Ridhim

(Music Streaming App)

A PROJECT REPORT

BACHELOR OF ENGINEERING

COMPUTER SCIENCE & ENGINEERING



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INTERNAL EXAMINER

EXTERNAL EXAMINER

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LITERATURE REVIEW

Music plays an important role in every person life. Over the time, it has been proved that music has immense effect in every aspect of life whether it is personal growth or social growth. Music has been shown to have many cognitive benefits, from improving memory and thinking to encouraging creativity and problem solving. Playing music or singing can also help develop fine motor skills and coordination. It can be a great way to showcase and celebrate a culture and heritage and can help bring people from different backgrounds together. Music is a universal language that brings people together and creates a sense of community. Music can create unity and build strong relationships. Music therapy has been used to help people cope with a variety of physical and mental problems, from chronic pain to depression and anxiety. Listening to music can also reduce stress and stimulate emotions.

Online music streaming apps have become increasingly popular in recent years, with the rise of smartphones and the increasing availability of high-speed internet. These apps helps in different ways.

It provides an easy and convenient way to access music anytime, anywhere. Users can stream or download millions of songs to their device with just a few clicks, making it easy for them to enjoy their favorite music anytime, anywhere. These apps use advanced algorithms to customize the user experience and offer recommendations based on the user's listening and preferences. This helps users discover new music they might not find otherwise and can create a more engaging and enjoyable listening experience.

These apps provides access to a large library of songs spanning many genres, artists, and eras. This means users can easily search for new movies and artists or rediscover old favorites all in one place. Many music apps offer integrations that allow users to share their favorite songs and playlists with friends and followers on social media. This will help create a sense of community and link music and can introduce users to new songs their friends are listening to. Music app provides a great way to access and enjoy music. While many apps offer free versions with limited features, premium versions often offer additional benefits such as ad-free listening, offline playback, and better sound. This literature review will provide an overview of the current state of research on online music streaming apps and their impact on the music industry.

BACKGROUND STUDY

Music streaming applications have revolutionized the way people consume music in the digital age. These apps provide users with access to a vast library of songs and artists, personalized recommendations, and the convenience of on-demand listening without the need for physical media. They have become increasingly popular due to the rise of smartphones and the increasing availability of high-speed internet. However, these apps have also raised concerns about the impact on the music industry, particularly for artists and record labels. Technical challenges such as audio quality and compatibility with different devices and platforms also need to be addressed to ensure a high-quality user experience.

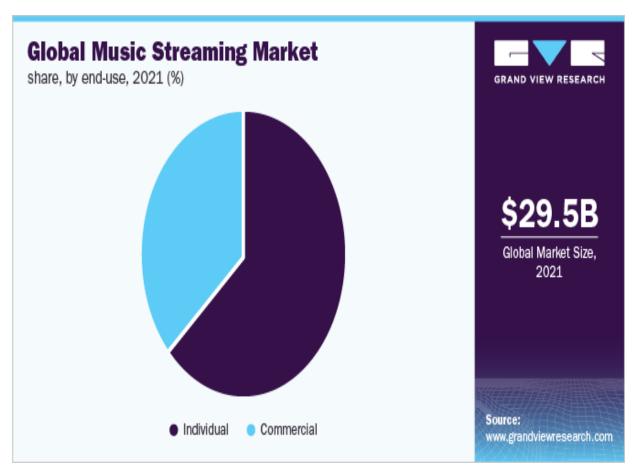


Figure 1.Market value graph

The world is tuning in to the sweet sound of music streaming, with the global market hitting a high note at USD 29.45 billion in 2021. The melody is expected to continue its crescendo, with a compound annual growth rate of 14.7% from 2022 to 2030, fueled by the rise of digital platforms and the use of smart devices. With offerings ranging from audio and podcasts to music videos, streaming services are striking the right chord with users through features like personalized recommendations and effortless connectivity on apps and browsers. As the podcast genre expands on these platforms, the market's rhythm is set to amplify.

Timeline Of the reported problem

- 2000s: The rise of digital music and file-sharing services such as Napster, Kazaa, and Limewire.
- 2008: The launch of Spotify, which becomes one of the most popular music streaming apps.
- 2014: Taylor Swift removes her music from Spotify, citing concerns about the low royalties paid to artists.
- 2015: Apple Music is launched, offering a new competitor in the music streaming market.
- 2016: Prince removes his music from all streaming services except Tidal, leading to a debate about exclusive content deals.
- 2018: Spotify goes public, with a valuation of over \$26 billion.
- 2019: Apple Music surpasses Spotify in paid subscribers in the United States.
- **2020:** The COVID-19 pandemic leads to a surge in music streaming as people stay home and seek entertainment online.
- 2021: Reports emerge about the potential impact of new music streaming regulations proposed in the US, which could affect how much artists are paid for their work.

Existing Solutions

There are many existing solutions in the music streaming app market. Here are some of the most popular ones:

- Spotify: It is one of the most popular music streaming apps, offering a vast library of songs, podcasts, and playlists, personalized recommendations, and social features. Spotify has many integrations that allow users to share their favorite songs, albums and playlists with their friends and followers on social media. This will help create a sense of community and link music and can introduce users to new songs their friends are listening to. Spotify also provides access to a variety of podcasts, audiobooks, and other content. This means users can use the app for various entertainment in one place. Spotify has a free version with limited features, as well as a premium version that offers additional benefits such as ad-free listening, great sound for offline play, and more.
- Apple Music: A music streaming service offered by Apple developed in 2015, with a similar range of features to Spotify, including exclusive content and radio shows. Apple Music integrates with all Apple devices such as iPhone, iPad and Mac. It offers a free trial period as well as a monthly subscription option that is very affordable and comparable to other music services.
- Amazon Music: A music streaming service offered by Amazon, with a focus on integrating with other Amazon devices and services.
- Tidal: It is a music streaming service launched in 2014 and owned by Jay-Z and

a group of other music artists. It is a music streaming service known for its high-quality audio and exclusive content, including albums and music videos. It has over 70 million songs from different genres and artists. This means users can easily find and listen to their favorite songs and discover new songs they may not have seen.

- Pandora: It is music streaming app launched in 2005 that creates personalized radio stations based on user preferences and song selection. Pandora offers both ad-supported and subscription-based options for users. The subscription option provides additional features such as ad-free listening, higher audio quality, and offline playback. It is integrated with a range of smart devices, including Amazon Echo and Google Home. This means that users can easily access and control their music using voice commands.
- **Deezer:** Deezer is a music streaming service launched in 2007. It has a large music library of songs in different formats and is known for its recommendations and features. It provides access to over 73 million songs, making it one of the largest music services. Deezer's "Flow" feature is a personalized radio station that plays shuffles based on the user's listening history and preferences. It's a great way to discover new music and artists you wouldn't find otherwise. It also provides access to a wide variety of podcasts, including original content and popular international shows.
- YouTube Music: A music streaming service launched in 2018 offered by YouTube, with a focus on music videos and live performances. It uses advanced technology to customize the user experience and offers recommendations based

on the user's listening history and preferences. This helps users find new music they like and can create a harmonious and enjoyable listening experience. YouTube Music offers users ad-supported and subscription-based options. The subscription option offers additional features such as ad-free listening, better sound quality and offline playback. YouTube Music has a free version with limited features as well as a monthly subscription option that is very affordable and comparable to other music services.

- **SoundCloud:** A platform for independent artists to upload and share their music, with a growing library of songs and features such as reposting and commenting. It is an online platform for music sharing and discovery that allows users to upload, promote and share their own music or listen to music uploaded by other users. Founded in 2007, SoundCloud has grown into a popular destination for independent musicians, DJs and music lovers, with a large and strong client base around the world.
- One of the unique features of SoundCloud is its focus on social networks, allowing users to follow, like and comment on tracks and connect with other users who share their experiences. The platform also offers a variety of tools and analytics to help artists and producers build their audience and track their progress.

Problem Definition

The main objective is to create application-based music player that enables users to stream their preferred music. The music player should have an intuitive interface that makes it simple for users to explore, search, and play music tracks. It should also be quick and easy to use.

There is a growing demand for online music streaming services, with users seeking convenient, personalized, and high-quality access to a vast library of songs and artists. However, there are several challenges associated with developing and maintaining a successful music streaming app, including technical issues such as audio quality and compatibility, concerns about the impact on the music industry and artist royalties, and the need to provide a unique and engaging user experience to stand out in a crowded market. The problem to be addressed by the Music Streaming App project is how to create a high-quality, user-friendly music streaming app that meets the needs and expectations of today's music consumers, while addressing these challenges and ensuring the sustainability and profitability of the service.

References

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- 3) "The Impact of Music Streaming on the Music Industry: A Global Perspective" by A. Montagnani and E. Losavio: This academic article explores the economic and legal implications of music streaming for the music industry, including revenue models and copyright issues.
- 4) "Designing the User Experience of Music Streaming Apps: A Literature Review" by M. Ma and L. Yang: This academic article reviews existing research on user experience design for music streaming apps and provides recommendations for creating engaging and user-friendly interfaces.
- 5) "How Spotify Engineered the Perfect Release Day" by J. Cowen: This article from The Verge examines the marketing strategies and data analytics behind successful music releases on Spotify.