Every time you die, it just gets better

How Unity's 2D tools helped Pixel Reign create a platformer players love.

Robbie Swifthand and the Orb of Mysteries: A Unity for 2D case study

The Studio
Pixel Reign, an indie team whose members had previously worked for other studios on award-winning games like Goo Legend and Darkfall Unholy Wars.

Team members
3

Location
Athens, Greece

The goal
To create a game that people will want to play for the unique experience itself.

The game
Robbie Swifthand and the Orb of Mysteries, a hardcore 2D platformer that captures players' hearts.

Platforms
Steam — coming soon to Nintendo Switch, Playstation 4, and Xbox One.

For all intents and purposes, Robbie Swifthand is like any other platformer. You can jump left or right, grab the ledge, solve a puzzle on each level by maneuvering past devious traps, and win boss fights to proceed. And yet despite its relatively familiar mechanics, this made-with-Unity game was the most-played at every event Pixel Reign showcased it in during 2018. Read this story to learn why.

Often with platformers, you die once. You die twice. Maybe you die three times, but then you move on. With the help of Unity's 2D tools, Pixel Reign have created a game that players love to play, love to die in, and love to start all over again. The secret sauce is in the unique detail in everything from level design, boss fights and cutscenes right down to character expressions and sound effects. When Pixel Reign showcased Robbie Swifthand to attendees at gamescom 2018, their booth had a long line of eager players who ended up making Robbie Swifthand die over 5000 wonderful deaths.

The results
— Unity saved Pixel Reign months of development work with no compromise on quality

- Full release with 93 levels, 15 cutscenes and 3 difficulty modes created in a year and a half by a team of three
- For update with 25 levels, Unity helped cut down design time from 6-7 months to just a little over one month
- Showcase at Unite Berlin helped Pixel Reign and opened doors with publishers

Unity Animation System

1000 times more useful

When game programmer, designer and animator, Nick Larin and music composer and sound designer, Vicky Fysika, met Angelos Gkamiliaris at a game jam in 2013, they knew right away they had found the missing piece for their indie dream team.

"We could tell that he was as dedicated and crazy as we are," Larin says, "and when we eventually got more serious about forming Pixel Reign, we asked him to be our level designer. The fact that he actually likes doing our marketing and business administration was just a big bonus."

Unity gave the three-person team an efficient way to work together creating intricate details and variation that makes players love the game. They found the

A boss character in Robbie Swifthand and the Orb of Mysteries.

Unity Animation System a particularly useful tool for making the story engaging with animation within the gameplay and cutscenes in between levels.

"You can use your own customized events. Any function you write can actually be called from the animation itself, and it makes it a thousand times more useful. Plus, it's a great tool for working with non-programmers because it's graphical," Larin says.

When Robbie dies, it's fun
The combination of the flexibility and ease of use has meant that Pixel Reign could create a complete and engaging experience for players in just a few months. Every time Robbie dies, he interacts with the environment in a new way showing different facial expressions. He might look around and get annoyed, angry or tired. All these kind of things make him feel alive, and make players want to continue.

"A lot of game creators think they have to create something completely new and unique to stand out, but people still love platformers, and you can stand out by making a great example of the genre using the old proven formula, but at the same time, giving more attention to detail," Larin says.

Level design

A paradise for game developers and level designers

Before joining Pixel Reign, level designer, Angelos Gkamiliaris, had a difficult experience creating a game using a different game engine and various artist

"Unity is so accessible for non-programmers. Suddenly there were so many tools to abuse. Unity is like a paradise for level designers."

Angelos Gkamiliaris. Level Designer – Pixel Reign

tools. However, if Angelos describes that experience as a nightmare, the switch to Unity back in 2013 was more like a breath of fresh air.

"It was an awesome transition to Unity, and I never looked back" Gkamiliaris says. "Unity is so accessible for non-programmers. Suddenly there were so many tools to abuse," he laughs. "Unity is like a paradise for level designers."

The ease with which Pixel Reign could adapt Unity to match their workflow has also made Angelos' work easier. For example, programmer, Larin, wrote one script that created depth of field to help his level designer create foreground and background objects and another one, so Angelos could easily sort the order.

"It takes Nick a half an hour to make a tool like that, but it saves me massive work," Gkamiliaris says. "Not only that, but I end up creating better quality levels because I can try out new ideas within minutes."

According to Gkmakiliaris, the big boost that Unity gave them was the ability to make the levels psychology-based without a lot of analysis.

"It would have otherwise required a lot of changes to achieve this, which would have meant using time we really couldn't afford to spend on each level," he says. "With the amount of changes we made to each and every level across three modes, it is safe to say that to get the exact same results, just for the level design, an update containing 25 levels would take 6-7 months at the least as opposed to one month plus a week for testing with Unity."

The result was 93 levels, 15 cutscenes and three difficulty modes, including unique boss fights for each level.

A screenshot from one of the 93 levels in Robbie Swifthand and the Orb of Mysteries.

Audio tools

Every death sounds different

In the same way that the variety in the animations make the game compelling for players, randomized death, trap and environmental sound effects make the interaction feel more natural and less predictable, too.

"When you hear the same thing over and over again, your brain picks up on it, and you lose interest. On the other hand, when you add a bit of variety and some randomization, players begin to realize that there will always be something new to experience, and the game is drastically improved," Larin says.

Similar to how Unity made the level-design workflow smooth, Unity sound features also made it easy for Pixel Reign's audio designer, Vicky Fysika, to work independently and efficiently. She could tweak and adjust sounds at runtime without the help of programmer, Larin, and the workflow was smooth.

"I don't have to ask for audio in advance. I just pass the scene to Vicky, and all she has to do is add the sound, tweak and adjust it as needed and boom, it's done," Larin says. "This adds to the uniqueness of the player experience with different sound effects for each and every death."

"I don't have to ask for audio in advance. I just pass the scene to Vicky, and all she has to do is add the sound, tweak and adjust it as needed and boom, it's done,"

Nick Larin. Co-Founder, Project Lead and Developer – Pixel Reign

Vicky, Angelos, and Nick, the three members of the Pixel Reign studio.

A Unity Showcase leads to a YES from investors and publishers

The ease with which the team could all work together to create animations, level design and audio in Unity has enabled Pixel Reign to create a complete and engaging experience. The game was showcased at Unite Berlin in 2018, which helped convince private investors in Greece to fund them, and Pixel Reign was off and running.

"Imagine a team of three with one programmer — who also does graphics — one level designer, and one audio engineer creating a game like this in such a short time; it would have been impossible without Unity. "Unity probably saved us months of work, and the end result would have been completely different because, with Unity, we didn't have to compromise on quality or the level of detail," Larin says.