. Secondly, it will conduct an in-depth investigation into the factors contributing to the recent decline in subscription numbers. This analysis will integrate both internal and external factors, encompassing shifts in the intensification of market competition and evolving user behavior. Subsequently, it will undertake a detailed market segmentation for Disney+ based on the data collected. Through meticulous analysis of the distinct needs and characteristics of various market segments, this paper devises tailored marketing strategies for each segment. This objective is to leverage precise market segmentation and targeted strategic interventions to bolster subscription growth and enhance customer satisfaction. Ultimately, this approach aims to expand Disney+'s market share and fortify its brand influence within the increasingly competitive streaming landscape.

# 2 Case description based on SWOT

SWOT analysis matches internal strengths with external opportunities to develop strategies that are beneficial to the development of the organization, helping the organization to evaluate the effectiveness of existing strategies and adjust strategies in a timely manner to adapt to the changing environment.

## 2.1 Strength

Disney+ is known for quality, unique content. Disney's core strength lies in its strong content library, including original works from Disney, Pixar, Marvel, Star Wars, and National Geographic. These contents almost meet the needs of customers of different ages and preferences [5]. In addition, Disney also has a strong network. Disney+ business covers approximately 160 countries and has approximately 154 million users worldwide. Such broad reach is a big advantage for Disney+, allowing it to tap into diverse markets.

## 2.2 Weakness

Managing the growing portfolio of Disney's filmed entertainment division has resulted in increasing operating costs as it operates more than seven film studios [5]. As a result, the production of exclusive content and the technical infrastructure required to support a seamless streaming experience incur high operating costs.

## 2.3 Opportunity

Traditional media is transforming into digital media. After the COVID-19 epidemic, more and more people are accustomed to enjoying movie-watching experiences at home, which has accelerated the popularity and user growth of streaming media platforms. Broadening the content library by generating new content and forming alliances with more media companies will allow Disney+ to maintain its growth trajectory in the streaming service space [6].

Today, millions of people can watch their favorite TV shows or the latest Hollywood blockbusters at any time from the comfort of their own homes. At the same time, Forecasts indicate that all OTT TV and video formats will see an increase in subscribers and revenues over the coming years, with subscription video-on-demand (SVOD) revenues growing the fastest. Non-linear video streaming is having an impact on the global media and entertainment business, and how it will continue to do so.

## 2.4 Threat

However, Disney+ still faces fierce competition from other media and entertainment companies, such as strong rivals such as Netflix and Amazon Prime, which may have an adverse impact on Disney's market share and financial performance. In addition, the global economic recession may affect consumer spending, further affecting Disney's financial performance [6]. In the face of these challenges, Disney needs to continue to innovate and optimize its content and services to maintain its competitive advantage and appeal.

# 3 Analysis on the problem

## 3.1 Internal factor

### *3.1.1 Core markets lose subscribers*

Disney+ Hotstar is a subscription video-on-demand and OTT streaming service in India, operated by Disney India, a subsidiary of The Walt Disney Company. It is a critical market for Disney+, particularly in India and Southeast Asia, contributing a significant portion of the overall Disney+ user base. As of 2022, Disney+ Hotstar accounted for more than one-third of the total Disney+ users. The platform primarily offers domestic Indian movies, TV series, and sports content, making it a major player in the region's streaming industry.

However, in 2023, the performance of Disney+ in the Indian market fell short of expectations because Disney+ lost approximately 1 million subscribers in its core markets after failing to secure the streaming rights for cricket, a significant draw for viewers in India [7]. This setback has led to a notable decline in Disney+ Hotstar memberships, adversely affecting the overall subscriber base and growth trajectory of the service. The loss of cricket streaming rights underscores the challenges Disney+ faces in maintaining its competitive edge and subscriber growth in the Indian market.

### *3.1.2 Subscription price increase*

In addition to the failed bid for the Indian Premier League rights, a series of price increases by Disney since its launch have exacerbated the problem, especially for price-sensitive users who are more likely to cancel their subscriptions. However, Disney+'s average monthly revenue per paying user has still increased. In the second quarter of 2024, this figure reached US$7.28 globally (excluding Disney+ Hotstar in India), an increase from the same period last year [8]. This trend shows that while price increases may have caused some user churn, Disney+ has successfully achieved revenue growth by increasing average revenue per user. This pricing strategy highlights Disney's efforts to strike a balance between maintaining user numbers and promoting revenue growth, demonstrating a thoughtful approach to navigating the complexity of subscription pricing and market demand [9].

## 3.2 External factor

In addition to Disney+'s internal factors affecting its subscription numbers, external factors, such as the development of competitors, also influence Disney+'s growth. Xumin's research found that Disney+ and Netflix each possess unique advantages—disney+ benefits from its dominance in the global box office. In contrast, Netflix boasts a wider global influence and larger target market, partly because it includes R-rated movies, attracting a broader audience. Disney+, however, primarily targets younger audiences, limiting its appeal to a more niche market.

Furthermore, Netflix's approach to international expansion has been notably effective. After entering various international markets, Netflix implemented a series of localization measures tailored to the consumption tendencies of local users, which significantly boosted its global subscriber base. These measures include producing and promoting region-specific content that resonates more with local audiences. Conversely, Disney+ is still largely dominated by films produced in the United States, and its globalization efforts are still in their early stages. This disparity in localization strategies highlights a key area where Disney+

can improve to enhance its global appeal and compete more effectively with Netflix on an international scale [10].

## 3.3 Customer behavior

### *3.3.1 Churn*

This file contains detailed information about Disney service subscriptions. It includes various user-specific data, such as joining date, payment date, device usage, and plan duration. Based on their last payment date and plan duration, the subscription expiration date can be obtained (partially shown in Table 1). If the subscription is not renewed after the subscription period has expired, it is considered a lost customer and marked as 0. The probability of customer churn is calculated from this. According to the original data obtained from the sample survey, the number of people who have not renewed their subscription after the subscription period has expired accounts for 41.3%.

**Table 1.** Subscription churn data of Disney+

| Join Date | Last Payment Date | Plan Duration | day | Expiration date | churn |
|---|---|---|---|---|---|
| 2023/3/14 | 2024/3/8 | 2 Years | 730 | 2026/3/8 | 1 |
| 2021/12/17 | 2023/1/18 | 1 Year | 365 | 2024/1/18 | 0 |
| 2024/4/4 | 2024/5/28 | 6 Months | 180 | 2024/11/24 | 1 |
| 2022/12/5 | 2023/11/6 | 6 Months | 180 | 2024/5/4 | 0 |
| 2022/11/24 | 2023/9/17 | 2 Years | 730 | 2025/9/16 | 1 |
| 2021/9/4 | 2023/2/14 | 1 Month | 30 | 2023/3/16 | 0 |
| 2022/6/23 | 2023/2/2 | 1 Year | 365 | 2024/2/2 | 0 |
| 2023/4/7 | 2023/7/20 | 1 Month | 30 | 2023/8/19 | 0 |
| 2021/7/28 | 2023/12/23 | 2 Years | 730 | 2025/12/22 | 1 |
| 2024/3/4 | 2024/6/9 | 6 Months | 180 | 2024/12/6 | 1 |
| 2021/10/12 | 2023/2/19 | 6 Months | 180 | 2023/8/18 | 0 |
| 2023/4/3 | 2023/9/5 | 2 Years | 730 | 2025/9/4 | 1 |
| 2023/9/4 | 2024/1/7 | 6 Months | 180 | 2024/7/5 | 1 |

### *3.3.2 Logistic regression*

At the same time, logistic regression analysis was performed on lost customers to explore whether there is a correlation between customer loss and certain variables (Table 2). However, none of the variables showed statistically significant relationships with the dependent variable. Specifically, the odds ratios (ORs) across categories of subscription type, country, age, device, and gender are all close to 1, indicating a weak or non-existent association between these variables and customer churn. Additionally, the confidence intervals (95% CI) for these variables are wide, further indicating that they do not have a significant impact on customer churn. Therefore, these factors failed to predict customer churn significantly, excluding the effects of subscription type, country or region, age group, device, and gender on customer churn.

**Table 2.** Subscription logistic data of Disney+

| Variable | $\beta$ | *OR* | 95%*CI* | *P* |
|---|---|---|---|---|
| Subscription Type | | | | |
| Basic | ref | ref | ref | |
| Premium | 0.13 | 1.14 | (0.82, 1.58) | 0.433 |
| Standard | 0.11 | 1.12 | (0.81, 1.55) | 0.501 |
| Monthly Revenue | 0.01 | 1.01 | (0.99, 1.01) | 0.377 |
| Country | | | | |
| Canada | ref | ref | ref | |
| France | -0.12 | 0.89 | (0.55, 1.45) | 0.638 |
| Germany | -0.32 | 0.72 | (0.45, 1.16) | 0.179 |
| India | 0.04 | 1.04 | (0.64, 1.69) | 0.872 |
| UK | 0.07 | 1.06 | (0.66, 1.74) | 0.790 |
| USA | 0.07 | 1.06 | (0.67, 1.70) | 0.779 |
| Unknown | 0.28 | 1.32 | (0.48, 4.01) | 0.600 |
| Age | -0.01 | 0.99 | (0.99, 1.01) | 0.807 |
| Device | | | | |
| Desktop | ref | ref | ref | |
| Mobile | 0.05 | 1.05 | (0.75, 1.48) | 0.760 |
| Tablet | 0.04 | 1.04 | (0.74, 1.45) | 0.814 |
| Gender | | | | |
| Female | ref | ref | ref | |
| Male | -0.05 | 0.95 | (0.68, 1.32) | 0.760 |
| Other | -0.20 | 0.82 | (0.58, 1.14) | 0.230 |

# 4 Suggestions

## 4.1 Market segmentation and customized marketing

As mentioned above, Disney's content landscape includes six major sectors: Disney, Pixar, Marvel, Star Wars, 20th Century Fox, and National Geographic. Each sector contains a large amount of film content and IP. This advantage has expanded its product coverage and target groups from children and teenagers to a more diverse audience [11]. Here, they are mainly divided into four major groups.

Firstly, family users, especially families with children. Based on big data, a large number of Disney classic animations, family-friendly movies, and series can be pushed to strengthen the brand image of family entertainment. At the same time, family subscription packages can be launched, combined with theme park tickets, peripheral products, and other bundled sales to attract family users.

Secondly, groups such as teenagers and young adults are usually interested in content such as Marvel movies, Star Wars series, and Pixar animations. Continue to launch and promote new series and movies of the Marvel Universe and Star Wars series, and increase interactive and social functions. In addition, using social media and digital advertising platforms to carry out online interactive activities and fan communities can also attract and retain this group.

Thirdly, old users, especially those born in the 1980s and 1990s, who are nostalgic for classic Disney content. For this type of user, Disney can create a nostalgic content area. Provide extra episodes and peripheral products of classic movies, animations, and early TV shows to stimulate emotional resonance among this group.

Finally, users from different countries and regions open up a global market perspective. Provide localized content and subtitle options based on local culture and language, and produce or purchase dramas and movies that suit local tastes. Cooperate with local companies, TV stations, or content production companies to promote Disney+ services and conduct localized marketing. Attract more target groups.

### 4.2 Pricing strategies for different target markets

Due to the diversity of target groups, the needs of different target groups may be more diverse. Disney+ can consider adding more pricing tiers or pay-as-you-go options to allow users to choose the right subscription plan based on their content needs and viewing habits [12].

For the target market of families, although the current family plan allows multiple devices to be used at the same time, it does not provide more flexible pricing for the different needs of large families or multi-generational families. Disney+ can consider launching more targeted family plans, such as providing different discounts or additional services for different family sizes, to further improve the satisfaction of family users.

At the same time, educational offers and student discount plans can be launched to help attract young user groups, especially in a highly competitive market. This will not only expand the user base but also cultivate future loyal users.

When facing new international markets, regional pricing strategies can be further refined, taking into account the consumption habits, income levels, and acceptance of users' streaming services in various regions. For example, in areas with lower incomes but higher Internet penetration, more competitive prices may need to be offered.

### 4.3 Company's social media marketing strategy

Social media marketing is of great significance in the modern business environment. Social media marketing is significantly correlated with consumer purchase intention [13]. Disney+ can deliver brand information and promote products and services to consumers through social media such as YouTube and Instagram, thereby influencing their purchase intention. Through big data, targeted content, advertisements, and promotions can be pushed to specific target audiences to increase brand exposure and awareness, thereby increasing consumer purchase intention. NDN Darmawan and I Rachmawati emphasized in their research that marketers must strengthen the use of social media because social media has a significant impact on consumer purchase intention [13].

In addition, it is necessary to increase consumer participation on social media and enhance the interactivity and stickiness between companies and customers. By communicating and interacting with viewers more actively on social media platforms, Disney Plus can effectively make viewers feel their own importance and presence. This emotional connection can not only enhance brand loyalty but also make viewers pay more attention to Disney's activities, thereby increasing users' long-term retention rate and satisfaction. This strategy is of great significance in enhancing the audience's sense of belonging and identification with the brand.

## 5 Conclusion

In summary, this study has taken an in-depth look at the various factors that have contributed to the recent decline in Disney+ subscriptions. Internal factors include the loss of subscribers in core markets and increases in subscription prices, which have negatively impacted the platform's growth. External factors are mainly reflected in the strong rise of competitors and the division of market share. On this basis, R language was used to conduct an in-depth analysis of consumer behavior, especially through the study of customer churn rate and logistic regression analysis. The customer churn rate was high, and the churn was not related to subscription type, country, or age Variables such as equipment and gender show significant correlations. Therefore, recommendations focus on market segmentation and pricing strategies, especially precise strategies tailored for different target markets. This approach not only helps drive subscription growth but also significantly improves overall customer satisfaction, helping Disney+ gain a greater advantage in the competitive streaming market.

Although this paper provides a preliminary analysis of the customer churn rate of Disney+, it still has certain limitations, mainly reflected in the key issue of the small amount of original customer data. First, in terms of survey data, the sample size is relatively limited. The subscription data in "Table 1 subscription data Disney+" only contains 906 samples. In contrast, Disney+ has 153 million global subscribers. This huge gap in data size limits the breadth and representativeness of the research conclusions. Secondly, in terms of dependent variables that affect customer churn rate, only five factors were analyzed: subscription type, country, age, device, and gender, and failed to find a strong factor that had a significant correlation with customer churn rate.

This suggests that the current analysis may have missed some important influencing factors or that the sample size was insufficient to reveal complex relationships. Therefore, in future research, further increasing the scope and depth of market research will help to obtain more relevant data, especially variables that can form a strong correlation with the number of subscribers and customer churn rate. Through more comprehensive and detailed data analysis, it is expected to find more accurate reasons for customer churn, providing a solid foundation for Disney+ to develop more effective user retention and growth strategies.

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