M MUSIC APP

"Discover your sound. Stream, Groove, Repeat.   Discover our music app now!"

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Course Code: BMAN 31212

Course Title: Investment Economics & Innovation

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Executive summary

♪ **Innovative Music Streaming App**

♫ Positioned in a booming market, our app offers competitive pricing and innovation

♫ High demand aligns with the rising trend in music streaming

♫ Global reach with easy scanning and language-changing features for diverse users

♪ **Rapid Returns and High Profits**

♫ Payback and discounted payback within five years.

♫ Anticipated 83.9% Internal Rate of Return (IRR)

♪ **Lucrative Cash Flow and Minimal Investment**

♫ Projected NPV of more than £ £1,600,000,000

♫ Low initial investment with a RoCE rate of 168937.80%

♪ **Enhanced User Experience and Competitive Advantage**

♫ Addresses common shortcomings observed in established music applications

♫ Offer users low cost and innovative features

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Introduction

This report is tailored for investors seeking opportunities in cutting-edge mobile applications equipped with advanced features and artificial intelligence within an established and growing market. The "M App" project presents a unique offering of mobile application compatible with both iOS and Android devices, providing users access to a diverse range of audio content including music and podcasts. Distinguished from recognised music applications, "M App" integrates fundamental music app functionalities with innovative features first-time in the industry. The initial investment for the "M App" project stands at approximately £543,140.00, with profitability anticipated within a three-year timeframe. This report provides a comprehensive examination of the "M App" project, supporting with detailed descriptions, thorough analyses of investment metrics, revenue and cost sensitivity assessments, finishing with conclusive insights and recommendations. Further information and resources are available in the appendix and reference section for your reference.

Project description

What is it?

The project involves developing a media app that allows users to download and listen to a variety of music albums from various artists, podcasts, and audio books through a subscription payment model. The app aims to provide additional innovative features alongside with basic music app features. The timeframe of the project is 20 years.

How does it work?

Upon using the app, users can initially explore the app with free trial of three months before being prompted to create an account. During free trial period, users will have access to basic music app features such as streaming, saving, and downloading media, as well as the ability to create, edit, and delete their own albums. Users can also use the new features three times each, listen with ads, and access to limited music, podcasts and audios. Account creation options include email, phone number, or social media platforms such as Google, Facebook, Apple, WeChat, KakaoTalk, and WhatsApp.

New features of the app include language change options, media sharing and messaging functionalities, audio identification, and text/image scanning capabilities. The language change feature enables users to use the app in their preferred language. Media sharing and messaging allow users to share media directly via the app, recommend new favorites, share favorite lines of lyrics, and engage in general messaging. Audio identification allows the app to identify songs by listening to a short piece of audio, while the text/image scanner automatically places scanned text into the search box. This feature is useful for quickly identifying songs from scanned lists or images, saving users time and effort.

The "M App" offers new feature that are not commonly found in established music applications while accessing basic music app features at a lower price. Users can get the taste of these new features during the three-month free trial period before committing to subscription. The new features customers can look forward to try includes language setting customization, media sharing and messaging, audio identification and text/image scanning. These innovative features not only address typical issues found in other music apps but also enhance accessibility, usability, and the ability to share the joy of audio with loved ones.

Technical Development Workflow

The app development requires researching, planning, designing and programming. Then, rigorous testing is carried out to fix bugs before deployment. Consistent maintenance and updates are done throughout the project timeframe.
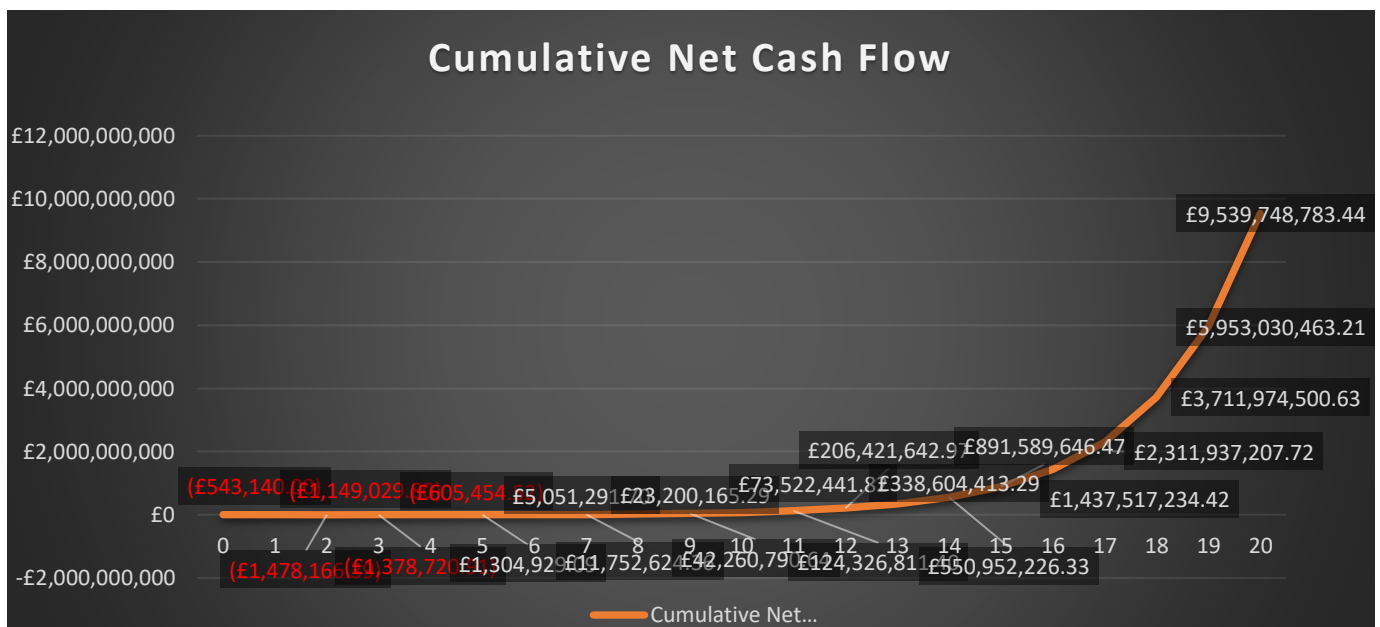
Business Model

Figure 1: Cumulative Net Cash Flow

Revenue

The "M App" project has two main sources of revenue: subscription fees and advertisement incomes.

Subscription Fee: paid by users and advertisement done on the platform. The assumption is based on a subscription fee of £8.99 per month per user, with an estimated retention rate of 60% of total users subscribing. This results in a steady increase in subscription revenue over the project's 20-year timeframe.

Advertisement Incomes: paid by other companies wishing to advertise on the platform. Revenue from advertisements is estimated based on industry data (Statista, 2023d), particularly data from Spotify in 2023 (Business of Apps, 2024). With an average revenue per user (ARPU) of £2.75 per year, derived from digital ad revenue from major internet companies (Statista, 2024b), the advertisement income increases gradually as the user base grows.

Estimation of User Number:

The project is assumed to have an initial user base of 50,000 in its first year, determined through an analysis of data from competitors during their early launch phases, although underestimated. Over the project's duration, user numbers are projected to increase exponentially at a 60% annual growth rate, potentially reaching a user base of 377 million by the project's conclusion, also underestimated. Revenue from subscription fees and advertisements will increase as the user base expands (Statista, 2024a).
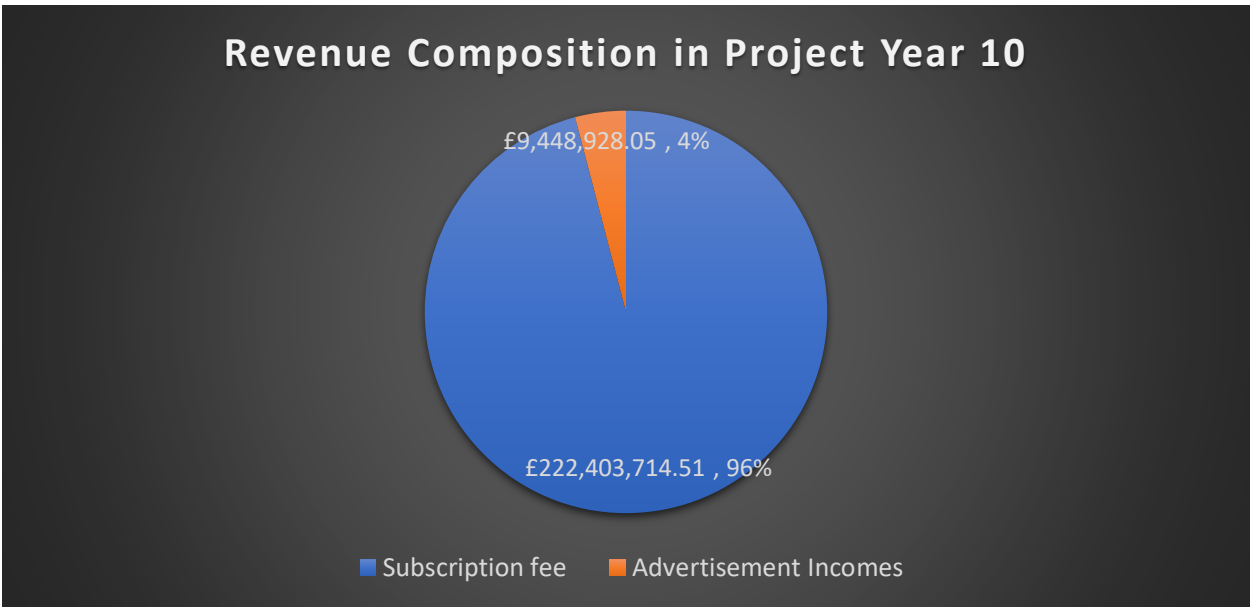

Figure 2: Revenue Composition in Project Year 10

Cost

The "M App" project has various expenses necessary for app development, maintenance, human resources, marketing, insurance, and other aspects.

App Development Fees: The initial cost of app development fee is estimated at £260,900 for a moderately complex application. This includes expenses such as frontend and backend development, database and cloud services. Additional fees will be included later in the line for third party payment service (Nimble AppGenie, 2024) (Cleveroad, 2023).

App Licenses: A one-time fee of £119 is incurred for acquiring licenses required for app distribution on platforms such as Apple App Store and Google Play Store (Creative.onl, 2023).

System Maintenance & Patching: Approximately 20% of the initial app development cost, totalling £20,000, for ongoing system maintenance to ensure optimal performance and address technical issues (Imaginovation, 2023).

HR Expenses: Human resource expenses are salaries for technical and non-technical employees (Velvetech, 2024). Tech employees are estimated to receive a total salary of £250,000 annually (CWJobs, n.d.), and other employees' salaries of £270,000 annually (Glassdoor, 2024a) (Glassdoor, 2024b) (Indeed, 2024) (Reed, n.d.), with the 5% increase after two years (Cintra, 2024).

Marketing Expenses: Marketing costs are calculated as 12% of total revenue for the first three years and 5% afterwards (Experian, 2020) (Statista, 2022).

Insurance: Insurance costs £60 per employee per year, totalling £660 annually for 11 employees (Moonworkers, 2023) (Nimblefins, 2023).

Tech Supplies: A one-time overestimate expense of £8,000 is distributed for purchasing necessary technical equipment and supplies (CyberPowerSystem, n.d.).

Rent: Coworking space rental expenses are estimated at £24,000 annually initially (Rubberdesk, 2024), increasing by a rate of 1.1% each year per employee (Statista, 2023a).

Artist Royalty Fee: A fixed royalty fee is calculated based on the number of music streams, resulting £57.67 per user per year (£0.0079 per stream) (Exploding Topics, 2024) (Statista, 2023b).

Depreciation: The tech supplies have a depreciation rate of 40% (ClearTax, 2023).
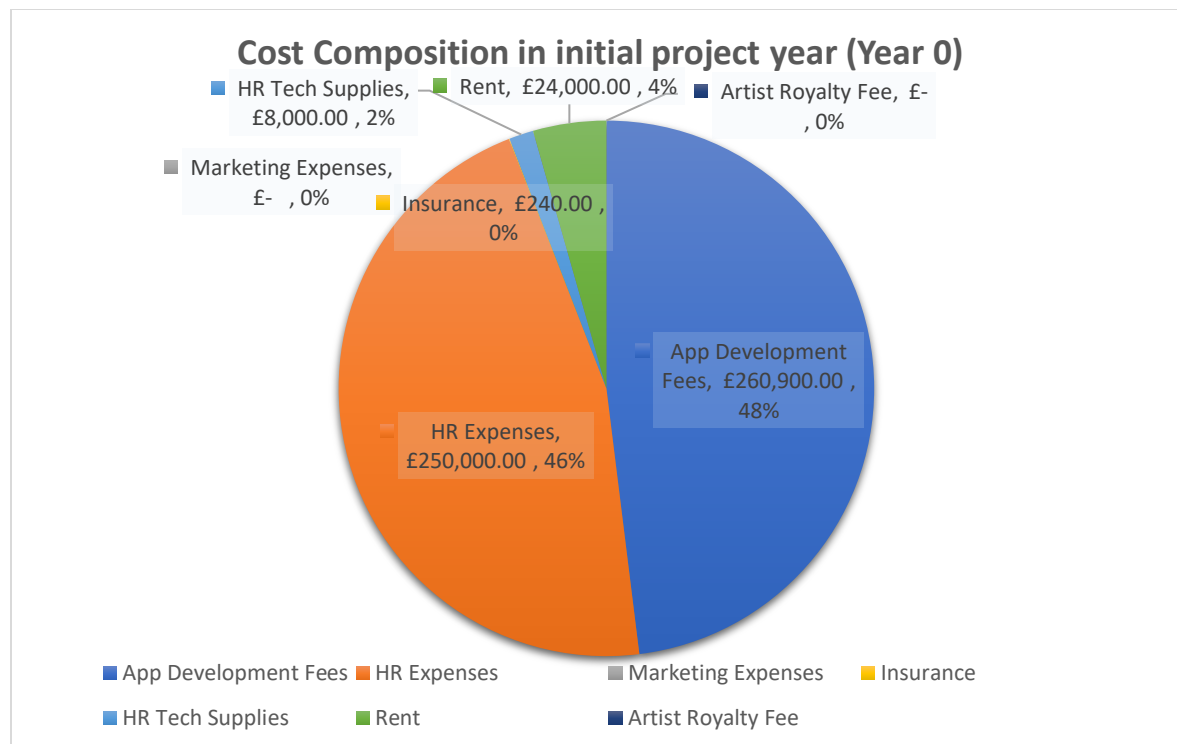
Figure 3: Cost Composition in Initial Project Year

Investment Indicators

The investment indicators provide a detailed evaluation of the project's feasibility, profitability, and financial performance over its duration. These are discussed below:

Payback Period: The payback period is the time it takes for an investment to generate cash flows to cover the initial investment cost. The payback period of our project is 3 years, meaning it takes three years for the project to regain the initial investment.

Discounted Payback Period: The discounted payback period considers the time it takes for the discounted cash flows to equal the initial investment. The discounted payback period also 3 years.

Return on Capital Employed (RoCE): RoCE measures the efficiency and profitability of an investment by comparing the net operating profit to the capital employed. The initial RoCE is 168937.80%, and the average RoCE is 7699.54% per year, meaning a highly profitable investment.

Net Present Value (NPV): NPV calculates the present value of all future cash flows generated by an investment, discounted back to the present using discount rate of 10%. The NPV of this project is £1,694,361,702.10, meaning that the project is expected to generate generous value.

Internal Rate of Return (IRR): IRR is the discount rate at which the NPV of cash flows equals zero. It represents the project's expected rate of return. The IRR here is 83.90%, meaning a high return relative to the initial investment.
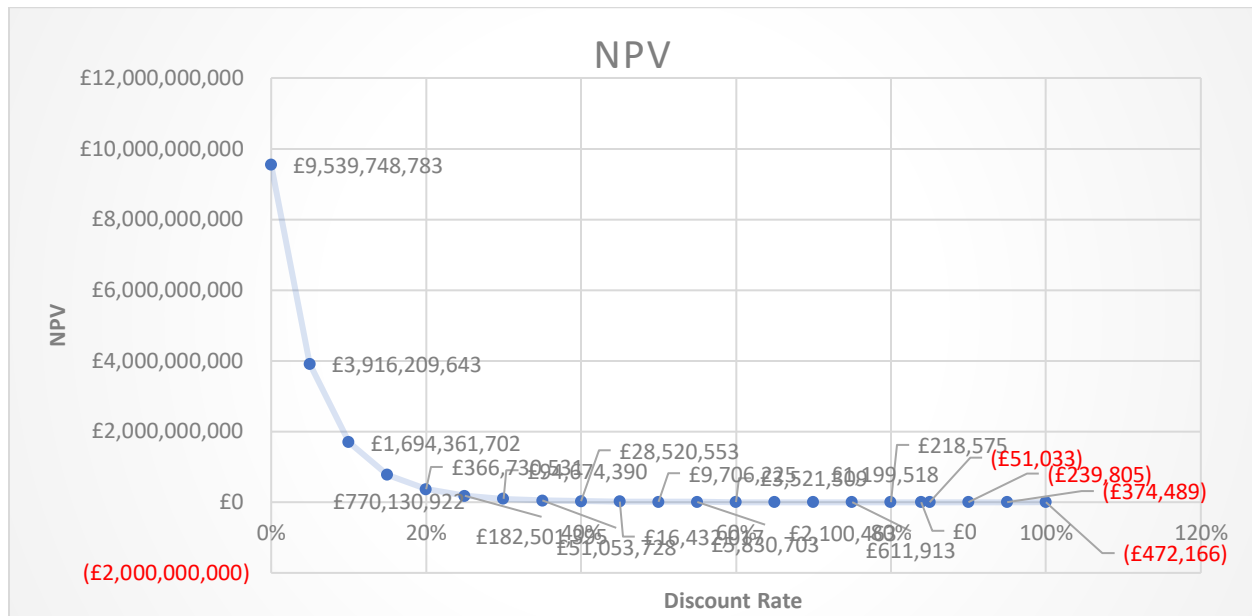

Figure 4: NPV of Each Project Year
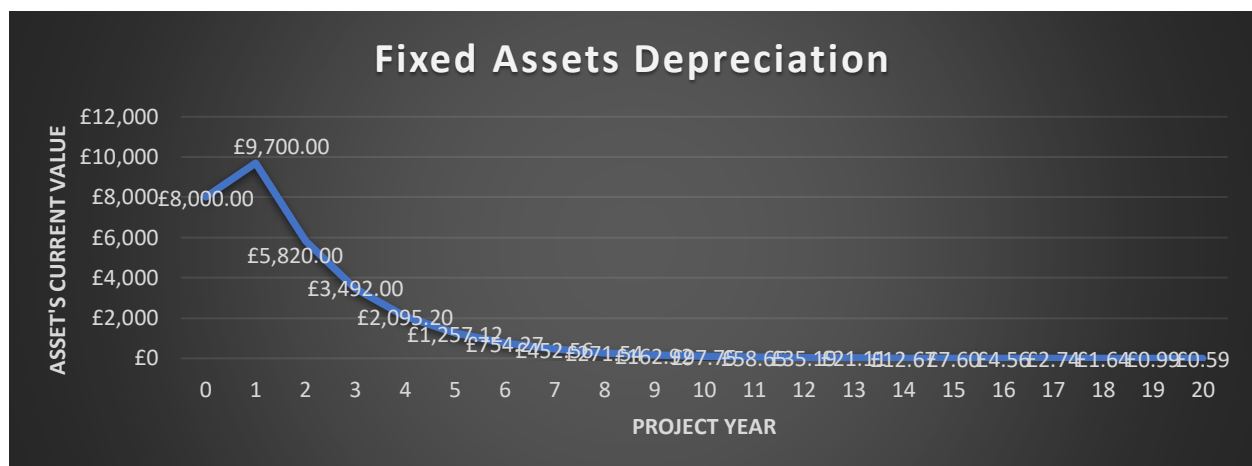
Figure 5: Fixed Assets Depreciation

Sensitivity analysis

The sensitivity analysis shows how changes in various factors affect the Net Present Value (NPV) of the project. Five factors are chosen and discussed below:

App Development Fees: A 10% decrease in fees results in a 0.332% increase in NPV, while a 20% decrease leads to a 0.664% increase in NPV.
This indicates that reducing app development costs positively impacts the project's NPV.

HR Expenses' Increased Rate: A 10% increase in HR expenses results in a 0.013% decrease in NPV, while a 20% increase leads to a 0.027% decrease.
This suggests that higher HR expenses may have a slightly negative impact on the project's NPV.

Software Maintenance & Patching: A 10% increase in maintenance costs leads to a 0.002% decrease in NPV, while a 20% increase results in a 0.005% decrease. This suggests that higher software maintenance & patching may have a slightly negative impact on the project's NPV, but less impact than HR Expenses.

Marketing Expenses (Year 1 to 3): A 10% decrease in marketing expenses results in a 0.006% increase in NPV, while a 20% decrease leads to a 0.012% increase.
It indicates that reducing marketing expenses in the early years positively influences the project's NPV.

Subscription Fee: A 10% increase in subscription fees leads to a 68.59% increase in NPV, while a 20% increase results in a 137.18% increase.
It suggests that higher subscription fees significantly boost the project's NPV.
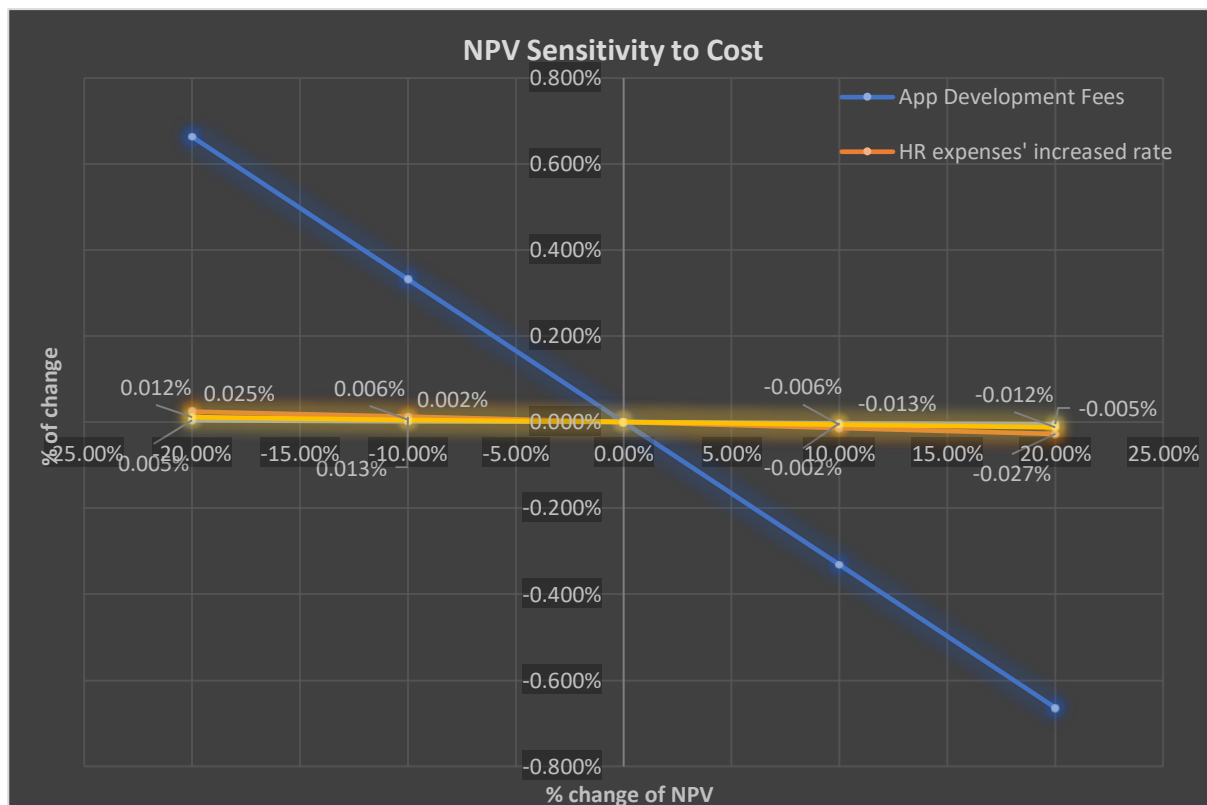The effects of each factor are illustrated below:
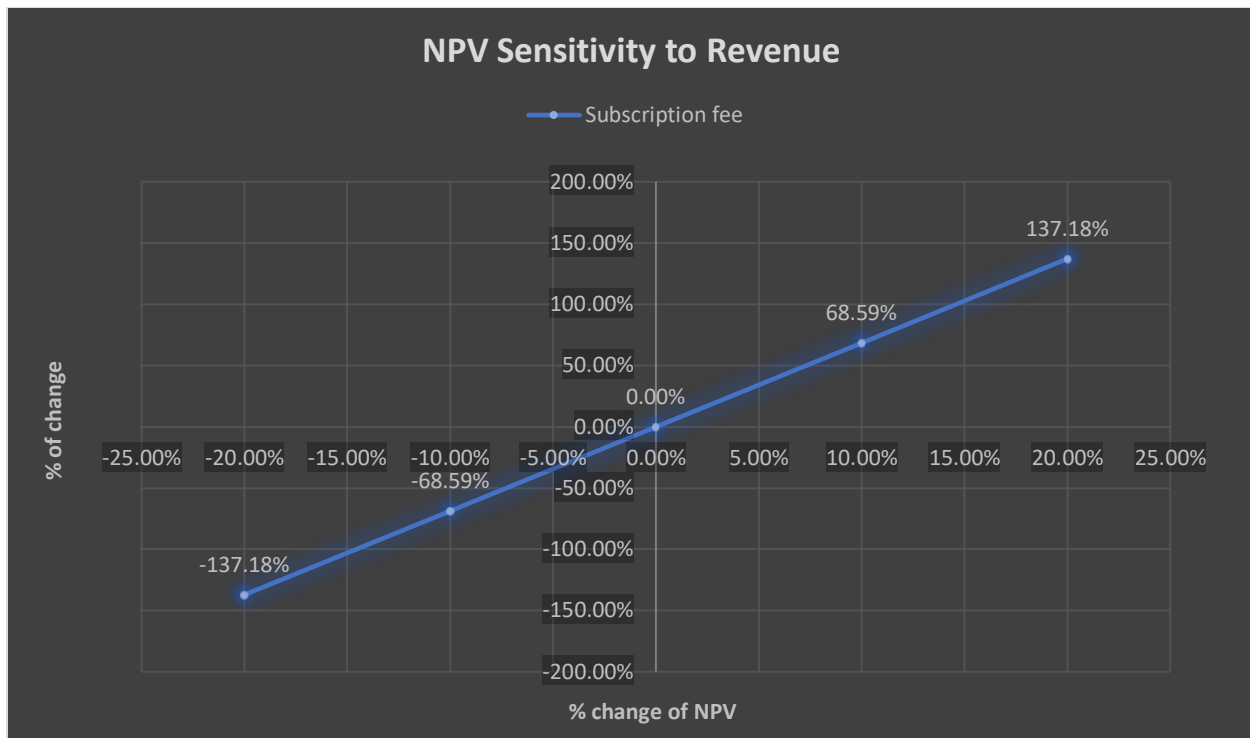

Figure 6: NPV Sensitivity to Cost

Figure 7: NPV Sensitivity to Revenue

Marketing

Our product targets customers worldwide, tapping into the growing trend of media streaming, especially music streaming. Big competitors in this field include Spotify, Apple Music, Amazon Music, YouTube Music, Tidal, Deezer, Pandora, and Shazam (Statista, 2023c), along with others such as Kugou Music, QQ Music, Kuwo Music, and NetEase Cloud Musi. To stand out, we've studied our rivals' strengths and weaknesses. We noticed common shortcomings in existing music apps, such as subscription payment methods, lack of innovative features, inaccurate recommendations, unavailability of certain songs, and high costs. Our plan is to fix at least three of these issues: adding new features, improving recommendations, and lowering costs. We've created unique features not seen elsewhere and set a competitive price of £8.99 per month. Plus, we use artificial intelligence to give users better recommendations.

SWOT Analysis

Strengths:

Innovative Features: features such as language change options, media sharing, and messaging functionalities set us apart from competitors
Global Market Potential: with growing trend of media streaming and target global customer base indicate high market demand
Compatibility: the app is compatible with both iOS and Android devices, providing accessibility to a wide range of users

Strategic Marketing: we address common shortcomings in existing music apps while offering innovative new and better features at a lower price

Weaknesses:

High Initial Investment: requires an initial investment of £543,140.00, which may pose a financial risk if not managed effectively
Non-tangible product: product hard to sell if project is unsuccessful

Opportunities:

Growing Market: increasing trend in media streaming presents a great opportunity for "M App" to capture a larger market share
Partnerships and Collaborations: collaborating with artists, influencers, and other industry players can help increase brand visibility and attract new users

Threats:

Competition: established competitors such as Spotify, Apple Music, and YouTube Music pose a threat for market penetration and growth
Technological Advances: rapid advancements in technology may lead certain features or functionalities outdated, requiring continuous innovation and adaptation to stay competitive.
Regulatory Challenges: changes in regulations related to data privacy, copyright laws, or app store policies could impact the app's operations and profitability
Malware: malware attacks can impact reputation and revenue

Conclusion & Recommendation

In conclusion, the "M App" project proves to be a promising enterprise in the market. The project's business model is to make the most of growing demand for audio content, offering great value offer with unique features that aligns with the needs of a diverse user base. While the project's target group presents opportunities for expansion, it also creates limitations on growth, where careful consideration of user volume and market dynamics is required. Although the project's target group offers opportunities for growth, it also creates limitations on expansion, where careful attention to user numbers and market changes is necessary. Despite that, the investment indicators highly support the sustainability and profitability of the "M App" project. With high returns, short payback period and impressive Internal Rate of Return (IRR), the project offers significant potential for financial success. Moreover, the project shows resilience to cost fluctuations, proving its stability in unexpected cases. In conclusion, the "M App" project presents an appealing opportunity with strong growth prospects and profitability, making it an attractive investment option for investors.

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Components of Annual Expenditure: A Comprehensive Analysis of Costs and Investments

£1,298,612,953

£811,633,095

£507,270,685

£317,044,178

£198,152,611

£123,845,382

£116,759,566.82
£77,403,364
£72,974,269.26
£48,367,102

Software Maintenance & Patching
HR Expenses (Tech)

Leading digital music brands ranked by brand awareness in the United Kingdom in 2023

Brand	Share of respondents
Spotify	93%
Amazon Music	88%
Apple Music	85%
iTunes	85%
YouTube Music	85%
SoundCloud	66%
Deezer	59%
Napster	44%
Tidal	34%
TuneIn	23%
eMusic	16%
7digital	14%
Qobuz	13%
I don't know any of these brands	2%

Share of respondents