Schell Games

Transformational, inspirational, sensational

Case study

SCHELL GAMES

A transformational experience

A 10-year-old boy appears to be on a seemingly ordinary school trip to a museum. Actually though, he's on a secret mission. The child touches his wrist to a drab grey set of pipes in the corner of the museum, and suddenly, the pipes light up in an intricate pattern. In order to move on to the next stage of his mission, the boy must solve a puzzle using his interactive wristlet to manipulate the lights in a certain way. This is no ordinary school trip. It is a project developed by Schell Games for the Children's Museum of Houston using the Unity game engine. It is a transformational experience.

Most of what Schell Games produces fits into the transformational category, a term they've coined to refer to games or experiences that inspire change. This covers everything from educational experiences used in museums and school curriculums to entertaining and challenging VR titles, like their latest success, I Expect You To Die, a fun spy game, which requires plenty of brainpower to navigate.

**Jesse Schell,
CEO and Founder,
Schell Games**

The challenge:

No one said it was going to be easy

Developing transformational games and experiences demands a lot of creative juice on the part of Schell Games programmers, artists and other game developers.
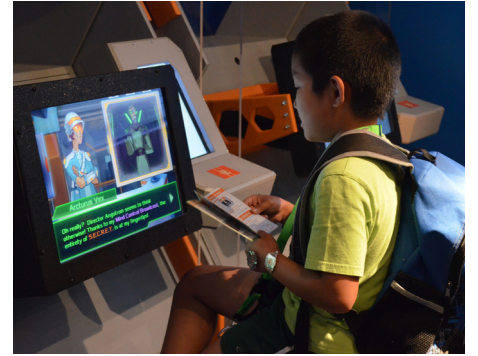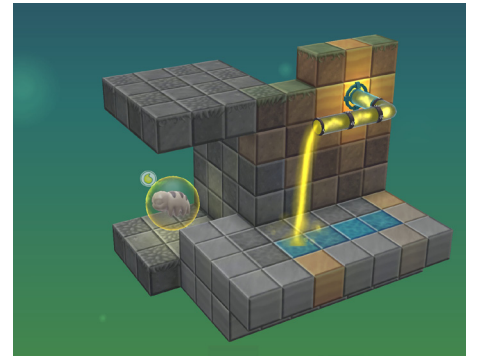
As CEO and Founder, Jesse Schell, once expressed it: "Teaching is really hard. Making an entertaining game is really hard. And now we're proposing that we're going to do both of them simultaneously. It's like doing stunt riding on a motorcycle and juggling, and now I'm going to do them at the same time. But when you do it right, it's frickin' amazing!" [1]

Despite the inherent difficulty of developing titles that are both

entertaining and enriching, creating one transformational experience after the other was something that Schell Games was focused on from the very start of their existence in 2002.

In order to get it right, Schell Games transitioned to Unity in 2011, which they currently use to develop around 90 percent of their projects. Unity's ease of use and strong market presence has meant that they haven't had to worry about getting tangled up in hardware integration and other technology issues. They know Unity will clear the way for them, so they can focus on pursuing their innovative and creative goals.

[1] http://www.gamesindustry.biz/articles/2013-05-30-serious-games-stigmatized-in-and-out-of-the-industry-says-schell

> "We just nudge our Unity contact person, and our whole Unity support team is very responsive. With Unity, we can just focus on creating games."

Matt Mahon,
VP of Engineering,
Schell Games

The solution:

A game engine that limits the technical challenges

Prior to 2011, Schell Games had been working mostly in Flash. When they decided to move to a game engine, they chose Unity. Unity's market traction indicated to them that the company would be around for a long time to come, general support and answers would be readily available, and multiplatform integration would be smooth. In addition, it has been easy for Schell Games to extend Unity to their own needs, and Unity has been easy to learn and to use.

Highly extendable editor
The C# language was appealing to Schell Games' developers, and it was easy for them to extend the editor. For example, they built their own framework on top of the editor and created scripts to support animators and other designers in accessing the system.

"The whole team switched over in a matter of months," says Matt Mahon,

VP of Engineering at Schell Games. "Even back in 2011, there were tutorials to help you get started," he says. "Since then, any time Unity comes out with any new system, there are always lots of great video tutorials. Plus, there's the super-useful community resources with things like forums, where Unity developers are really responsive."

Got a problem? Just give support a nudge
On top of the game engine itself and the support they find in the community, Schell Games has the added insurance of a custom support package. So if a ship date is approaching fast and they have a bug, they can count on a quick solution or workaround.

"We just nudge our Unity contact person, and our whole Unity support team is very responsive. With Unity, we can just focus on creating games," Mahon says.

> "Unity lowers the risk of experimentation considerably because it limits the number of technical challenges we face and makes everything so efficient."

Matt Mahon, VP of Engineering, Schell Games

The results:

Virtual splendors and challenging mind-benders

Unity's inherent flexibility has enabled Schell Games to focus on the creative side of things, which has resulted in a full catalog of award-winning games. Their engineers concentrate on developing games rather than learning the system or adapting to the intended hardware.

"The short learning curve allows us to bring a new hire on board fast, or borrow developers moving them from one project to another wherever they're needed. And we don't have to worry about integration to hardware because we know that Unity is going to take care of that for us," Mahon says.

Any platform or technology
The ability to move from platform to platform rapidly has made it easier for Schell Games to launch wherever it made most sense. In one case, it even allowed them to change the intended platform in the middle of development. Water Bears, an award-winning 3D puzzle game, which challenges children's spatial reasoning began as a PC game, was later developed as an iPad title, and after a successful pitch to Valve, was converted to a room-scale VR experience.

The strong support of Unity for emerging technologies was what enabled them to start their experimentation with VR in the first place. Their first VR title, Orion Trail, a science fiction space adventure game, was actually borne out of their internal company jam week and funded on Kickstarter.

I expect you to die
The experimentation with VR then led to their current award-winning Oculus Rift VR game with the droll title, I Expect You To Die. This fun,

brain-teasing game lets you step into the world of an elite secret agent to attempt to survive a series of deadly situations.

The result was yet another critically acclaimed, popular title. Among other honors, I Expect You To Die won the Vision Inspire award at Vision Summit 2016, Best Overall VR Experience at the Proto Awards and so far has had over 35,000 unique downloads on Oculus Share, since its pre-release in June 2015.

Mahon credits the Unity engine as an important foundation for such innovative development.

"Unity lowers the risk of experimentation considerably because it limits the number of technical challenges we face and makes everything so efficient," he says. "We were able to create a working demo of I Expect You To Die with a team of around six people in under four months. Unity has helped us focus on what's important, the game, not the technology."

About Unity Technologies
Unity Technologies is the creator of Unity, a flexible and high-performance end-to-end development platform used to create rich interactive 3D and 2D experiences. Unity's powerful graphics engine and full-featured editor serve as the foundation to develop beautiful games or apps and easily bring them to multiple platforms: mobile devices, home entertainment systems, personal computers, and embedded systems. Unity also offers solutions and services for creating games, boosting productivity, and connecting with audiences including the Unity Asset Store, Unity Cloud Build, Unity Game Performance Reporting, Unity Analytics, Unity Ads, and Unity Everyplay. Unity Technologies serves over 1 million monthly active developers including large publishers, indie studios, students and hobbyists around the globe. For more information, visit: **http://unity3d.com**.