

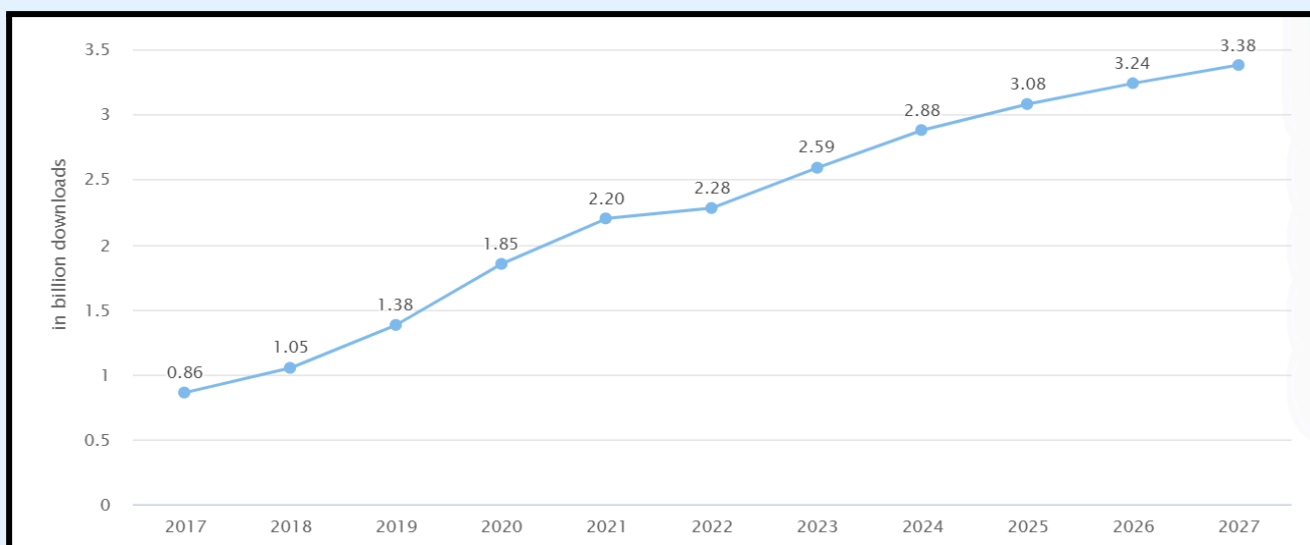
Market Analysis: Rhythm Games

The analysis is divided into this document (which deals with the textual data and the final report) and in the

[Raw Datas](#) (Sheet: **Raw Datas Rhythm Games**) regarding the market statistics of Rhythm Games.

Music Games Worldwide

- Total revenue in the Music Games market is projected to reach US\$2.81bn in 2022.
- Total revenue is expected to show an annual growth rate (CAGR 2022-2027) of 8.38%, resulting in a projected market volume of US\$4.18bn by 2027.
- In-app purchase (IAP) revenue in the Music Games market is projected to reach US\$1,137.00m in 2022.
- Paid app revenue in the Music Games market is projected to reach US\$17.45m in 2022.
- Advertising revenue in the Music Games market is projected to reach US\$1,657.00m in 2022.
- The number of downloads in the Music Games market is projected to reach 2.28bn downloads in 2022.
- The average revenue per download currently is expected to amount to US\$1.24.
- A global comparison reveals that most revenue is generated in China (US\$1,358.00m in 2022).



ChatGPT Research

Rhythm games have a diverse and widespread appeal, **attracting** players of **various ages** and backgrounds. The **demographics** of rhythm game players can vary depending on the specific **game** and **platform**, but here are some **general trends**:

- **Age:** Rhythm games often appeal to a **broad age range**. While there are certainly younger players who enjoy rhythm games, there's also a significant following among adults and even older individuals. The availability of different difficulty levels in many games allows players of varying skill levels to enjoy the experience.
- **Gender:** Rhythm games traditionally had a strong **male-dominated player base**, but in recent years, there has been a notable increase in female players. This shift is partly due to the development of more diverse and inclusive game titles that cater to a wider audience.
- **Platform:** The platform on which a rhythm game is available can influence its demographics. **Mobile** rhythm games, for example, may **attract** a more **casual audience**, including people who might not consider themselves traditional gamers. **Console** and **PC** rhythm games, on the other hand, may have a more dedicated and **diverse player base**.
- **Casual vs. Hardcore Players:** Rhythm games **can appeal** to both **casual** and **hardcore** gamers. Casual players might enjoy the accessibility and simplicity of some titles, while hardcore players might be drawn to more challenging games that require precision and mastery.
- **Music Preferences:** The genre of music featured in a rhythm game can influence its player demographics. **Some games focus** on **specific genres**, such as pop, rock, electronic, or hip-hop, and this can attract players with corresponding musical tastes.
- **Competitive Scene:** Some rhythm games, especially those with multiplayer or online components, have developed competitive scenes. This can attract players who enjoy the competitive aspect of gaming, similar to esports in other genres.
- **Cultural Influence:** The popularity of rhythm games can vary across different cultures. In some regions, arcade rhythm games have been particularly popular, while in others, mobile or console rhythm games may dominate.

Overall, the appeal of rhythm games is broadening, thanks to the variety of titles available and efforts to make them more inclusive. The demographics are continuously evolving as the genre expands and new games with diverse features are introduced to the market.



Music Games: Potential Application and Considerations for Rhythmic Training

TABLE 1 | List of the reviewed rhythm-based games.

Game	Peripheral	Type of response recorded	Output
Dance revolution/dancing stage	Dance pad (PS2, PC)	Impacts of feet (PS2)/fingers (PC)	Incrementing score
Donkey konga	Bongos	Impacts of hands	Incrementing score
Dancing with the star	Wii mote, Nunchuk (Wii), keyboard (PC)	Hands movement (Wii mote), Key tapping (PC)	Incrementing score
DJ hero	Turntable replica (Wii, PS 2 and 3, Xbox 360)	Hands and fingers movement on the Turntable	Incrementing score
Everyone sing	Microphone (Wii, PS 3, Xbox 360)	Voice	Incrementing score
Guitar hero	Guitar replica, joystick (Wii, PS 3, Xbox 360), keyboard (PC), screen (tablet, Android)	Left-hand key tapping, right-hand key moving up and down (Wii, PS3, Xbox 360), screen tapping (tablet), joystick button pressing (Wii mote, pS3, Xbox 360)	Incrementing score
Just dance	Wii mote (Wii), PS camera, PS move (PS4, PS3), Kinect (Xbox 360, Xbox one)	Hand movement (Wii mote), all-body movement (PS move, PS camera, Kinect)	Incrementing score
Rhythm paradise (USA: Rhythm Heaven Fever)	Nintendo DS, Wii mote	Finger tapping on the screen, hand movement (stylus; DS), key tapping (Wii)	Incrementing score
Rock band	Guitar, Drums replica, Microphone (Wii, Xbox 360, PS3), Tactile screen (Iphone, Ipod Touch), Nintendo DS, PSP	Left-hand key tapping, right-hand key moving up and down (mediator-like), feet impact (bass drum), drumsticks impact (Wii, PS3, Xbox 360, Nintendo DS, PSP), screen tapping (Iphone, Ipod), joystick button pressing (Wii mote, pS3, Xbox 360), voice (microphone)	Incrementing score
140	Keyboard (PC)	Key pressing	Progression in a level
Osu	Mouse (PC)	Key pressing	Incrementing score
Beatmania	Turntable replica (Arcade, PS1, PS2), Nintendo gameboy	Hands and fingers movement on the Turntable (Arcade, PS1, PS2), key pressing (Gameboy color)	Incrementing score
Patapon	PSP	Key tapping	Progression in a level
Rhythm cat	Tablet, Smartphone	Screen tapping, holding, swiping	Incrementing score
Groove coaster zero	Tablet, Smartphone	Screen tapping, holding, swiping	Incrementing score
Igobeat	Tablet, Smartphone	Screen tapping, holding, swiping	Incrementing score
Beat brite	Tablet, Smartphone	Screen tapping, holding, swiping	Incrementing score
Online PC games	Keyboard	Screen tapping	Progression in a level/Incrementing score

The last row concerns online PC games (available at www.musicgames.co/games-by-category/rhythm-games/) having similar characteristics.

Computer/Console games that requires finger tap on keys

These games can be played on a **keyboard**, using a **joystick**, or on **special devices**. For example *Guitar Hero*. In this game the player plays on a **guitar replica** with **five keys**, and has to push the keys in correspondence of images presented on a screen. Rhythm **precision** of the responses is **recorded** and used to **compute** a **performance score**. The response must appear in a specific temporal window to be considered as good.

The same concept is used in **many PC games**, but **keyboards keys** (e.g., arrows) are used **instead** of guitar replicas. As in the case of tablet games, the main weakness of these games is their low temporal precision in recording rhythmic performance (around 100 ms in *Guitar Hero*). Nevertheless, these games are interesting as they represent **a good starting point to develop serious-game applications aimed at training rhythmic skills**

Time perception, immersion and music in video games

In this article, a study was made to see what was the **relation** between **immersion** and **time perception**. **Players** that are **immersed** in a game often **lose** the **sense of time** passing. The study wanted to see if **music could influence** the **time perception**.

- The study can with the conclusion that **music** can **set up** a **situation** where **immersion** is more likely **to occur**
- Additionally the **type of music** can make a **game more** or **less immersive** based on the player tastes



The Crossover Potential Between Music & Gaming

The **article explores** the potential **synergy** between the **music** and **gaming** industries, acknowledging the historical challenges arising from their distinct business models.

- The **gaming industry** is **characterized** by **low barriers** to entry, **free access**, and **microtransactions**, leading to broad **global distribution** and **substantial revenue**.
- In contrast, the **music industry** faces complexities like **unintelligible rights**, **high barriers** to entry, and a **preference** for a **few large revenue streams**.

The piece highlights past difficulties, where music-centric games struggled in licensing processes or failed to capitalize on opportunities, while gaming studios often preferred original compositions to navigate the intricacies of music rights.

Despite these challenges, the gaming industry has experienced explosive growth, with an estimated 3 billion active gamers globally and a projected revenue exceeding \$200 billion in 2023, surpassing the combined revenues of the music and film industries.

In order to have a collaboration, now **music companies must: study** what kind of **artists** each type of **gamer likes**, start with a **license fee** for a one-off **game integration**, **recognize** the **engaging power** of **videogames**, in fact **"49% of gamers, or nearly 1.5 billion people, say they often discover new music through games"**, **try to keep an eye** on the **metaverse**, since **"44% of gamers watched a virtual music concert on a gaming platform in the last three months (IFPI, 2022)"** and **be open minded** to **generational shift**, because the **same young gamers** of **nowadays**, are the **same** that **buy concert tickets** and **artist merchandising**.



Music and rhythm games are trending in Japan

One of the **latest trends** is **video games incorporating music elements** into **existing genres**, for example: **Metal: Hellsinger**, a **rhythm-based first-person shooter** featuring music from **vocalists** in **System of a Down, Trivium, Lamb of God** and many more. Alongside this musical mash-up of genres, **traditional rhythm games** are still **thriving**, especially in the mobile market.

Rhythm and music games are **alive** and well, but they're especially **popular** in **Japan**. At the time of writing, data from GameRefinery shows '**music/band**' is the **fourth biggest mobile subgenre** in the country, with a 6.1% market share in the Japanese iOS market in Q2 so far and four rhythm games in the Japanese iOS top-grossing 200 chart at the time of writing. That means **Japan's mobile market is eight times the size of China's**, and a staggering 35 times bigger than the US.

There are some **key differences** between **rhythm games** in the **US, China** and **Japan**. **Beat-matching** and **casual rhythm games** are more **popular** in the **West**. In **China**, players **prefer cosmetics** and **customisation**, while the most popular rhythm games in **Japan** such as Project Sekai feature **rhythm gameplay wrapped** around **character-driven narratives** with heavily detailed **storylines** and progressive **RPG elements**.

Another **key trait** of **successful rhythm games** in the **East** is that they're often **tied to popular franchises** and **IP**, such as other games, **manga** and **anime**, or feature **music based** on real **idol groups**. This might explain why Project Sekai Colorful Stage feat. Hatsune Miku is such a hit, as well as being a vocaloid, Hatsune Miku is one of the most popular and successful virtual idols in Japan.