

Endless Runner – Comparative Analysis

Overview

The purpose of this document is to analyze three mobile endless runner games. A brief analysis of each game will be provided to highlight their micro and macro characteristics. The games will then be compared and evaluated based on specific criteria, including their pros and cons, revenue, and success.

List of Games

- ***Sonic Dash***, developed by Hardlight, published by SEGA and released in 2013 for App Store and in 2014 for Google Play Store;
- ***Sky Dancer***, developed and published by Topebox and released in 2018 for App Store and in 2017 for Google Play Store;
- ***Vector***, developed and published by Nekki and released in 2012 for App Store and in 2013 for Google Play Store.

Disclaimer: any data in this document is updated to June 2023.

Game 1 Analysis: Sonic Dash

Sonic Dash is a 3D endless runner. The main goal of the game is to go as far as possible from the starting point, collecting the rings (in-game money) and other collectables useful to unlock perks and in-game objects.

Core mechanics

The game must be played in portrait mode and is viewed from a third-person perspective behind the main character. The paths are divided into three lanes, which the player can slide between to collect items or avoid obstacles. The basic actions are:

- Swipe left, to move to the left lane;
- Swipe right, to move to the right lane;
- Swipe up to perform a jump;
- Swipe down or tap the screen to perform a roll.

In this game the player can hit enemies with the classic Sonic roll and collect items by performing this action.

As in all Sonic games, if the player is hit by an enemy or an explosive, he will lose all of their collected rings. If the player is hit again while he has no rings, the player will lose the game.

There are many maps in the game, each of which is divided into different stages. The difficulty increases as the player progresses through each stage, and some stages may include boss fights.



Theme

The game is based on the popular Japanese media franchise “Sonic the Hedgehog”. It uses this well-known game world to create scenarios and features famous characters that have appeared in other media. The game is designed to appeal to fans of the Sonic brand who want to try a new iteration of the game featuring the famous hedgehog.

Macro

The game introduces a series of choices to increase player agency. Players can complete daily and weekly challenges to earn in-game items and perks that could be added to every character before each game. Additionally, the game features a system for building shelters for rescued the animals got in every run, providing players different achievements and rewards separated from the main game. This system allows players to see the impact of their efforts in the game and engage in activities beyond simply achieving a high score.



Game 2 Analysis: Sky Dancer

The primary objective of the game is to advance as far as possible from the initial position while accumulating coins and other valuable collectibles. These can be used to unlock various perks and in-game items.



Core mechanics

The game must be played in landscape mode and features a third person perspective behind the main character. The basic actions are:

- Pressing the side of the screen to slide the game character left or right
- Press both sides simultaneously to make the game character perform a jump

The player should try catch as much as possible coins during every game while avoiding obstacles along the way. The game's unique concept involves navigating a path made by flying islands, requiring the player to perform large jumps and skillfully lands on platforms. So becomes an important part of the core gameplay to land in the next stages that are very difficult to reach.



Theme

The marketing and the advertising around this game promote it as a parkour experience. However, aside from a few characters, playing the game feels more like a relaxing journey through a mythological world than a street performance. In fact, the game is set in a dreamlike environment with flying islands and impossible jumps.

Macro

The game revolves around collecting coins and perks along the path, which provide advantages for subsequent runs in the form of initial boosters and special powers. Players can also use these collectibles to change their

character's appearance and the game's environment. Each run offers in-game achievements that reward players with additional coins to spend.

Game 3 Analysis: Vector

Vector is a 2D platform game divided into levels. The objective of each level is to reach the end point without being caught by a hunter who pursues the player throughout the level. To achieve the highest score, the player must collect all the items in the level and perform all the required parkour moves..



Core mechanics

Vector is not an endless runner game: every level is handcrafted rather than procedurally generated. The game features a side view and minimalist graphics: in fact, the player will see only the silhouette of the character attempting to escape from the hunter.

The gameplay involves a single basic action: swiping in the direction indicated by the game to perform jumps and slides. Different jumps are performed depending on the kind of obstacle encountered. To successfully navigate these obstacles without slowing down, the player must swipe with precise time.

Theme

The game is set in a dystopian future where the main character rebels against ruling government and flees from his workplace.

The atmosphere is well made through the use of the silhouette to represent the character, allowing the player to fully immerse himself in the role. The tense music let the player feels the urgency and enhances the overall atmosphere.

Macro

Before playing a level, the player can use in-game currency to purchase parkour moves. These special jumps are essential for achieving the highest score in a level, but the level can still be completed without them.



There are three main stages in the game and in each of them there are 11 levels. Players must complete each stage before progressing to the next.

Comparison

In the following section, the document will examine various aspects of the three games and highlight their respective strengths and weaknesses.

One hand is better than Two

Of the three games analyzed, Sonic Dash is the only one that can be played in portrait mode using just one hand. This makes it quick and easy to play. Vector can also be played with one hand, but since it is a 2D game and must be played in landscape mode to show upcoming obstacles, the player needs to use both hands to hold the phone. The same is true for Sky Dancer, where using both hands is necessary to perform in-game jumps.

Main game

Sonic Dash features a well-established gameplay system with an endless path divided into three lanes for collecting items and avoiding obstacles. Sky Dancer offers a more fluid sliding movement along the path, providing a less arcade-like experience but requiring greater precision as the path narrows and obstacles increase.

Vector's gameplay focuses on performing the right moves at the right time, providing a satisfying sense of accomplishment but requiring extensive practice to master each level, which can be frustrating.

Other activities

Sonic Dash offers a variety of mini activities that engage the player, such as building animal refuges, spinning a roulette wheel for perks, accessing daily gifts, participating in weekly missions, and customizing characters and environments. Sky Dancer offers a similar but smaller range of activities that are less intrusive but also less engaging. Vector has different goals, focusing on completing levels to unlock parkour moves and earn enough points to access a new mode where the player takes on the role of the hunter as well as the hunted.

Art style

Sonic Dash features a 3D cartoon style that appeals to younger audiences familiar with the Sonic brand.

Sky Dancer and Vector both have minimalist designs that create immersive atmospheres. Sky Dancer has a dreamlike imaginary with beautiful landscapes, while Vector's action-oriented style is more appealing to fans of action media.

Which is better?

It is difficult to determine which of the three games is better, as each has different goals and budgets. Sonic Dash has the highest number of monthly downloads, but Vector's unique gameplay and definitive ending have helped it achieve over 1 million downloads in the last month. This is an impressive goal for a game released in 2012 that has no more updates. Sky Dancer has the lowest downloads and revenues of the three games, and its imaginative setting is unable to compete with Sonic Dash's established franchise or Vector's originality.



Key takeaways

The aspects that a mobile endless runner should include, looking the three games analyzed, are:

- Agency: Providing players with multiple in-game goals and mini activities can enhance their sense of agency and allow them to play the game in different ways.
- Portrait view: Making the game easily playable with one hand in portrait view can accommodate players who have limited time or are playing on the go.
- Theme: Creating a recognizable and engaging theme is crucial for attracting and retaining players.
- Level design: Even in procedurally generated endless runners, it's important to design levels that feel unique and offer a fresh experience with each run.