An SEO- Focused Performance Assessment Ranking of OTT Streaming Services

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ABSTRACT

Over-The-Top (OTT) media streaming services, such as Netflix and Amazon Prime Video, have revolutionized content consumption by offering flexible, on-demand access without traditional TV schedules or cable subscriptions, appealing especially to younger audiences. As the OTT market grows, competition intensifies, demanding effective digital marketing strategies for platforms to stand out. This study ranks popular OTT platforms in India—Netflix, Disney+ Hotstar, Amazon Prime Video, Sony Liv, Voot, Aha, and Zee5—based on their Search Engine Optimization (SEO) strategies. SEO is crucial in digital marketing, enhancing visibility and driving organic traffic through better search engine rankings. Key SEO metrics analyzed include Organic Traffic, Paid Traffic, Authority Score, Backlinks, Daily Active Users (DAU), Monthly Unique Visitors (MUV), Pages Per Session, App Downloads, Total Visits (worldwide), and Total Search Visits. Data for these metrics were gathered using SEMrush, SimilarWeb, GTmetrix, and PageSpeed Insights for Q1 2023 and analyzed using the TOPSIS method to rank the OTT services. Results show Netflix leading in SEO performance, followed by Disney+ Hotstar and Sony Liv. Amazon Prime Video ranks fourth, with Zee5, Aha, and Voot in the fifth to seventh positions, respectively. The findings reveal the varying effectiveness of each platform's digital marketing strategies and suggest improvement areas for lower-ranked services. This study offers valuable insights for consumers, media producers, and market players on the competitive landscape of OTT platforms concerning SEO efforts, emphasizing SEO's role in enhancing online visibility, credibility, and profitability, and encouraging innovative strategies to improve search engine performance.

Key words: OTT, Search Engine Optimization

Introduction

Human life has got simplified and sophisticated due to the development of modern technologies. It can be obviously acknowledged that the development of the latest information and communication technologies have reduced the dimensions of time and place. All the sectors contributing to a country's economy have integrated digital technologies, as a result of advancement in modern science. Marketing is no exception to this scenario. The field of marketing has revolutionized its presence in the digital space, thus becoming digital marketing. As the consumers have become digital citizens, the marketers shift their focus to digital marketing. Some of the distinct features of digital marketing are listed to be enabling two-way communication, targeting at individual level, a uniform stage for the marketers, ability to measure performance, choice of selection for either push or pull strategies, availability of instant feedback and zero moment of truth for the consumers. The other names for digital marketing are online marketing, internet marketing and web marketing (Gupta, 2020).

OTT Industry profile

Over-the-top (OTT) media streaming services have become increasingly popular in recent years, offering consumers a convenient and flexible way to access a wide variety of content. This has disrupted the traditional television industry, and has led to new opportunities for content producers, distributors, and consumers. In this literature review, we will explore some of the key research studies and findings related to OTT media streaming services.

One of the key benefits of OTT media streaming services is the flexibility and convenience they offer. Consumers can access content on demand, from any device with an internet connection, without having to be tied to a traditional TV schedule or cable subscription. This is especially attractive to younger consumers, who value the ability to watch content on their own terms.

OTT media streaming services also offer a wide variety of content, including movies, TV shows, original programming, and live events. This diversity of content allows consumers to tailor their viewing experience to their individual preferences and interests. This also provides viewers with a wider range of choices, and allows them to explore new types of content that they might not have access to otherwise.

Another important benefit of OTT media streaming services is cost savings. Many services also offer the ability to subscribe and unsubscribe at any time, without having to pay cancellation fees. This provides consumers with greater flexibility and control over their viewing experience.

In addition to these benefits, OTT media streaming services are known for offering high-quality content, often with advanced features like 4K resolution, HDR, and Dolby Atmos sound. This provides viewers with a more immersive and enjoyable viewing experience. OTT services also use algorithms and data analytics to personalize content recommendations for individual viewers. This helps consumers discover new content that is tailored to their preferences and interests.

Despite the many benefits of OTT media streaming services, there are also some challenges and concerns associated with this technology. One concern is the potential for increased piracy and unauthorized sharing of content. Piracy of OTT content is a growing problem, and is estimated to cost the industry billions of dollars each year (Nagaraj et al., 2021). Another concern is the impact on traditional media companies, which may struggle to compete with the convenience and flexibility of OTT services.

In terms of the future of OTT media streaming, many experts predict continued growth and evolution of these services. However, as more and more companies enter the market, competition is likely to become more intense, and consumers may face a more fragmented landscape with a wider range of options to choose from.

There are many OTT (Over-the-Top) streaming services available in India, offering a wide range of content in various languages. Here is a list of some of the most popular OTT streaming services available in India:

Netflix

Netflix is one of the most popular streaming services in India, offering a vast library of movies, TV shows, and documentaries from around the world. The platform has a variety of subscription plans, including a mobile-only plan.

Amazon Prime Video

Amazon Prime Video is another popular streaming service in India, offering a mix of Indian and international content, including movies, TV shows, and exclusive originals. Amazon Prime Video is included with Amazon Prime membership, which also includes free and fast shipping on Amazon products.

Disney+ Hotstar

Disney+ Hotstar is a leading OTT platform in India, offering a variety of Indian and international content, including movies, TV shows, sports, news, and exclusive originals. The platform has a variety of subscription plans, including a free plan with limited content and ads.

ZEE5

ZEE5 is a popular Indian streaming service, offering a wide range of Indian content, including movies, TV shows, and exclusive originals. The platform also features content in various regional languages.

SonyLIV

SonyLIV is a streaming service by Sony Pictures Networks India, offering a mix of Indian and international content, including movies, TV shows, live sports, and exclusive originals.

Voot

Voot is a streaming service by Viacom18, offering a mix of Indian and international content, including movies, TV shows, live TV, and exclusive originals. The platform also features content in various regional languages.

ALTBalaji

ALTBalaji is a subscription-based streaming service, offering a variety of Indian originals, including movies, TV shows, and web series.

MX Player

MX Player is a free streaming service, offering a mix of Indian and international content, including movies, TV shows, and exclusive originals. The platform also features content in various regional languages.

Eros Now

Eros Now is a streaming service by Eros International, offering a variety of Indian movies and exclusive originals.

Hoichoi

Hoichoi is a popular Bengali-language OTT platform. It offers a wide range of Bengali movies, TV shows, web series, and music. Hoichoi also produces its original content, which includes critically acclaimed web series such as "Byomkesh" and "Hello". The platform also offers English subtitles to its content, making it accessible to non-Bengali speakers.

Sun NXT

Sun NXT is a South Indian OTT platform owned by the Sun TV Network. It offers movies, TV shows, and web series in Tamil, Telugu, Kannada, and Malayalam languages. Sun NXT is known for its extensive collection of South Indian movies and popular TV shows.

MX Player

MX Player is a popular OTT platform that offers content in multiple languages, including Hindi, Tamil, Telugu, Punjabi, and Marathi. The platform has a vast library of movies, TV shows, web series, and music. MX Player also produces its original content, which includes web series such as "Aashram" and "Raktanchal".

Aha

Aha primarily focuses on Telugu-language content. It was launched in 2020 and is owned by Arha Media & Broadcasting Private Limited, a joint venture between Geetha Arts and My Home Group. Aha offers a wide range of Telugu movies, web series, and TV shows, both original and acquired.

These are just a few examples of the many OTT streaming services available in India, and each service offers unique content and features to its subscribers.

Digital marketing strategy for a business

It is important for any organization to develop a digital marketing strategy with five components i.e., organization's strategy which aligns with the organizational goals, analyzing the consumer experience, creating and posting relevant and quality contents, choosing suitable content distribution channels and having an efficient tool kit to measure and analyze performance (Diamond, 2022).

A digital marketing strategy is important for businesses of all sizes because it helps to define a clear direction and plan for reaching target customers online. Here are some reasons why having a digital marketing strategy is crucial:

Aligns business goals with marketing efforts. A digital marketing strategy helps to ensure that the marketing efforts are aligned with the overall business goals and objectives. It helps to prioritize the marketing activities and ensure that they contribute towards achieving the business objectives.

Helps to target the right audience. A digital marketing strategy helps to identify the target audience and create content and campaigns that resonate with them. It helps to understand the audience's pain points, preferences, and behavior, and create customized marketing messages that appeal to them.

Increases brand visibility and awareness. A digital marketing strategy helps to increase brand visibility and awareness by leveraging various online marketing channels. It helps to create a consistent brand image and message across different channels, such as social media, email marketing, search engine marketing, and content marketing.

Improves customer engagement and retention. A digital marketing strategy helps to engage customers through various online channels and build lasting relationships with them. It helps to create personalized and relevant content that connects with the audience and encourages them to take action.

Provides measurable results. A digital marketing strategy helps to track and measure the performance of marketing campaigns and activities. It provides valuable insights into the effectiveness of different marketing channels and allows businesses to optimize their marketing efforts for better results.

In summary, a digital marketing strategy is essential for businesses to compete in today's digital age. It helps to create a clear roadmap for reaching target customers online, and enables businesses to stay relevant, engage customers, and achieve their business objectives. One of the important methods of the digital marketing is known to be the Search Engine Optimization.

Search Engine Optimization (SEO)

In order to survive in the attention economy, all these platforms adopt certain digital marketing techniques like display advertising, search engine advertising, social media marketing, mobile marketing, search engine optimization, web analytics, etc. In the recent times, Over-the-top (OTT platforms have gained a greater momentum in the markets. Considering the importance of digital marketing, this study focusses on ranking of widely used OTT platforms in India, based on their Search Engine Optimization (SEO) strategies.

Search Engine Optimization and its significance

In the Search Engine Optimization, efforts are taken in order to increase the visibility of a particular website for the consumers, when a product or service is searched by the consumers in the search engines like Google, Bing, etc. As far as the digital marketing is concerned, SEO is one of the important aspects. Internet search is the primary source for traffic in the digital arena. Zeroth moment of truth of the products and services is achieved by the consumers only through the search of the same in the internet search engines. Better visibility of a brand's website leads to increased traffic, thus leading to greater amount of sales conversions. Some SEO parameters are listed in the table 1.

Table 1

List of some SEO parameters

Some SEO parameters	
1. Keywords	21. SSL certificate
2. Content	22. User experience (UX)
3. Backlinks	23. Bounce rate
4. Title tags	24. Click-through rate (CTR)
5. Meta descriptions	25. Dwell time
6. Header tags	26. Time on site
7. URL structure	27. Content depth
8. Page speed	28. Content length
9.Mobile-friendliness	29. Image optimization
10. Social signals	30. Video optimization
11. Alt tags	31. Schema markup
12. Anchor text	32. Featured snippets
13. Internal linking	33. Local SEO
14. External linking	34. NAP consistency
15. Site architecture	35. Reviews and ratings
16. Site maps	36. Google My Business
17. Robots.txt file	37. Structured data
18. Domain age	38. Canonical tags
19. Page authority	39. Duplicate content
20. Domain authority	40.Crawlability and indexability

SEO is one of the important parameters for a brand to prove its digital presence. The OTT industry being a new industry, can adopt better SEO strategies to acquire more subscriptions and work on innovative business models.

Search engine optimization (SEO) is the process of improving the quality and quantity of website traffic by increasing the visibility of a website or a web page in a search engine's organic results. SEO is a critical component of online marketing, as it allows businesses to optimize their website content and structure to appear higher in search engine results pages (SERPs). In this article, we will review some key research findings and best practices related to SEO.

One of the most important aspects of SEO is keyword research. Keyword research involves identifying the most relevant and popular search terms related to a business or website. This allows businesses to optimize their website content and structure to better align with these keywords, which can lead to higher search engine rankings and increased organic traffic. Keyword research can be conducted using various tools, including Google's Keyword Planner and Moz's Keyword Explorer.

Another important aspect of SEO is on-page optimization. According to Backlinko (2021), on-page optimization refers to the optimization of individual web pages to improve their search engine rankings and drive more organic traffic. This can include optimizing page titles, meta descriptions, headers, and content for specific keywords, as well as ensuring that website pages are mobile-friendly and load quickly. On-page optimization can be a complex process, but can greatly improve a website's search engine rankings and visibility.

Off-page optimization is another important component of SEO. Off-page optimization refers to the activities conducted outside of a website to improve its search engine rankings. This can include link building, social media marketing, and influencer outreach, among other strategies. Off-page optimization can help to build a website's reputation and authority, which can lead to higher search engine rankings and increased organic traffic.

In addition to these key components of SEO, there are also various best practices that businesses can follow to improve their search engine rankings. Some of these best practices include creating high-quality, valuable content that is optimized for specific keywords, regularly updating website content and structure, and monitoring website analytics to identify areas for improvement. Additionally, businesses can consider leveraging paid search advertising to complement their organic SEO efforts.

Despite the many benefits of SEO, there are also some challenges and considerations to keep in mind. Search engine algorithms are constantly changing, which can make it difficult to stay up-to-date on the latest best practices and trends. Additionally, SEO can be a time-consuming and resource-intensive process, requiring ongoing effort and investment to maintain and improve search engine rankings.

This chapter tries to explain different SEO parameters with its relevance for performance. It also includes the comparison of seven live OTT services in terms of SEO for better understanding of the learners.

Global rank

Global rank and industry rank are two important metrics in search engine optimization (SEO). Both of these metrics can help businesses to understand how their website is performing in comparison to their competitors, as well as identify areas for improvement in their SEO strategy.

Global rank refers to a website's position in search engine results pages (SERPs) across all geographic locations. This metric is important because it provides a broad view of a website's overall search engine visibility and reach. A higher global rank indicates that a website is appearing higher in search results across multiple regions, which can lead to increased organic traffic and potential customer reach.

Industry rank

Industry rank, on the other hand, refers to a website's position in search engine results pages (SERPs) within a specific industry or niche. This metric is important because it allows businesses to compare their website's performance to their competitors within their specific industry. By analyzing industry rank, businesses can identify areas where they may be falling behind their competitors and develop strategies to improve their SEO efforts.

In addition to these metrics, businesses can also analyze other important SEO metrics such as keyword rankings, click-through rates (CTR), bounce rates, and conversion rates. By regularly monitoring and analyzing these metrics, businesses can gain insights into the effectiveness of their SEO strategy and make data-driven decisions to optimize their website's search engine visibility and performance.

Traffic and Engagement metrics

Traffic and engagement metrics are important aspects of search engine optimization (SEO) that can help businesses measure the success of their SEO strategy. Some of the common traffic and engagement metrics are;

Organic Traffic. Organic traffic refers to the number of website visitors that arrive at a website through organic search engine results. It is a key metric in SEO as it indicates the visibility of a website on search engine results pages (SERPs). The higher the organic search traffic, the better the ranking and the more clicks, and hence, more visitors from search engines.

Bounce Rate. Bounce rate refers to the percentage of visitors who leave a website after viewing only one page. A high bounce rate can indicate that a website's content is not relevant or engaging for visitors. A high bounce rate can signal to search engines that the page isn't providing the answers searchers need.

Click-Through Rate (CTR). CTR refers to the percentage of clicks a website receives in relation to the number of impressions it has. A high CTR indicates that a website's content is relevant and engaging to users. According to Backlinko, "Google may use click-through-rate as a ranking signal" (Backlinko, 2021).

Time on Site. Time on site refers to the amount of time visitors spend on a website. This metric is important because it indicates how engaged visitors are with a website's content. The longer someone stays on the website, the more likely they are to convert or return.

Pages per Session. Pages per session refers to the number of pages a visitor views on a website during a single session. A high pages per session metric indicates that visitors are engaged with a website's content and are exploring multiple pages. Pages per session can provide a clear picture of how much a user is engaged with the website.

Authority Score

Authority score is a metric used in search engine optimization (SEO) that measures the strength and credibility of a website or webpage. This metric takes into account factors such as the quality and quantity of backlinks, domain age, and content relevance to assign a score that reflects the website's authority in its niche.

Back links

Backlinks are an important factor in search engine optimization (SEO) because they signal to search engines that other websites consider the content to be valuable and relevant. When a website links to the site, it is essentially vouching for the quality of the content and indicating that it is a useful resource for their audience. Backlinks are one of the top ranking factors in Google's algorithm. A website with a higher number of quality backlinks is likely to have a higher search engine ranking than a website with fewer or low-quality backlinks. Backlinks from authoritative websites can drive traffic to the site. When a website links to the site, their visitors may click on the link and visit the site, increasing the website traffic. Domain authority is a metric that predicts how well a website will rank on search engine results pages (SERPs). Backlinks from high-quality websites can improve the domain authority, which can lead to higher search engine rankings. Backlinks from popular and authoritative websites can help increase the brand visibility. When the website is linked from reputable websites, it can help establish the brand as an industry expert and increase the credibility. Quality

backlinks can continue to benefit the website for a long time, even after they are published. Backlinks can help improve the search engine rankings and drive traffic to the site for months or even years after they are published.

Core web vitals

Core Web Vitals are a set of metrics that Google has identified as key indicators of a website's user experience. These metrics focus on the loading speed, interactivity, and visual stability of a website and are becoming increasingly important in search engine optimization (SEO). In May 2021, Google announced that Core Web Vitals would become a ranking factor in its search algorithm, making it essential for businesses to optimize their website's performance to improve their search engine rankings. The Core Web Vitals include three specific metrics:

Largest Contentful Paint (LCP). This metric measures how long it takes for the largest content element on a webpage to load. Google recommends that websites aim for an LCP of 2.5 seconds or faster.

First Input Delay (FID). This metric measures how long it takes for a website to respond to user interactions, such as clicking a button or filling out a form. Google recommends that websites aim for an FID of 100 milliseconds or less.

Cumulative Layout Shift (CLS). This metric measures how much a website's content shifts around as it loads. Google recommends that websites aim for a CLS score of 0.1 or less.

Optimizing for Core Web Vitals can have a significant impact on a website's search engine rankings. One study found that websites that scored well on Core Web Vitals had significantly higher search engine rankings than those that scored poorly. The study, conducted by SEO software company Ahrefs, analyzed over 2 million mobile and desktop search queries and found that the median Core Web Vitals scores were higher for pages that ranked in the top 10 search results.

In addition to the Core Web Vitals, there are several other performance metrics that are important for search engine optimization (SEO). These metrics provide insights into how quickly a website loads and responds to user interactions, which can impact both user experience and search engine rankings.

First Contentful Paint (FCP). This metric measures how long it takes for the first piece of content to appear on a webpage. It is an important indicator of perceived loading speed and can impact user engagement. Google recommends that websites aim for an FCP of 1.5 seconds or faster.

Input Latency (INP). This metric measures how long it takes for a website to respond to user interactions, such as clicking a button or filling out a form. It is similar to the FID metric used in the Core Web Vitals. Google recommends that websites aim for an INP of 50 milliseconds or less.

Time to First Byte (TTFB). This metric measures how long it takes for a user's browser to receive the first byte of data from a website's server. It is an important indicator of server response time and can impact both user experience and search engine rankings. Google recommends that websites aim for a TTFB of 200 milliseconds or less. Optimizing for these metrics can help improve a website's loading speed and user experience, which can lead to higher search engine rankings (Sainy et al., 2022)

SEO tools adopted for the study

SEMrush, SimilarWeb, GTmetrix and PageSpeed Insights are some of the web analytics and SEO tools. These tools were used to create illustrations for the study.

SEMrush

SEMrush is a popular and powerful online marketing tool that is designed to provide insights into the search engine optimization (SEO) strategies of websites (Drivas et al., 2017). It allows users to analyze their own websites or those of their competitors, and provides data on keyword rankings, traffic statistics, and backlink profiles. SEMrush is one of the most widely used SEO tools among marketers, with over 6 million users worldwide. The authors also note that SEMrush has been shown to be effective in improving website traffic and visibility in search engine results pages (SERPs), making it a valuable asset for businesses looking to improve their online presence.

SimilarWeb

SimilarWeb is a competitive intelligence tool that provides insights into the online behavior of users, allowing businesses to track and analyze their own performance as well as that of their competitors. The tool provides data on website traffic, audience demographics, referral sources, and user engagement metrics. SimilarWeb has been shown to be effective in identifying key online competitors and analyzing their strategies, making it a valuable tool for businesses looking to improve their online presence (Suksida & Santiworarak, 2017). The authors also note that SimilarWeb has been used in academic research to understand online user behavior and track trends in the digital marketplace.

GTmetrix

GTmetrix is a popular website performance monitoring tool that provides insights into website speed and optimization (Dawis & Setiawan, 2022). The tool analyzes website loading speed, page size, and requests, as well as providing recommendations for improving website performance. GTmetrix is a useful tool for optimizing website speed and improving user experience. The authors note that the tool has been used to analyze the performance of websites across a variety of industries, and has been shown to be effective in identifying areas for improvement. GTmetrix is a valuable asset for

businesses looking to improve website performance, particularly in industries where website speed is critical to user experience, such as e-commerce and news websites.

PageSpeed Insights

PageSpeed Insights is a free website performance monitoring tool that is designed to help website owners and developers optimize website speed and user experience. The tool analyzes website loading speed and provides recommendations for improving website performance. PageSpeed Insights is an effective tool for optimizing website speed and improving user experience, particularly for mobile users (Shan et al., 2017). The authors note that the tool has been shown to be particularly useful for websites in industries where user experience is critical, such as e-commerce and travel websites. PageSpeed Insights is a valuable asset for website owners and developers looking to improve website performance and user experience.

Comparison of OTT services based on SEO

The table 2 provides information on the performance of seven popular OTT (Over The Top) streaming services during the first quarter of 2023. The data includes their global and industry ranking, traffic and engagement metrics such as monthly unique visitors, total visits, average visit duration, pages per visit, and bounce rate. Additionally, it provides information on the search behavior of users, including total search visits, organic visits, and paid visits, along with data on app downloads and daily active users.

Table 2

SimilarWeb Insights

OTT streaming service	Rank		Traffic and Engagement					Search			App data	
	Global rank	Industry Rank	Monthly unique visitors (during Jan 2023 – Mar 2023)	Total visits – Worldwide (during Jan 2023 – Mar 2023)	Average visit duration	Pages per visit (during Jan 2023 – Mar 2023)	Bounce rate (during Jan 2023 – Mar 2023)	Total Search Visits (during Jan 2023 – Mar 2023)	Organic visits %	Paid visits %	App downloads (Mar 2023)	Daily active users (Mar 2023)
Netflix	29	2	214.4M	4.745 B	00:05:25	4.38	34.75%	298.7 M	99.92	0.08	18.9 M	51.65 M
Disney + Hotstar	170	6	66.73M	744.8 M	00:07:21	4.36	32.50%	38.71 M	97.62	2.38	17M	26.36 M
Amazon prime video	234	12	60.58M	596.4 M	00:02:40	2.75	44.65%	98.23 M	66.04	33.96	8.8 K	3.27 K
Zee5	2627	112	9.994M	24.57 M	00:07:04	3.29	39.39%	5.996 M	65.68	34.32	7.3 M	5.98 M
Sony Liv	1648	34	11.90M	37.89 M	00:03:50	3.33	46.11%	8.507 M	49.16	50.84	50.6 K	5.95 K
Aha	19492	801	1.682M	11.90 M	00:02:30	3.56	44.09%	1.708 M	69.09	30.91	376.8 K	368.53 K
Voot	4600	188	6.858M	69.22 M	00:05:04	3.83	38.69%	2.636 M	94.92	5.08	2.3 M	2.02 M

According to the data, Netflix is the top-ranked OTT streaming service in terms of both global and industry ranking, with 214.4 million monthly unique visitors and 4.745 billion total visits. Users spend an average of 5 minutes and 25 seconds on the platform and view 4.38 pages per visit, while the bounce rate is 34.75%. The search behavior data reveals that Netflix received 298.7 million search visits during this period, with 99.92% being organic visits.

Disney+ Hotstar is the second most popular streaming service with 66.73 million monthly unique visitors and 744.8 million total visits. The platform boasts an average visit duration of 7 minutes and 21 seconds and 4.36 pages per visit, while the bounce rate is 32.5%. The search behavior data indicates that 97.62% of the 38.71 million total search visits were organic, with 2.38% being paid visits.

Amazon Prime Video ranked third in terms of popularity with 60.58 million monthly unique visitors and 596.4 million total visits. Users spent an average of 2 minutes and 40 seconds on the platform and viewed 2.75 pages per visit, while the bounce rate was 44.65%. The search behavior data shows that 66.04% of the 98.23 million total search visits were organic, with 33.96% being paid visits.

Zee5 is the fourth most popular streaming service with 9.994 million monthly unique visitors and 24.57 million total visits. Users spent an average of 7 minutes and 4 seconds on the platform and viewed 3.29 pages per visit, while the bounce rate was 39.39%. The search behavior data indicates that 65.68% of the 5.996 million total search visits were organic, with 34.32% being paid visits.

Sony Liv ranked fifth with 11.9 million monthly unique visitors and 37.89 million total visits. Users spent an average of 3 minutes and 50 seconds on the platform and viewed 3.33 pages per visit, while the bounce rate was 46.11%. The search behavior data shows that 49.16% of the 8.507 million total search visits were organic, with 50.84% being paid visits.

Aha is the sixth most popular streaming service with 1.682 million monthly unique visitors and 11.9 million total visits. Users spent an average of 2 minutes and 30 seconds on the platform and viewed 3.56 pages per visit, while the bounce rate was 44.09%. The search behavior data reveals that 69.09% of the 1.708 million total search visits were organic, with 30.91% being paid visits.

Voot ranked last in terms of popularity with 6.858 million monthly unique visitors and 69.22 million total visits. Users spent an average of 5 minutes and 4 seconds on the platform and viewed 3.83 pages per visit, while the bounce rate was 38.69%. The search behavior data shows that 94.92% of the 2.636 million total search visits were organic.

Thus, on the whole, Services like Netflix and Amazon Prime Video should work on improving average visit duration and pages per visit to increase engagement, while services like Disney+ Hotstar and Sony Liv should focus on increasing organic visits to reduce the percentage of paid visits. In addition, increasing app downloads and daily active users is important for all services to improve their visibility and expand their user base in the highly competitive OTT streaming industry.

Table 3

Semrush Insights

OTT streaming service	Authority Score (Mar 2023)	Search Traffic		Bounce rate	Avg. visit duration	Back links
		Organic	Paid			
Netflix	100	330.2M	75.4K	56.89%	27:10	239.4M
Disney+ Hotstar	95	60.1M	50.6K	70.99%	23:49	11.6M
Amazon prime video	90	45.6 M	7.3 M	58.06%	07:14	119.5 M
Zee5	77	18.5 M	592.6 K	73.07%	17:26	1.7M
Sony Liv	79	7.9 M	785.7 K	80.81%	19:54	2.3 M
Aha	54	1.6 M	172.5 K	NA	NA	298.1 K
Voot	67	6.4 M	54.8 K	74.12%	24:58	604.9 K

The above table 3 provides data on the Authority Score, Search Traffic, Bounce Rate, Average Visit Duration, and Backlinks for the top OTT (Over-The-Top) streaming services as of March 2023. Netflix has an Authority Score of 100, the highest among all the OTT services listed. It also has the highest Search Traffic of 330.2 million, indicating strong brand awareness and user interest. The bounce rate is relatively low at 56.89%, and the average visit duration is high at 27 minutes and 10 seconds, indicating that users spend a significant amount of time on the platform. It also has the highest number of backlinks at 239.4 million, indicating a strong online presence. Disney+ Hotstar has an Authority Score of 95, indicating high credibility and influence. It has a search traffic of 60.1 million, which is significantly lower than Netflix. The bounce rate is relatively high at 70.99%, and the average visit duration is 23 minutes and 49 seconds, indicating that users are not spending as much time on the platform. However, it has a decent number of backlinks at 11.6 million, which shows that it is also a well-known brand. Amazon Prime Video has an Authority Score of 90 and has both organic and paid search traffic of 45.6 million and 7.3 million, respectively. The bounce rate is 58.06%, and the average visit duration is 7 minutes and 14 seconds, indicating that users spend relatively less time on the platform. However, it has a high number of backlinks at 119.5 million, which shows its popularity and strong online presence. Zee5 has an Authority Score of 77, indicating a moderately high level of credibility and influence. It

has organic search traffic of 18.5 million and a relatively low bounce rate of 73.07%. The average visit duration is high at 17 minutes and 26 seconds, indicating that users spend a decent amount of time on the platform. It has 1.7 million backlinks, which is relatively low compared to Netflix and Amazon Prime Video. Sony Liv has an Authority Score of 79, indicating a good level of credibility and influence. It has organic search traffic of 7.9 million and a bounce rate of 80.81%. The average visit duration is high at 19 minutes and 54 seconds, indicating that users spend a decent amount of time on the platform. It has 2.3 million backlinks, which is higher than Zee5 but still lower than Netflix and Amazon Prime Video. Aha has an Authority Score of 54, indicating a relatively low level of credibility and influence compared to the other OTT services. It has organic search traffic of 1.6 million and a low number of backlinks at 298.1K. Voot has an Authority Score of 67, indicating a moderate level of credibility and influence. It has organic search traffic of 6.4 million and a bounce rate of 74.12%. The average visit duration is high at 24 minutes and 58 seconds, indicating that users spend a decent amount of time on the platform. It has 604.9K backlinks, which is lower than all the other OTT services listed except Aha.

Thus, Netflix, being the leader in the industry, should continue to improve its already strong organic search traffic and backlinks. Disney+ Hotstar and Amazon Prime Video should work on reducing their high bounce rates, while services like Zee5, Sony Liv, and Voot should increase their search traffic and backlinks to improve their authority scores. Aha needs to work on improving all metrics to increase its authority score and compete with other OTT services.

Table 4

Core Web Vitals Assessment - Mobile

OTT streaming service	Largest Contentful Paint (LCP)	First Input Delay (FID)	Cumulative Layout Shift (CLS)	First Contentful Paint (FCP)	Interaction to Next Paint (INP)	Time to First Byte (TTFB)
Netflix	2.3 s	17 ms	0	1.8 s	153 ms	1.1 s
Disney+ Hotstar	6.1 s	222 ms	0.29	2.6 s	1043 ms	1 s
Amazon prime video	3.5 s	15 ms	0	3.2 s	155 ms	2.2 s
Zee5	7.7 s	949 ms	0.29	3.1 s	3890 ms	2 s
Sony Liv	7.9 s	75 ms	0.94	4 s	778 ms	1 s
Aha	5.9 s	36 ms	0.16	2.9 s	455 ms	0.9 s
Voot	2.4 s	63 ms	0.59	2 s	842 ms	1.2 s

The table 4 shows the Core Web Vitals assessment of popular OTT (Over-the-Top) streaming services on mobile devices. The Core Web Vitals are a set of metrics that measure website speed, responsiveness, and visual stability.

The first metric, Largest Contentful Paint (LCP), measures the loading performance of the largest image or text block visible within the viewport. The ideal score for LCP is below 2.5 seconds, and all streaming services have managed to achieve that. Netflix has the fastest LCP of 2.3 seconds, while Zee5 has the slowest LCP of 7.7 seconds.

The second metric, First Input Delay (FID), measures the time between the user's first interaction with the website and the website's response. The ideal score for FID is below 100 milliseconds. All streaming services, except Sony Liv, have managed to achieve an FID score of under 100 milliseconds. Disney+ Hotstar has the slowest FID of 222 milliseconds, while Sony Liv has the highest FID of 75 milliseconds.

The third metric, Cumulative Layout Shift (CLS), measures the visual stability of a webpage by measuring the amount of unexpected layout shifts that occur during the loading process. The ideal score for CLS is below 0.1. None of the streaming services scored a perfect 0 for CLS, but only Zee5 and Sony Liv have a CLS score above 0.5.

The fourth metric, First Contentful Paint (FCP), measures the time it takes for the first content element of a webpage to appear on the screen. The ideal score for FCP is below 1.5 seconds. All streaming services have achieved an FCP score below 5 seconds, with Aha having the fastest FCP of 2.9 seconds, while Sony Liv has the slowest FCP of 4 seconds.

The fifth metric, Interaction to Next Paint (INP), measures the time between a user's interaction with the website and the website's response to that interaction. The ideal score for INP is below 100 milliseconds. All streaming services, except Voot, have achieved an INP score below 1 second. Zee5 has the slowest INP of 3.89 seconds, while Voot has the highest INP of 842 milliseconds.

The sixth metric, Time to First Byte (TTFB), measures the time it takes for a user's browser to receive the first byte of page content from the server. The ideal score for TTFB is below 200 milliseconds. None of the streaming services have achieved a TTFB score below 200 milliseconds, with Amazon Prime Video having the fastest TTFB of 2.2 seconds, while Sony Liv has the slowest TTFB of 1 second.

In mobile interface, services like Disney+ Hotstar, Zee5, Sony Liv, and Aha should focus on improving their LCP, which is considerably slower than other services. Additionally, Voot can work on reducing its Cumulative Layout Shift (CLS) score. Finally, all services can aim to improve their First Contentful Paint (FCP), Interaction to Next Paint (INP), and Time to First Byte (TTFB) scores to further enhance their user experience.

Table 5

Core Web Vitals Assessment - Desktop

OTT streaming service	Largest Contentful Paint (LCP)	First Input Delay (FID)	Cumulative Layout Shift (CLS)	First Contentful Paint (FCP)	Interaction to Next Paint (INP)	Time to First Byte (TTFB)
Netflix	2.6 s	23 ms	0.01	2.2 s	57 ms	1.5 s
Disney+ Hotstar	3.9 s	17 ms	0.53	1.5 s	552 ms	0.7 s
Amazon prime video	3.5 s	2 ms	0	3 s	28 ms	1.8 s
Zee5	3.7 s	51 ms	0.06	2.2 s	772 ms	1.5 s
Sony Liv	5.5 s	4 ms	0.19	1.2 s	226 ms	0.6 s
Aha	6.8 s	4 ms	0.12	1.8 s	166 ms	0.4 s
Voot	1.7 s	6 ms	0.16	1.3 s	414 ms	0.7 s

The table 5 shows the Core Web Vitals Assessment for various OTT (Over-The-Top) streaming services on desktop devices.

Among the services assessed, Voot appears to have the best performance, with an LCP of 1.7 seconds, an FID of 6 milliseconds, and a CLS of 0.16. Amazon Prime Video had the best FID score of just 2 milliseconds, indicating a highly responsive user interface.

In contrast, Sony Liv had the slowest LCP score of 5.5 seconds, indicating that the largest element on the page takes longer to load. Aha had the slowest INP score of 166 milliseconds, indicating that the user's interaction with the website takes longer to produce a visible response.

In the desktop interface, based on the performance metrics provided, all seven OTT streaming services could benefit from improving their page load times and reducing layout shift to improve user experience. Specific recommendations include optimizing images and videos to reduce their file size, leveraging browser caching to reduce Time to First Byte (TTFB), and minimizing the use of third-party scripts that can impact page performance. Additionally, reducing the amount of content above the fold and deferring non-critical scripts can help improve Largest Contentful Paint (LCP) and First Contentful Paint (FCP). Overall, prioritizing user experience and page speed can lead to increased engagement and retention of users on these platforms.

Table 6

GTmetrix Insights

OTT streaming service	Grade	Performance	Structure	LCP (Largest Content Element)	TBT	CLS
Netflix	B	87	85	1.2 s	229 ms	0.01
Disney+ Hotstar	NA	NA	NA	NA	NA	NA
Amazon prime video	A	98	88	1.0	70 ms	0
Zee5	F	25	80	3.1 s	2.8 s	0.17
Sony Liv	C	64	90	1.7 s	643 ms	0.05
Aha	NA	NA	NA	NA	NA	NA
Voot	E	38	89	3.7	879 ms	0

Based on the table 6, the performance of these services has been graded on a scale of A to F, where A represents the highest grade and F represents the lowest. The metrics considered for grading include Performance, Structure, LCP (Largest Content Element), TBT (Time to Interactive), and CLS (Cumulative Layout Shift).

Based on the table, Amazon Prime Video has the highest overall grade of A, with excellent performance (98) and well-structured website (88). It also has a very fast LCP (largest content element) of 1.0 second and TBT (time to interactive) of only 70ms. Additionally, it has a perfect score of 0 for CLS (cumulative layout shift), indicating that users won't experience any annoying or unexpected layout shifts while using the service.

On the other hand, Zee5 has the lowest grade of F, indicating that it has significant performance and structural issues. It has a slow LCP (largest content element) of 3.1 seconds, and a very high TBT (time to interactive) of 2.8 seconds. Additionally, it has a high CLS (cumulative layout shift) score of 0.17, indicating that users may experience unexpected layout shifts while using the service.

Netflix has a decent overall grade of B, with a good performance score (87) and a well-structured website (85). However, its LCP (largest content element) of 1.2 seconds is relatively slower than Amazon Prime Video. Sony Liv has a slightly lower grade of C, with a moderate performance score (64) and a well-structured website (90). However, its LCP (largest content element) of 1.7 seconds is also slower than Amazon Prime Video.

Disney+ Hotstar and Aha do not have any data available for analysis, and therefore, their performance metrics are unknown.

Hence, streaming services should focus on improving their performance metrics such as LCP and TBT to provide a better user experience. Additionally, they should pay attention to the layout shift to avoid annoying the users while browsing. Services with higher grades, such as Amazon Prime Video, should serve as a benchmark for other services in the industry.

Ranking based on TOPSIS method

Ranking was done based on Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) method, taking 11 important metrics into account with the respective weightage as shown in the table 7. The weightage for each of the metrics were decided based on the experts' opinion and literature.

Table 7

Metrics	Weightage
Daily Active Users (DAU)	0.1
Monthly Unique Visitors	0.1
Total Visits - Worldwide	0.1
Total Search Visits	0.08
Organic Visits	0.08
Paid Visits	0.08
Authority Score	0.07
Backlinks	0.07
Pages Per Visit	0.06
App Downloads	0.03
Structure	0.01

The results based on the TOPSIS method are shown below;

Table 8

	Si+	Si-	Pi
Netflix	0.052855	0.193365	0.785333
Disney+ Hotstar	0.155	0.064303	0.293216
Amazon prime video	0.167388	0.053098	0.240822
Zee5	0.185297	0.039764	0.176681
Sony Liv	0.189488	0.065416	0.25663
Aha	0.193334	0.033365	0.147179

Voot	0.194132	0.020909	0.097233

Table 9

Brand	Rank
Netflix	1
Disney+ Hotstar	2
Amazon prime video	4
Zee5	5
Sony Liv	3
Aha	6
Voot	7

Table 8 and 9 indicate that Netflix has been ranked first, indicating that it performs exceptionally well across the chosen metrics for digital marketing. This could suggest that it effectively utilizes online advertising, has a strong social media presence, high website traffic, and impressive conversion rates. Disney+ Hotstar is ranked second, showing that it also performs admirably in your digital marketing metrics. It likely has a strong online marketing strategy, effective engagement on social media, good website traffic, and decent conversion rates.Sony Liv takes the third spot, suggesting solid performance in your digital marketing metrics. This means it is likely doing well in online advertising, maintaining an active presence on social media, and attracting visitors to its website.Amazon Prime Video is ranked fourth, indicating that its digital marketing performance is good but not as strong as the top three. It may excel in some metrics but lag behind in others. Zee5 occupies the fifth position, signifying that it's a decent performer in your metrics but has room for improvement in digital marketing strategies.Aha is ranked sixth, suggesting that it may need to enhance its digital marketing efforts to compete more effectively with the higher-ranked platforms. Voot is at the bottom of the ranking, indicating that it may have some challenges in its digital marketing performance. It might need to review and optimize its strategies to improve its position.

Conclusion and Discussion

This study will an eye opener for the consumers, media producers and the market players in understanding the position of the OTT brands in terms of the efforts in search engine optimization. This will also kindle new strategies in order to enhance the visibility through SEO strategies. SEO is essential for any online business that wants to succeed in today's digital landscape. It helps businesses to increase their visibility, credibility, and profitability, while also providing a cost-effective way to attract targeted traffic and gain a competitive edge. Real-life business examples can help to understand SEO better by providing concrete illustrations of how SEO works in practice and how it can impact a business's success. This chapter has attempted to emphasise on the same.

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