



SQUARE ENIX®



How to succeed in the mobile game market

Learn from three success stories



How to succeed in the mobile game market

Mobile games may be a creative endeavor, but for game developers, it's no playground. Mobile game development has become a battleground with increasing costs and fierce competition. As one mobile game developer described the current landscape: "You might create a mobile game of the highest quality, but it can still end up getting lost like a single drop in a waterfall of other games on multiple platforms."

There are currently some fundamental challenges that every mobile game developer, big or small, has to deal with. How do I create quality games that stand out in a crowded market? How do I streamline my pipeline to deal with growing pressure on development time, costs and resources? How do I find my audience, and how do I monetize? Answering these questions and meeting these challenges requires not just one tool, but a collection of connected tools, easy-to-use resources, and community support.

Three case studies of mobile game success

The mobile game case studies included here illustrate how three mobile game developers have successfully dealt with these challenges. These stories show how the Unity platform, with its integrated features, and active community and resources, has enabled these three developers to realize their creative vision and find success.

Read the story of how game developer Jelly Button drew upon the Unity platform, resources, and community to stay focused on their goals. Discover how Jelly Button saved precious monthly developer hours when creating their premiere game release, *Pirate Kings*, which has **over 50 million downloads globally**.

You can also find out how Square Enix Montreal tested dozens of scenarios to determine which game engine would help them streamline their workflow most, and reach the widest possible audience. After a rigorous testing period over several weeks, the Canadian game developers chose Unity, and it has paid dividends. The Unity engine helped them ship the first iteration of their award-winning *Hitman GO* mobile game in **ten months with only a team of five developers**.

And you can learn the story of Futureplay's hugely successful *Farm Away!* mobile release, and how their monetization strategy actually increased player engagement. Their players began requesting, not less, but more rewarded video ads, and the integrated Unity Ads monetization platform helped them reach **\$0.15 daily ARPU in the US market**.



“Unity Cloud Build is an awesome tool. We rely on it heavily. Integrating it to the Unity Editor was so quick; it took 10 minutes to set up and literally saved us dozens of hours of manpower every month.”

Ron Rejwan, Co-Founder and CTO, Jelly Button

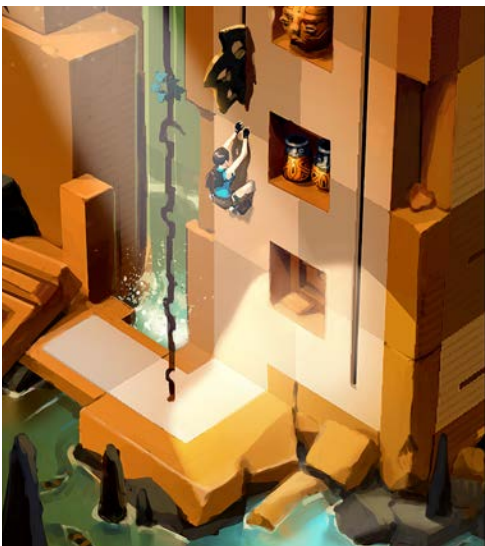
Read the case story on page 4



“Unity Ads brings something extra – something that creates a good feeling for the player, benefits the advertiser, and most importantly, increases our average revenue per daily active user (ARPDau).”

JAMI LAES, Co-Founder and CEO, Futureplay

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“No other engine matched Unity in terms of pipeline efficiency and multiplatform portability.”

Martin Ruel, CTO, Square Enix Montreal

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How Jelly Button brought their dream game to life



It's been downloaded over 50 million times. It's the number one grossing game in 20 countries.

Every month, it has a combined total gameplay time of over 5000 years.

What is it? It's Jelly Button's free-to-play, multiplayer, multi-platform game, *Pirate Kings*, which was made with Unity.

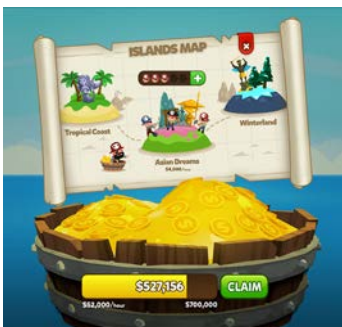
Creating a unique social experience

Jelly Button released *Pirate Kings* at the end of 2013 on iOS, on Android five months later, and on WebPlayer (Facebook Canvas) five months after that. *Pirate Kings* offers a unique social experience. In other games, social interactions tend to be minor, but in *Pirate Kings*, they're fundamental to the game. Players can interact with their friends whether they're online or offline, and they don't have to wait for a response to see the results. So, for example, they can steal their friend's treasures or even attack their island, whether the friend is online or not.

"The social interaction actually affects how you play the game, not just visually. And you can see the effect in real-time whenever you connect," says Ron Rejwan, one of Jelly Button's five founders and CTO. "We call this a Mingle player experience because it combines elements of both single and multi-player games in a unique way."

This unique social dimension can make the game experience very emotional, and Rejwan believes that it is a key reason for the game's explosive popularity.

"We've seen amazing growth with an especially engaged audience in SE Asia," Rejwan says. "Players talk on online communities about how the game has affected their lives and friendships. There's hundreds of reviews with some users even warning not to play the game if your friendships are not strong enough to withstand social pirating. And that's a sign of emotional engagement. People even share original videos and songs about their experiences interacting with friends in the game. It's amazing to see how it's touching people across the world," he says.



The challenge

How to live up to your own high standards

The degree of success with Pirate Kings may have surpassed Jelly Button's expectations, but the level of quality in their finished product was the result of an ambitious development process. Their recipe for creating original quality content is to get feedback quickly from as many people as possible within their network of game lovers, all of whom share their high standards. This network is comprised of their own team, family and friends. In order to succeed, however, the process needs to be streamlined.

"Making great games takes time. You need to investigate the idea and play around with it," says Rejwan. "We didn't want to be like a factory, releasing 40 games a month. We aim

to release one or two games every year, but they have to push the limits of product and technology. They have to be mobile friendly, multi-platform and based on an original idea that offers a great experience."

Back in 2011, however, they had been working mostly with Flash, which didn't enable them to get where they wanted to go.

"It was a terrible experience, and we knew we needed for something to change," Rejwan says. "We've been in this industry for a very long time, and it's more than just a job. Games are important to us, and we know that if a game doesn't live up to our expectations - in terms of great art, technical quality, and the overall experience - then it's just not going to be good enough," he says.



The solution

Sometimes it takes a community to develop a quality game

What Jelly Button needed was a way to iterate as fast as possible in order to get a proof of concept. The technology, community and collaboration possibilities that Unity presents have enabled them to test their concept very quickly.

“Within a month, we can have a prototype where the core game mechanics, the way it looks and behaves, the features, and the capabilities of the game we test, are all quite polished. And that means we can get valid feedback quickly from as many people as possible,” Rejwan says.

Jelly Button adopted the Unity Engine in 2012, and they’ve used it to develop *Pirate Kings*, and their second game, which will be released later this year. For Rejwan, it was love at first sight.

“I guess you could call me an unofficial technical evangelist for Unity,” he says. “I really love the platform. One of our aspirations is

to become a brand name for the industry, one that inspires the next generation of game players and developers. And Unity is a big part of that. We take part in forums, look for and provide answers in QAs on the Unity Community, and participate in live events. In fact, we’ve even hosted several Unity meetups of our own in our office. And we’re actively educating and cultivating a new crop of Unity developers in Israel.”

Time-savers that let them get down to the nitty gritty

One way Unity saves Jelly Button time is by enabling them to create prototypes that are very close to the quality of the future final version, and the integrated Unity Cloud Build capabilities are important in this respect. With Cloud Build, they can create builds for their team, focus groups, and do QA without wasting time on administration.

“Unity Cloud Build is an awesome tool. We rely on it heavily. Integrating it to the Unity Editor was so quick; it took 10 minutes to set up and

literally saved us dozens of hours of manpower every month,” Rejwan says.

The Unity Asset Store is another offering that enables Jelly Button to prototype quickly. They use it to save time by adding all kinds of game elements quickly, which they don’t deem crucial for them to develop in-house.

“Whether it’s gorgeous graphics, a 3rd party IAP integration, or something else that we buy, the Asset Store saves us so much time in the prototyping phase and allows us to focus on creating great games. It’s unbelievable. I don’t even know how it would be possible otherwise.”

The multi-platform capabilities in Unity also save Jelly Button considerable time and headaches by allowing them to work on several game versions in parallel without having to manage separate projects and duplicate code for iOS, Google and Facebook. They can release the different versions with very minor adaptations.



The facts in brief

Founded in 2011, Jelly Button Games is a free-to-play mobile game company based in Tel Aviv, Israel, with around 50 employees. Their premiere game release, *Pirate Kings*, has over 50 million downloads globally.

The challenge

A fast prototyping process was needed in order to streamline a development process aimed at producing one or two groundbreaking games per year..

The solution

The Unity Engine, Cloud Build, Asset Store and Community have increased the efficiency of the development process enabling Jelly Button to focus on creating and testing unique and innovative, high-quality games.

The results

- Can create basic prototype within days
- Integrated the Cloud Build collaboration tool in just minutes
- Saved dozens of developer hours monthly



“To sum it up in one phrase, Unity enables us to turn our dream into a reality.”

Ron Rejwan,
Jelly Button co-founder and CTO

The results

The dreams that games are made of

Unity has helped the Israeli game developer stay true to their core vision: To create original, premium quality games with unique and innovative social dimensions.

The combination of the Unity platform, the integrated Cloud Build and the Unity Community, where they can seek answers to niche problems and participate in the conversation, enables Jelly Button to focus on their goals. As a result, they've cut developer time significantly and can create working prototypes very quickly.

This has opened the door to the kind of long-term success they can be proud of. And for Jelly Button, success is defined as creating unique, quality games that stretch the boundaries of social interaction.

“To sum it up in one phrase,” Rejwan says, “Unity enables us to turn our dreams into a reality.”



Introducing... Futureplay

“Our success wouldn’t have been possible without Unity’s great tools. Unity Ads brings something extra – something that creates a good feeling for the player, benefits the advertiser, and most importantly, increases our average revenue per daily active user (ARPDau).”

JAMI LAES
Co-Founder and CEO, Futureplay

Founded in 2015, Futureplay’s rise to success serves as a reminder of just how fast the mobile games industry can move. Of course, with a team collectively bringing over 60 years of experience from studios like EA, Rovio and Remedy to the table, Futureplay are anything but newcomers in their field. Nonetheless, forming a studio and developing, releasing and updating a successful game in under a year is an impressive feat. The game is “Farm Away!”, a widely accessible mobile release that sees players tend to crops and livestock. It’s also a creation that has thrived since the day it was launched, and helped a studio in relative infancy begin their journey with a robust revenue stream. Farm Away is Made With Unity, and it uses the Unity Ads platform to monetize players without asking them to pay a penny; something core to the values of its creators. “Unity Ads fuels our game by helping drive \$0.15 average revenue per player per day in the US market,” reveals Mika Rahko, Co-Founder and Head of Development, pointing to a notably successful implementation of the studio’s preferred monetization model.



The challenge

Of course, building a studio and a popular game in such a short time frame wasn't without significant challenges, but the Futureplay team had much experience at its disposal. And just how quickly Rahko and his colleagues have moved is quite remarkable. "When we started creating Farm Away in May 2015, we went from concept to launch in a rapid five months," he confirms. Unity may be famed for its ability to enable lightning fast games development, but even so, Futureplay's pace stands out. Without building a solid monetization strategy, the investment of effort, time, and talent could go to

waste - regardless of the speed or quality of your team's work.

Futureplay needed a business model that could be built into their debut release's gameplay from day one and guarantee results after a blazingly fast development process. The team were keenly aware that players could move between games at an even faster rate. "Our success depended on a monetization strategy that doesn't scare away players, and we knew from day one that we wanted ads to power our view-to-play model to achieve optimal adoption," confirms Rahko.



The solution

Clearly, though, the challenge facing Futureplay was not insurmountable, in part because the engine they were using could also serve as their monetization platform. "Having made the game in the Unity engine, it made perfect sense to reach out to Unity Ads for their native integration as the first ad network in the game," offers Rahko. That meant that as Futureplay set about shaping their game and building support for rewarded video ads as a monetization solution, they could do so in one and the same tool; particularly significant when getting the most from rewarded ads means designing them into the very heart of a game.

Exactly how Futureplay approached integrating ads into the pleasure of playing Farm Away is particularly enlightening. "Our secret to success is focusing on creating a monetization method that has positive reinforcement," suggests Jami Laes,

Co-Founder and CEO. "We give our players a choice when they want to watch video ads, stirring engagement." For example, players choose to watch video ads by clicking a cloud that rains so they can harvest crops with double profits for four hours. Or, through simply clicking the sun and watching their points double from the over abundance of sunshine. "We avoid triggering ads when a player has run out of energy, needs a lifeline, or just outright failed. Instead, we firmly believe in creating a positive experience at all times that creates a good feeling for the player, which separates us from our competition."

It's a fascinating, thoughtful approach, and one that many developers could be wise to consider. Pairing rewarded video ads solely with positive experiences is a simple mantra that may serve many games looking to enjoy similar revenues to those seen at Futureplay.





The results

Ultimately, Futureplay's thorough consideration of their monetization strategy – and their care integrating it into Farm Away's gameplay – got the studio very definite results. "Even though we lose half our players after day one, since everything is player initiated from the get-go we're seeing a daily ad conversion of 80% – meaning players are really watching," enthuses Laes. "Even more amazing is that we're seeing an average of 22 ads watched per install," Rahko adds. "And this engagement is sending our revenue through the roof – driving \$0.15 average revenue per player per day in the US market."

Additionally, Futureplay has seen Unity Ads bolster Farm Away's retention, which feeds directly back into those revenues. To further the studio's commitment to providing a positive experience for the players, the team has set a cap to prevent users from being overburdened with ad content. But those caps left some players crying out for more ads, which goes

to show how rewarded video ads can stand as the players' choice, and retain an audience only too happy to consume rewarded content. "When control caps are reached, we're getting tons of player feedback that they want to reap even more profit from crops by watching rewarded video ads," explains Laes. "So we've had to adjust these cap limits a bit to appease consumer demand."

Put simply, Unity Ads' role in Farm Away has been significant, and of benefit to both the players and the studio, proving that the right monetization strategy really can provide a win-win situation. "We're overly impressed with the time to market, and our success wouldn't have been possible without Unity's great tools," Laes concludes. "Unity Ads brings something extra – something that creates a good feeling to the player, benefits the advertiser, and most importantly, increases our average revenue per daily active user (ARPDau)."

"When control caps are reached, we're getting tons of player feedback that they want to reap even more profit from crops by watching rewarded video ads."



The facts in brief

Founded in 2012, Square Enix Montréal currently employs around 30 to 40 experienced developers out to define a new benchmark for mobile games. They have experienced one success after another, introducing Square-Enix core franchise brands to new audiences in fresh ways on mobile platforms.

The challenge

In order to expand the Square Enix presence to the western mobile market, Square Enix Montréal needed a game engine that would allow them to craft engaging mobile experiences and to establish an efficient development pipeline, while maintaining their strong creative culture.

The solution

Unity's open nature, user-friendliness and multiplatform capabilities, along with strong support and extensive community resources, have helped Square Enix Montréal to quickly establish a firm presence in the mobile game market.

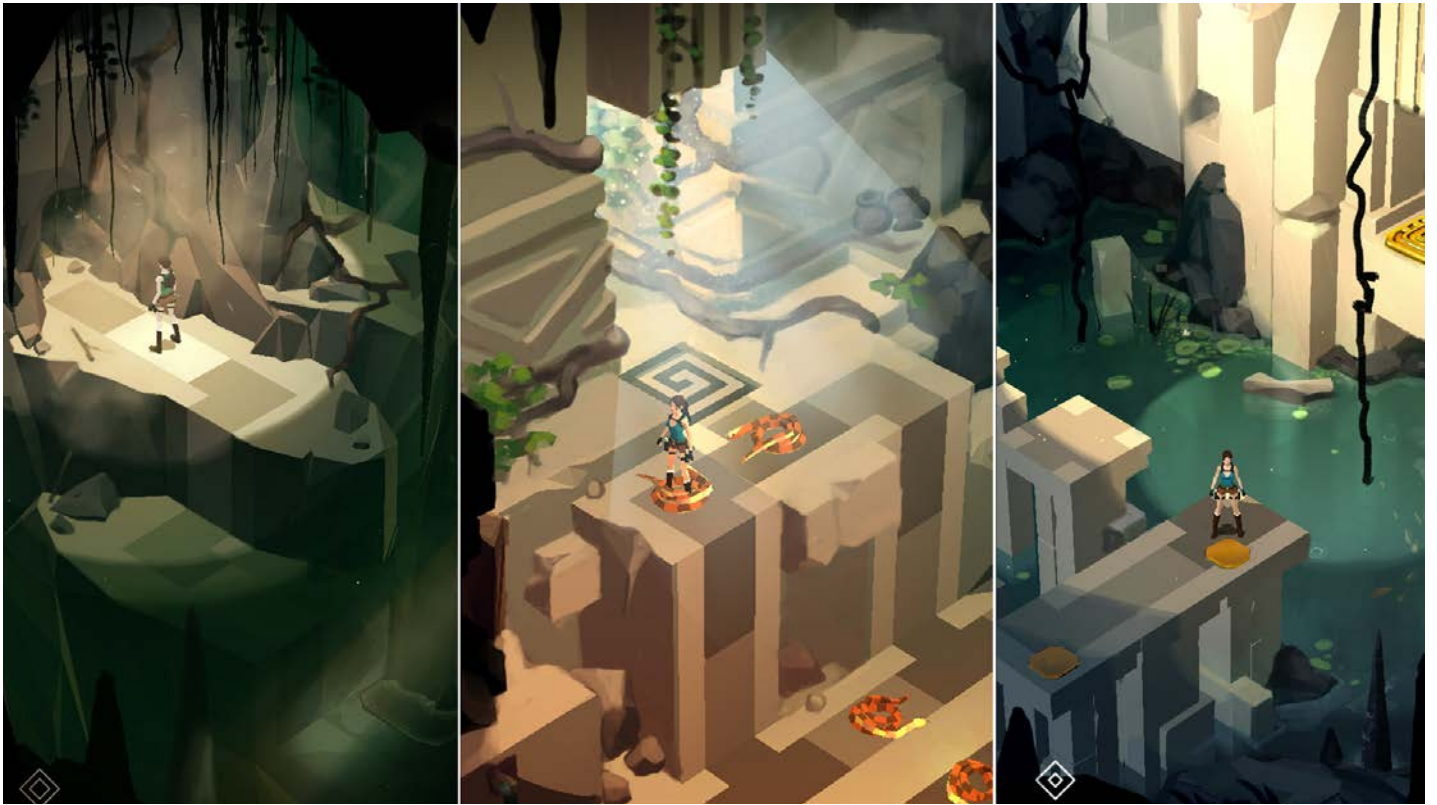
The results

- **Efficient workflow:** Released Hitman GO's first iteration within ten months with fewer than a dozen developers
- **Critical success:** Multiple award-winning mobile games, including Apple iPhone Game of the Year: Lara Croft GO
- **Commercial success:** Square Enix Montréal games are now available for six different platforms (including PlayStation 4, PS Vita and Steam), on eight storefronts, in 11 different languages, and they will soon make their way onto VR platforms

A game engine for a creative culture

The Square Enix network of development studios located around the world is responsible for producing games from well-known franchises such as Tomb Raider, Hitman, and Deus Ex. Square Enix Montréal was founded at the end of 2012 with a specific mission: to generate a presence for the global organization in the western mobile game market. In order to determine which engine would help them best to streamline their workflow, reach the widest audience possible, and maintain their creative culture, they explored dozens of possibilities. Among those, Unity won hands down.

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The challenge: Creating amazing mobile experiences

“We didn’t want an engine that would get in the way of creativity, but one that would support it.”

**Martin Ruel, CTO,
Square Enix Montréal**

At first, Square Enix Montréal established a technical group, including engine and game programmers, artists and project managers. The technical group’s task was to choose the best game engine for their venture into the mobile market.

Taking into account around 40 different usage cases, they rolled up their sleeves and tested the efficiency of each scenario to develop highly creative concepts for new mobile games. Their main selection criteria were: engine pipeline efficiency and mobile portability. In other words, which engine would be better suited for work in a creative team, and which would make it easier to release with different platforms and technologies.

Even before the testing phase, they eliminated a number of engines (including their own custom engine), which they quickly realized would

not live up to the task. Then, they performed an exhaustive test drive of the remaining candidates – Unreal, Cryengine, Havoc Vision, and Unity.

“We didn’t want an engine that would get in the way of creativity, but one that would support it. Specifically, we wanted an engine that would allow the game team to do rapid prototyping and ultra-fast iterations,” says Martin Ruel, CTO at Square Enix Montréal. “With that in mind, we did an in depth test drive on each of them.”

When it comes to reaching as many players as possible, Unity proved itself reliable in terms of performance, smooth framerate and superb player experience across target platforms.

“Unity enabled us to develop for iOS, Android, Windows, Linux, Web, and all major consoles. And that’s a key differentiator to reach as many of our fans as possible,” Ruel says.



The solution:

Finding the fun

In addition to the multiplatform capabilities, the team needed to determine how the engine would support the studio's creative projects. The open nature and ease of use of Unity helped Square Enix Montréal to maintain a strong creative culture while moving rapidly into a new market space.

"Unity helped us to learn faster about mobile gameplay and its different types of control inputs, like swiping or tapping, instead of using a gamepad. We gained a lot of mobile experience in a short time because we could iterate faster. That meant we could get where we wanted to go - to what we call 'finding the fun', faster," says Ruel.

However, the challenge went beyond adapting to the interface of mobile games. Square Enix Montréal also

needed to find a creative way to capture the essence and experience of their parent company's console games, which had large emotionally invested fan bases wary of mobile experimentation. The newly created studio needed to find a new take on these existing games without damaging the brand.

Introducing the GO games

The final result of this experimentation are the titles now known as the GO games: Hitman GO and Lara Croft GO. While each of the mobile games adapts its original console experience in a distinct way, they both manage to capture the essence of their original game counterparts.

"More than just adapting the aesthetics or game mechanics of each game, we aimed to tap into the feelings and impressions of the players who played

these titles, while reinventing them for the mobile platform," says Ruel.

With Hitman GO, this resulted in a board-game aesthetic with beautifully rendered diorama-style set pieces. For Lara Croft GO, the team was able to condense the rich universe of Tomb Raider into a simple, elegant puzzle game.

In both cases, the extendibility, rapid iterative editing and general user-friendliness of Unity helped them to maintain a fast moving creative team as they evolved into the mobile market.

"Because Unity is so easy to use, to create new behavior, to tweak gameplay systems, or to integrate assets into our game, we were able to improve rapidly on what was most important to us: the user experience," Ruel says.



Support and community: The first and second lines of defense

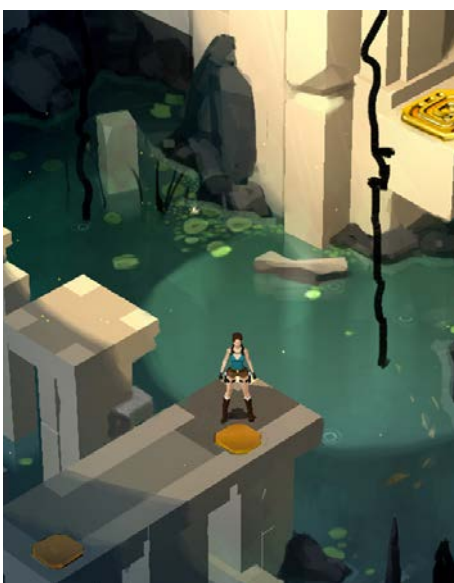
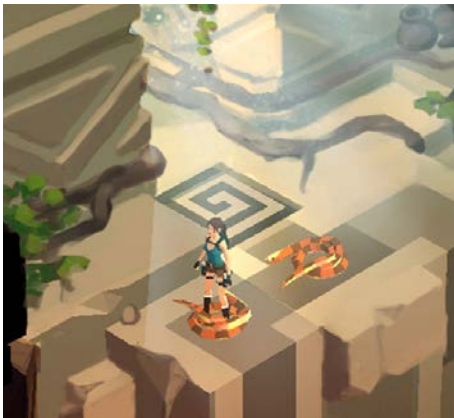
Beyond the technical capabilities of the engine itself lies another factor that keeps Square Enix Montréal moving fast and staying focused on creativity: the support that Unity offers. They were able to take advantage of both the time-sensitive, personal attention they receive via their premium support package, and the broad and far-reaching resources available from the 1.5 million active monthly users who make up the Unity community.

Ruel says that premium support is the studio's first line of defense for bugs close to the ship date that don't have a known solution.

"For example," he says, "we had a problem with the animation on Lara Croft GO — one of our character's skin was not displayed properly—and the ship date was approaching fast. Although we couldn't get a patch in time, Unity helped us with a workaround, which allowed us to ship without having to remake expensive assets. Premium support has saved us a lot of production time."

He notes that they have also drawn heavily on the free resources available from within the bustling Unity community.

"Our developers go on the forums on a weekly basis — pretty much every time we get stuck on a specific problem. And 90 percent of the time, developers will get an answer or a workaround they can use. There are so many people talking on forums, user groups, and tech websites. There's just a ton of knowledge already out there in the Unity community," he says.





“Because Unity is so easy to use, to create new behavior, to tweak gameplay systems, or to integrate assets into our game, we were able to improve rapidly on what was most important to us: the user experience.”

**Martin Ruel, CTO,
Square Enix Montréal**

The results:

A release in ten months with fewer than a dozen developers

Because Unity facilitates a fast development pipeline and makes it easy to release on all the major platforms, Square Enix Montréal was able to focus more on core creative competencies.

A team of fewer than a dozen developers was able to ship Hitman GO's first iteration in only ten months. Since then, the studio grew to reach almost 40 developers. Unity helped them transfer all their creative experience and abilities from the console market to the mobile market in record time.

Square Enix Montreal games have won over gamers and game critics alike, confounding those skeptical about the idea of moving titles like Hitman and Tomb Raider to a mobile platform. In fact, Hitman GO and Lara Croft GO's long list of awards and nominations include Best Game Design at the Canadian Videogame Awards (Hitman GO) and Apple iPhone Game of the Year Award (Lara Croft GO). Square Enix Montréal have also achieved commercial success with the publication of their games on 8 different storefronts in 11 languages across the world. The games are currently available on six gaming platforms, and on their way to virtual reality.

Bring your creative ideas to life with Unity

Unity's open nature, user-friendliness, and strong community resources help you go to market rapidly, connect with your audience, and succeed.

The Unity community: 1.5 million active monthly users

Forums, QAs, feature requests, training, documentation...

The Unity community is the place where many of Unity's active game developers and artists come to get help, share knowledge, and discuss how to get the most out of Unity.

Made with Unity: A showcase for your work

Countless game makers around the world – from indie developers to AAA Studios, like Blizzard Entertainment, Ubisoft Blue Byte, and Frima Studio – use Unity to develop content. Many of them are transforming our idea of what a great and beautiful game is.

The result is an astonishing array of 2D and 3D multiplatform games and interactive experiences. Many Unity game developers share their stories, show off their trailers, and get their titles discovered on the Made with Unity site.

Learn more about the Unity community and Made with Unity.

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>

