



Leading the growth of a game development studio: Scaling up Frogmind through the creative power of small and independent teams

Teaching Case

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While looking through the window of his office into a central square in Helsinki, Finland, Johannes Vuorinen was expecting an important phone call that he knew was about to change the future of his company Frogmind. Around four years ago he was moving into the first small office of the company, together with his friend and co-founder Juhana. The game that they developed in just over one year accomplished worldwide success and received highly positive reviews from critics and players. More than sixty million game downloads later, the recognition brought by prestigious awards, a sequel of the first game released, growing to thirteen employees and working on several new projects at the same time, the company was now being valued at around fourteen million euros.

However, the mobile game market had radically changed over these four years and free-to-play games became dominant in the gaming charts all over the world. Frogmind now faced the dilemma on how to continue growing. As the phone rang, Johannes knew that co-operation with a strategic partner would probably be the best way to continue growing the business, and the final decision on this would be made in the next minutes. On the other side of the call was the CEO of the most successful mobile game company in the world...

Introduction: Frogmind's desire to do something on their own

Frogmind is a game studio located in Helsinki, Finland. The company was founded in April 2012 and is the developer of the award-winning BADLAND game as well as BADLAND 2, Badland Brawl, and Rumble Stars Soccer. The goal of Frogmind's founders - Juhana Myllys and Johannes Vuorinen - was simple: to develop and self-publish games with the best possible gaming experience by small independent teams of talented game developers without managers. The entrepreneurs were proud that they founded a true indie game studio.

Frogmind was founded by two like-minded friends who early on in their lives decided to become game development professionals. Johannes Vuorinen, the company's CEO and co-founder explained in 2016 how the drive to embrace game development as a career appeared naturally while studying at the university. He recalls a summer internship in 2007 as the starting point for his professional career:

During that summer when I was programming some rather boring IT product stuff I just could not see myself doing that for the rest of my life. Instead, I decided to fully focus on studying game

programming and apply for a game programming position the next summer. (Pocketgamer.biz, 23 September 2016)

Johannes continues:

... [the] plan worked well and I landed my first job in games in THQ Wireless / Universomo in summer 2008. I worked as a game programmer helping on many J2ME mobile games such as Star Wars: The Clone Wars, WWE Smackdown vs. Raw 2010 and Chop Sushi. I really enjoyed the time there but decided to switch to - back then - "real games" on console/PC and joined RedLynx to work on Trials Evolution for Xbox 360 in 2010. (Pocketgamer.biz, 23 September 2016)

Whilst working at Redlynx, Johannes met Juhana Myllys, a game developer, and a few years later they decided to do something on their own. This was the genesis of Frogmind. Although they had never worked on the same project at RedLynx, they shared similar ideas for the development of games. The duo did not want any investors or publishers who might try to deviate the company from its vision, but instead they were inspired by success stories of companies established by one or two people. As Juhana explains to the publication boardgamegeek in 2013:

I really like how easy it is to self-publish your game globally especially on mobile platforms. It has improved massively in the last 5 years. You can totally be a two man (or even a one man) indie studio and self-publish your game as we did. I am not saying it is easy to get sales but at least it is easy to get the game there available for easy download. (Boardgamegeek.com, 6 August 2013)

Without any prior knowledge about managing a game development company, and without press contacts and marketing experience they nonetheless launched themselves in a new professional adventure with their own company. Frogmind started without having an office space and in the first months after establishing the company they worked from home. Since neither Johannes or Juhana had prior entrepreneurial experience, they did not know what to expect from the journey. Being a lean organization with only two people was helpful as they were able to divide work packages easily amongst themselves. In terms of the game development process, that is. Marketing during Frogmind's first steps, according to Johannes, implied "*writing something on Facebook and Tumblr*" and it was a shared activity, while the duo decided that Johannes would take care of daily operations and perform CEO's functions.

In June 2012 Frogmind applied for funding from a Start-up Centre promoted by Aalto University.

With 15.000 euros they moved to an office in the center of Helsinki. Johannes recalls those first months of activity:

“... basically we used only our own savings, but my wife was a big help, working a job that brought in a regular salary. It was a tough year in that sense, but it allowed us to not concentrate our efforts on how to finance this thing. (...) It was one year, seven days a week, working crazy hours every day, but it was definitely worth it because it was the project of our dreams, and we put everything we had into it, our soul and our hearts.” (Adweek.com, 30 September, 2013)

First year of their company was a major learning experience for both Juhana and Johannes. BADLAND's financial success attracted also a lot of media attention, and this was something completely new for them: especially in an interview on *Nelonen* (18 April 2013), one of the commercial TV channels in Finland, Frogmind was boldly named 'the next Supercell', and this clearly put pressure on the company. Johannes and Juhana aimed at developing the best game possible for touchscreen devices, and their ambitions had no limits, as explained by Johannes:

Why not create the best? Why... set the goal lower? Why not set the goal, really high and, then if you don't, if you cannot reach that high, at least you reach really high. If you can't reach that super goal, then, you still reach a really high goal. So I think it's good idea to set your goals very high. (Interview with Johannes Vuorinen, April 2014)

With this ambitious vision, BADLAND was fully developed by the two founders: Juhana Myllys did all of the game art and Johannes Vuorinen was responsible for coding. Sound design was the only outsourced component in the development process. Since Juhana and Johannes were developing BADLAND on their own, they decided to concentrate their efforts and resources on one platform, Apple's iOS, because they considered it to be the most accessible platform.

The first plan was to launch BADLAND during Christmas 2012, then it got postponed till February 2013, and finally it was April same year - exactly one year after the foundation of their company Frogmind. Both Juhana and Johannes wanted the game to be as unique and perfect as possible, as explained by Johannes in the Spring of 2014:

We didn't want to make something that looks like Angry Birds or other, like many games there are. So we wanted to create something unique to really stand out from the crowd because there are so many games there so that was one of the key things we wanted to do. (Interview with Johannes Vuorinen, April 2014)

This focus on differentiation was also envisioned as a way to ease the marketing of the product. As explained in an interview to GameIndustryIQ:

If you don't have lots of money to invest into marketing, like where we came from, your game has to be really unique and polished. It needs to look unique in screenshots and video. It needs to be interesting, as if you don't have a marketing project, the product has to market itself as well as possible. Indies need to stand- out from the overall crowd! (Gamingindustryiq.com, 9 September 2013)

BADLAND also distinguished itself from the crowd in two other ways: first, there was no tutorial in the game; that is to say, the player is given no introduction in the beginning to how to play the game, but the game expects the player to learn as they progress, and second, originally BADLAND's price point was higher than most other games. Usually mobile games were either free (so called free-to-play games) or less than one USD, but BADLAND was priced at 3.99USD when it was initially released on Apple's App Store.

According to Johannes, the company's name - Frogmind - does not have any special meaning. The duo was applying for funding for their upcoming company, and for this they needed to have the company established prior to the application, which is why they needed to come up with a name. They had some requirements for the name, though: it had to sound like a game company and it had to contain an animal. This process was far from straight-forward, though, as every time they thought they had come up with a suitable name, a brief online search revealed the name was already taken. But in the end, Frogmind was available, and thus their entrepreneurial endeavor was given a name.

The Game industry: a brief overview

The global mobile game industry

Although the first mobile game devices were introduced already in the 1970s, it is only at the end of the 1980s when the industry really started picking up steam. Nintendo's handheld console Game Boy was first introduced in 1989, and although its processing power was not what the critics were hoping for, in terms of its portability it was a huge success. Game Boy came bundled with the game Tetris, and for many this was one of the main reasons why handheld gaming became a global phenomenon.

Ever since Nintendo introduced the Game Boy to wider audiences, its competitors tried entering this burgeoning market: Atari Lynx, Sega Game Gear, TurboExpress, and even Nokia's N-Gage tried to challenge Nintendo's dominant position in the market, but alas they all failed. It was only Sony that was able to challenge Nintendo by releasing its first handheld console, PlayStation Portable (PSP), in 2004. As the market for game consoles consolidated since the end of 1980s, the same trend had been taking place in the handheld industry since in the 2010s, and the market has been dominated by Nintendo and Sony. However, while Nintendo and Sony continued fighting for dominance over the handheld market, in the beginning of the 21st century Apple radically changed the way we understand mobile and handheld gaming.

The widespread use of mobile phones by the end of the 20th century offered the opportunity to have games in these devices but the lack of standardization and the difficulties in terms of distribution created significant challenges. However, the situation started to change with the launch of the iPhone and Apple Store in 2007. For the first time, there was a mobile phone with adequate technical features that made possible the global distribution of mobile games. With the Apple App store a new digital distribution channel appeared and developers no longer needed the publishing companies that until then had dominated the market. Furthermore and as the use of touchscreen devices such as smartphones and tablets continued to rise, and with more digital distribution channels such as that of Google that followed Apple, an industry centred on mobile games emerged.

However, while these new platforms greatly disrupted the previous value chains by establishing a direct link between the developers and the consumers, they have also indicated a shift in responsibilities. For example, while digital distribution has - to a large extent - made publishers and distributors largely redundant (game developers can release their games directly on different platforms), it also means game development studios now have more responsibility over marketing, user acquisition, and other functions. For small companies like Frogmind, the proliferation of digital distribution has been a sort of double-edged sword: on the one hand, they now have more freedom to design the kind of games they want and their revenue share is larger due to middlemen being out of the picture, but at the same time they have had to develop competencies in fields they have not focused on previously.

The Finnish game industry

In Finland, there is a strong gaming community that brings together everyone who loves making and playing games. During one of our chats with Johannes Vuorinen he elaborated on this:

At least small companies are sharing a lot of stuff together, for example, in these IGDA (International Game Developers Association) meetings, There is nothing to lose. It is so global. In a way we are competing with each other but in reality we are not.

So it helps to share info. I think that is one of the key things here in Finland. There are so many good success stories and there will be many new success stories in the future also. I am very confident about that. (Interview with Johannes Vuorinen, April 2014)

Stimulated and often funded by diverse initiatives of Nokia, numerous companies in Finland started developing games for mobile phones since the beginning of the 21st century, and that is why the Finnish game industry became particularly well prepared to compete in the mobile game market. After the launch of the iPhone in 2007, an increasing number of Finnish companies soon focused their efforts on the development of games for touchscreens. At least two things contributed to this major pivot in the industry: first, growth in the entrepreneurial activities in the country, and second, the government has been actively supporting and incentivizing entrepreneurship and establishment of new firms. Moreover, the success cases of some Finnish companies propelled the industry. In particular, two of these companies became archetypal in the field. In 2009, Rovio launched Angry Birds and the game became the first global success in the Apple Store. The second highly successful case is Supercell, established by two game industry veterans Mikko Kodisoja and Ilkka Paananen. In October 2013, and with two mobile games for touchscreens on the market, 51% of the Finnish company was acquired for 1.1 billion euros by the Japanese Softbank and then later on in 2016 by the Chinese Tencent. Supercell, founded only three years earlier, became one of the fastest-growing start-ups ever (Kuorikoski, 2015).

But the Finnish game industry ecosystem was also slowly maturing. As of 2020, three companies had been listed in the stock exchange. While this development clearly showed the industry was moving forward, it also posed new challenges to the openness that so far had characterized the industry. Being listed on the stock exchange limits a degree of openness due to the need to comply with laws and regulations. Thus, some of the listed companies felt it was easier to withdraw themselves from the scene, as the practitioners refer to the industry.

Mobile games: self-publishing as a new paradigm

In the world before digital distribution, game development studios were part of a longer value chain where between the studio and the consumers there were usually publishers, distributors, and retailers. In this context, game development studios would usually get thirty percent of all the revenues, with publisher, distributor and retailer taking about seventy percent of everything. This was somewhat justified as all the actors in the value chain had a role to play, but digital distribution transformed the revenue model by increasing the game developer's share to roughly seventy percent of the revenue if they sold their game directly on the platforms. In reality, however, the situation is more granulated, but these two extremes illustrate how greatly digital distribution has impacted how games are sold and purchased.

Having said that, with increased revenue share comes great responsibility: marketing, management, customer support, and so forth. In essence, game development studios, whilst now having a more direct access to customers, also need to take care of activities previously managed by publishers, distributors, and retailers. As the number of games being sold on different platforms is growing rapidly on a daily basis, game development studios have acknowledged the importance of publishers not only in user acquisition but also in creating more predictability in revenue streams.

Revenue models: free-to-play, premium, and subscription

Currently the game industry is characterized by three business models: free-to-play (e.g. Pokémon GO), premium (Star Wars Battlefront II), and subscription (World of Warcraft). Out of these three, the free-to-play model has quickly become the dominant one within mobile games, although some console games have also experimented with this model. In essence, free-to-play implies that the game can be downloaded and played for free with in-game purchases (either cosmetic or impacting the gameplay), premium games having a one-time price, and finally the subscription model means the consumer pays a monthly fee to play the game. Before digital distribution, the premium model was the *de facto* way of selling games, and as such games were regarded as physical products with a clear beginning and end.

Digital distribution, however, has enabled game development studios to treat games *as services*, that is being referred to as *game as a service* model, meaning that new content can be easily introduced to the game, the existing gameplay experience can be modified, and cosmetic and gameplay enhancements can be purchased. These features have a tremendous impact on how games are purchased and how much consumers are spending while playing. However, this has also generated a lot of controversy amongst consumers and even policy-makers.

The service business model can be integrated with other models. Star Wars Battlefront II is perhaps the most infamous contemporary example of such approach. Originally released in 2017 as a premium game for Xbox, PlayStation, and Windows, Star Wars Battlefront II also included loot boxes: players could spend actual money to get them in order to acquire cosmetic enhancements or improve their gameplay. Paying for improving one's standing in relation to other players is called 'pay to win', and including this element in a premium game made consumers furious: in other words, paying full price for a game did not guarantee the players would get their hands on the full experience.

This incident takes us to the critical question: are these new business models in the game industry always ethical? Game development studios can define games as services, but can we really call them services if there is no end to the service? Furthermore, how much and under what conditions can game development studios expect consumers to pay for the games they play? As the digital distribution model is maturing and becoming the industry standard, both consumers and companies are slowly realizing that the business models need to be revised to become more ethical.

For small studios like Frogmind, ethical and operational questions such as the ones discussed above have become critical, especially when they are considering transitioning to free-to-play games. In fact, this trend has been apparent in the mobile game industry for several years now, but switching from premium to free-to-play requires not only revisions to the business model but also changes in how the game is designed. It is not only a matter of including in-game purchases in the game's main menu, but ensuring there is access to customer support and that the servers can take a sudden influx of new players (the free-to-play business model relies heavily on acquiring substantive amount of players out of which a small segment ends up making the game profitable through their in-game purchases).

Thus, although the free-to-play model has become significantly profitable, at the same time the mobile game industry has quickly turned into a 'winner takes it all' situation where a handful of companies are generating most of the profits while most games do not even break even. Simultaneously, consumers have started to expect mobile games to be free, so seen from this light Frogmind's decision to transition to free-to-play has been a logical one, but has it been a wise move regarding future strategic options?

BADLAND: journey to worldwide success

BADLAND is an atmospheric side-scrolling action adventure platformer set in a forest full of various inhabitants, trees and flowers, and the player controls one of the forest dwellers. The game features an original physics-based gameplay that makes full use of the possibilities offered by touchscreens. The foreground where the action takes place is almost entirely black, so you see your character and all of the moving parts of the world in a kind of silhouette. Initially BADLAND was launched with forty levels and every single level introduces the player to some new obstacles (Figure 3 and Figure 4 in Exhibit).

All over the landscape there are power-ups: some of them will speed you up or slow you down. There are power ups that change your little creature's size; it'll shrink down to a tiny dot or blow up so big it can barely fly. There are power ups that make it bouncy, ones that turn it into an invincible square, and ones that make it roll or spin. The game is paid since its creators did not want anything to come between the player and the game itself. They believed that in-app purchases would ruin the gameplay experience.

Before the launch of the game: creating momentum

Frogmind started to promote their first game BADLAND already nine months before the launch. They released two screenshots of the game in July 2012 and the reaction in the industry was immediate, as exemplified by the following article:

Not too long ago, a pair of industry veterans broke off from the mainstream herd to embark on an indie adventure of their own. Now, we have the faintest glimpses of what they've been up to. Sometime earlier this month, Frogmind Games (which consists of Johannes Vuorinen and Juhana Myllys) announced their first title: an atmospheric, side scrolling, potentially addictive action adventure title for the iOS. Annnnd that's all we know. The two pieces of artwork they've revealed thus far look rather promising. According to their website, they were created with in-game art assets. We'll keep you posted. (Indie Games+, 19 July 2012)

Furthermore, Frogmind's founders set up a live stream in their studio in July 2012 showing them developing BADLAND. Later, in October, the first gameplay video was released, as recalled by the cofounder in an interview to Adweek:

... And that video with just the game running on an iPad, being recorded by a cheap camcorder, we actually got an e-mail from Apple that said, "Hey, this looks interesting. When are you going

to release this?" In addition to that, we got multiple sites to write about the game, so we just kept publishing new videos, and everything went smoothly from there. (Adweek.com, 30 September, 2013)

The statement above highlights two critical insights here: first, the importance of marketing even before the game is launched, and second, attracting the platforms' interest. Games had been marketed prior to their launch also in the pre-digital distribution era, but with so many games being released today, generating hype is seen as extremely beneficial. Also, in terms of gaining further visibility, being on good terms with the platform owners is perhaps even more important as they can feature selected applications and games on their marketplace's front page. This, in fact, is what happened with BADLAND as well, and it has been said being featured by Apple really helped them stand out from their competitors.

An immediate success

In April 2013, Frogmind's founders finally managed to release BADLAND for Apple's devices, and it was an immediate commercial and critical success. Initially priced at \$3.99, the game became the most downloaded game in 83 countries. And, over time, it has accumulated over 100 million players in total on nine different platforms. But this success did not come immediately. It took different strategies and very hard work.

BADLAND was awarded with Apple's App Store iPad Game of the Year (2013), Apple Design Award and Apple Editors' Choice recognition, thus boosting their visibility amongst consumers. BADLAND also benefited from promotional featuring: Apple showcased the game in its new iPhone 5C advertisements.

Extending the success over time: strategic choices for keeping the momentum

Based on the extremely positive reception from consumers and critics, Frogmind's founders decided to dedicate their efforts to building on the initial success of the game. As Johannes recalls, this decision was not immediately straightforward to them and they were considering different options at the time:

We either keep developing the current game with updates, start developing a sequel, BADLAND 2, or start developing a totally new game. Okay, you may ask why didn't we do all the options at once. Well, as I said, we were only two guys with no previous game company experience. So even

hiring one employee felt kind of challenging and risky. We haven't hired anyone ever. We don't know how to manage people and do that stuff, that was totally new to us. And of course, there was this feeling that as we saw the download curve, that what if it goes to zero, what if the launch success was it, and then nothing. So it felt too risky. So we decided to stay two guys still. And our decision was to keep developing BADLAND. Why? Because we love the game, we love the world of BADLAND, we had so many ideas still left that we didn't have time to implement to the launch version. And we wanted everyone to be able to play it, not just the iPhone and iPad users. So we wanted to port it to other platforms. And we wanted to see how big we can get this game and this franchise. So, this meant updates. Updates, updates, updates, monthly updates. We quickly made a plan for monthly updates. And we also had designed the game to easily add new content, so it was pretty easy to add new content. (BADLAND Postmortem, GDC, March 2014)

Hence, at first the strategy to maintain the relevance of BADLAND, Frogmind's founders decided to keep improving the game with updates. These were significant and in addition to the forty levels originally featured in the launch of the game, for example, they ended up releasing sixty more levels. Also, important improvements such as multiplayer mode on the same device were later launched. These changes were automatically added to all the games that were sold before. In addition to this central strategy of creating new content and features, they also engaged in different other actions. A second strategy involved price related promotions. They started to promote the game with discounts: fifty and even seventy percent discount campaigns were launched for limited time periods. Furthermore, and building on the good relationship Frogmind had with Apple, Johannes and Juhana decided to participate in the App Store's five years promotional campaign, generating over seven million downloads in one week. The game was offered for free and Johannes explains how they decided to engage with this promotion:

But why did we do it? Well, of course, it was a huge exposure for the game. We didn't have any in-app purchases, so being free means actually being free, so this kind of just cost us money, because we didn't get the paid downloads. But yeah, we got so many new opportunities to explore, which was great. And it was really great to see that those seven million new users enjoyed the game also. (BADLAND Postmortem, GDC, March 2014)

A third strategy for keeping the game relevant was to launch it also in other platforms rather than just focusing on Apple's iOS. The question then became how to do it, since launching the games for different platforms implied not only working on the technical side of the game but also adapting the game's monetization mechanisms. Frogmind devised a prioritizing principle: they prioritized new platforms based on the ratio between market potential and work required. As a

result, they launched the game in this order: BlackBerry, Google Play, Amazon App Store, Humble Bundle (within the Android version) and Windows Phone. Later the game was also launched for game consoles.

The reasons for setting Blackberry as a top priority was that it supported Frogmind even already before iOS launch. Also, transposing the game was technically easier as it was similar to iOS in terms of monetization. Android was next, but one of the main challenges of this operating system is that there are a few thousand different devices that run on the system. So, Frogmind's founders decided to hire an external Quality Assurance (QA) company, which had about hundred devices, and figured out that if it runs on those devices, it should work on most of the devices that are important. In Google Play (the main store of applications for Android devices in the western world), Frogmind did not find good examples of premium games that were successful. Also, they realized that the majority of Android users were expecting to download their games for free due to the fact that many Android users were not able to make purchases on their mobile phone. This has created the need for changes not only in the game but also in how Frogmind operates in new markets.

Changing a premium game to a free-to-play experience is very challenging without affecting the game experience. Frogmind decided to have video ads between levels for those who do not want to or cannot spend money, as well as offering an option to unlock the premium version with a one-time purchase. Furthermore, in the Chinese market, Frogmind has a special version distributed through a publisher. After the initial success of the game Frogmind got many different Chinese publishers reaching out to them, and it was not an easy decision to pick the right distributor. Especially in China, Frogmind experienced piracy problems for the premium version, and there were many downloads in China outside the official platforms. Also, as the founders realized there is little or no demand for premium games in China, they decided to release BADLAND for free in China on Android.

Fourth and finally, building on the widespread success of the game, Frogmind also decided to regard BADLAND as a brand, which is why they quickly launched BADLAND merchandise such as t-shirts and smartphone cases. Johanes explained to us this decision:

Because of the initial success we had many fans that wanted to have that kind of stuff. Several former employees of Rovio established this new licensing agency, so for us it was an easy decision because it does not take our time. There are lots of opportunities in releasing physical products

because games are so popular, so it just makes sense to sell products that you already know from the virtual world or from the mobile games. (Interview with Johannes Vuorinen, April 2014)

To conclude, and as stated in the beginning of this section, Frogmind's BADLAND has been a real commercial and critical success that shows how small game development studios can realize their dreams in the digital distribution era. It has required a tremendous amount of work, and along the way they have also had to develop new skills when it comes to recruitment, management, marketing, and human resources. Driven by BADLAND's success, Frogmind eventually decided to start developing a sequel to their hit title.

Keeping the growth: towards management of product portfolio

From April 2013 to around April 2014 their focus was very much on building on the success of the first game. During this time Frogmind was fully occupied with updates to the game and porting the game to other platforms other than iOS. Then, from spring 2014 onwards until December of 2015 Frogmind was focused on developing BADLAND 2. The game is strikingly similar to its predecessor, although its creators argue that it is also an advancement not only in terms of gameplay but also depth. For example, while in the original BADLAND touching any location on the screen flapped the character's wings, causing it to rise up and move forward, in BADLAND 2 they added a control scheme that allows the character to move left and right, as well as up and down. The camera now zooms in and out, and the levels scroll to all directions. Finally, new features include different obstacles and environments to navigate through, such as liquid magma, fire and searing light, as well as a new rolling character and slow-motion, low-gravity stages.

As it happened with the original BADLAND, BADLAND 2 was first released in Apple's App Store. BADLAND 2's launch was somewhat different from its predecessor's. Frogmind announced right away that the game would also be launched in Android and other platforms, as well as regularly enriched with new content over time. The game was generally well received by the critics, as the review below exemplifies:

BADLAND is objectively one of the best mobile games available. The art is gorgeous, the sound is great, and the gameplay is fun. Somehow, developer Frogmind put together a sequel to the game and released it without anyone knowing that the game was on the way. And, if early reviews are to be believed, Bandland 2 might be better than the original. For the most part, Bandland 2 is a pretty traditional sequel in that it uses everything from the original and just adds a couple new

tricks. So, you're still controlling a weird flappy creature through silhouette style levels. Your creature can multiply (for more death), get bigger, or lose its ability to fly. The big changes are that this time around are new liquid based puzzles and the ability to fly both directions on screen.

Essentially, if you liked the original, you'll like this one. BADLAND 2 is available now on iOS for \$4.99, and Frogmind has promised free content "coming soon after launch" in updates. No word yet on when the Android or Windows versions might be available. (phonearena.com, 18 December 2015)

In the months that followed the launch of the original BADLAND the two founders of Frogmind faced an overload of different requests. As Johannes recognized, the initial plans of Frogmind's founders have not included to hire the business manager that could handle some of these requests, but they ended up employing such a person:

...because of this AppStore and, the easy of.. that it's so easy to publish yourself. For example Mountain Sheep didn't have any... business guy, in that company, and they have successfully launched, a couple of hit games. Because of these examples, we were confident that we don't need such a guy, initially. But then, if the game because successful then, it automatically, there's the need for such a guy. So that's why we hired... this kind of guy. (Interview with Johannes Vuorinen, April 2014)

Hence, in September 2013 Frogmind relied on their new employee, Teemu Mäki-Patola, for help with the marketing and business side of Frogmind. The identity of remaining true to the origins as indie developer was thus something that has been underlying decisions related to growth of the company. The logic of a small team that develops a highly successful game, established the blueprint for the organizational structure and work processes of Frogmind. An absolute flat hierarchy and a context where a small and agile team can independently pursue their vision of a game, with no interference of other people, proved a worthy formula that the entrepreneurs decided to keep as the company grew. As the pressure to build on the success of BADLAND series and to launch new games increased, the entrepreneurs decided not to make the development team bigger, but rather to create a second and a third teams, over time. This way, the logic of small, independent teams was established as the basis for the growth of the company.

After the launch of BADLAND 2, Frogmind had two game development teams working in parallel: one focused on creating new content for BADLAND 2 and expanding it beyond Apple

devices, and a second team working on an entirely new game. At the end of 2016, a third team of game developers was established.

New strategies to go ahead: Frogmind's partnership with Supercell

The organizational growth of Frogmind based on an increasing number of small game development teams resembles the model pursued by Supercell, another Finnish mobile game developer that accomplished international success in the freemium game market.

Supercell background

Supercell, considered by many as the world's most successful mobile developer, was valued in 2016 as more than 10 billion dollars, when it was acquired by the Chinese firm Tencent. Supercell focuses on the development of free-to-play games that yield profits through in-game micropayments. Games launched by Supercell include Clash of Clans, HayDay and Clash Royale. These were all free-to-play games that became highly successful across the globe bringing millions in revenues.

Supercell game development focuses around small teams being referred to as "cells" (from where the name of the company was created). As explained in the company's website:

... we've found the best way to get big is by being small. Small teams, that is. Need proof? Clash of Clans and Hay Day were created by teams of only half a dozen developers each. There's no clumsy hierarchy or bureaucracy here, just exceptionally talented [super nice] people with absolute freedom to pursue their creative vision. (Supercell website, 2020)

Each small team works on the creation of a new game. When a playable version is ready then all Supercell's employees are asked to play-test the game. After this first scrutiny the game gets further tested in one market with real players. If the reception of the game is not according to the expectations then the game is "killed" (which is the field's jargon to abandoning the project). Over the time of its operations Supercell has cancelled more game projects than it has actually launched to the market. Supercell's co-founder and CEO - Ilkka Paananen - explains that the teams (or cells) have complete independence and responsibility to work on their games. According to Ilkka Paananen, one way to describe these cells would be to think of them as small companies inside the greater company.

Partnership with Supercell

In September 2016 Frogmind entered into a long-term partnership with Supercell. Supercell acquired 51% stake in the company and the remaining 49% were kept in ownership by the current and future employees of Frogmind. On the day of announcement of the deal, Johannes issued a press-release where he explained this unexpected move:

I am extremely happy to announce that Frogmind has entered into a long-term partnership with Supercell! (...) With BADLAND's success, we decided to start growing our independent studio so that we could do more things at once. We grew slowly as we hired only the top talent. We wanted our team to consist of people who can work independently and we wanted to keep a flat hierarchy. With our growing team, we were able to keep updating BADLAND with new content and features, bring it onto new platforms and develop and eventually launch BADLAND 2 for the Christmas of 2015. (...)

This all leads to our new partnership with Supercell. They liked our new upcoming games and the teams behind them, and we have the utmost respect for them and their gameplay, production values and elegance in solving difficult design challenges. Partnering with the world's top mobile developer, we can get help and information no one else knows better. And with the Supercell's backing, we can think much more long term and be more ambitious with our games than ever. This is an ideal partnership that will greatly benefit our future games and players.

We will continue to operate completely independently as Frogmind, publish our own games and get to decide what games to make and how. It's very similar to the way Supercell has operated under SoftBank and now under Tencent. We'll be able to focus fully onto our games, worry less about finances and continue being an awesome place to work for our employees. Supercell also understands our culture and the way we make games. It's actually very similar to theirs, having small talented independent teams with no middle management aiming to make the best games in the world. Like BADLAND which was initially made by the two of us, our new games are also being developed by small and effective teams of three to five people. Continuing to operate independently means also that our games will very much continue to be Frogmind games with their own unique DNA. (Frogmind press release, September 2016)

From Supercell's perspective, this was the first time the firm made an investment in another mobile game company. Supercell's intention behind the deal is to diversify beyond its own games by making investments in other mobile game companies. However, as Ilkka Paananen

emphasized, Supercell will remain a developer, not a publisher. Supercell's CEO also provided an explanation about why the decision was made to partner with Frogmind, and emphasized the organizational structure as one of the key aspects in this regard:

We've been thinking for a while about ways in which we can enable the best talent to make the best games when they aren't in a position to come and work for us. Over the years, we have talked with a number of teams but Frogmind was the first one that just felt perfect for us. They share the same passion for quality that we do, and are fans of small teams as well. In fact, their teams are even smaller than ours. (VentureBeat, 21 September 2016)

Road ahead

It seems this partnership is bearing fruit as Frogmind has been strengthening its approach to developing long-lasting game franchises. Fast forward to April 2020, Frogmind had developed further its operations and expanded game portfolio. Company has grown from 14 to 24 employees and begun development of three new real-time multiplayer F2P games. Badland Brawl was one of these projects and was launched 10.2018. Rumble Stars was another and was launched 4/2019. The third project was killed. Rumble & Brawl have done quite well. Combined they have about 30 million installs and our revenue last year (2019) was 5,75Me which is our highest ever by a good margin.

Currently Frogmind is launching their newest title called Rumble Hockey that is coming out on May 19th 2020. Prior to the global launch, Rumble Hockey was pre-launched in six countries. Its purpose is to see how well especially free-to-play games would generate player retention, and thus eventually revenue. Rumble Hockey was interesting from Frogmind's point of view in the sense that it was a sibling to their previous title, Rumble Stars Soccer. It seemed the strategic partnership with Supercell had taught Frogmind a lot about creating experiences that would keep players coming back to their games, but would it be enough for Frogmind to stay relevant in a market saturated with competition?

The work is on the way for other new projects as well. Frogmind plans to keep focusing on multiplayer games as services and social experiences. The vision is to make them interesting enough to play even for years.

Exhibits and Figures

Exhibit A) Timeline with launches of Frogmind's games

<i>Game</i>	<i>Release date</i>	<i>Platform</i>
<i>Rumble Stars Hockey</i>	<i>May 19th, 2020</i>	<i>iOS</i>
<i>Rumble Stars Football</i>	<i>April 23, 2019</i>	<i>iOS</i>
	<i>April 23, 2019</i>	<i>Android</i>
<i>Badland Brawl</i>	<i>October 10, 2018</i>	<i>iOS</i>
	<i>October 8, 2018</i>	<i>Android</i>
<i>Badland 2</i>	<i>December 17, 2015</i>	<i>iOS</i>
<i>Badland: Game of the Year Edition</i>	<i>May 26, 2015</i>	<i>PlayStation 4</i>
	<i>May 26, 2015</i>	<i>PlayStation 3</i>
	<i>May 26, 2015</i>	<i>PlayStation Vita</i>
	<i>May 27, 2015</i>	<i>Windows (PC)</i>
	<i>May 27, 2015</i>	<i>OS X (Apple)</i>
	<i>May 27, 2015</i>	<i>Steam for Linux</i>
	<i>May 29, 2015</i>	<i>Microsoft XBOX1</i>
	<i>July 30, 2015</i>	<i>Nintendo Wii U</i>
<i>Badland</i>	<i>April 4, 2013</i>	<i>iOS</i>
	<i>November 30, 2013</i>	<i>Android</i>
	<i>June 8, 2014</i>	<i>Windows phone</i>

Exhibit B) Evolution of Frogmind's employee headcount

Time	Hiring	Total of persons working in the company
Until fall of 2013	1 marketing / business developer	3 people
Until fall of 2014	3 game developers hired - two programmers and one artist hired	6 people
Until fall of 2015	4 game developers hired	10 people
Until fall of 2016	2 game developers hired, Juhana Myllys exits the company in June	11 people
Until spring of 2020	13 game developers hired	24 people

Exhibit C) Key financial figures from 2016 to 2018 (in euros)

	2018	2017	2016
Revenue	1 387 226	616 239	2 040 293
Operating income	-757 688	-740 155	881 201
Employee costs	-965 351	-754 277	-589 845
Profit	-758 235	-739 945	701 882

Exhibit D) Selected visuals

FROGMIND

Figure 1. Frogmind logo



Figure 2. BADLAND logo

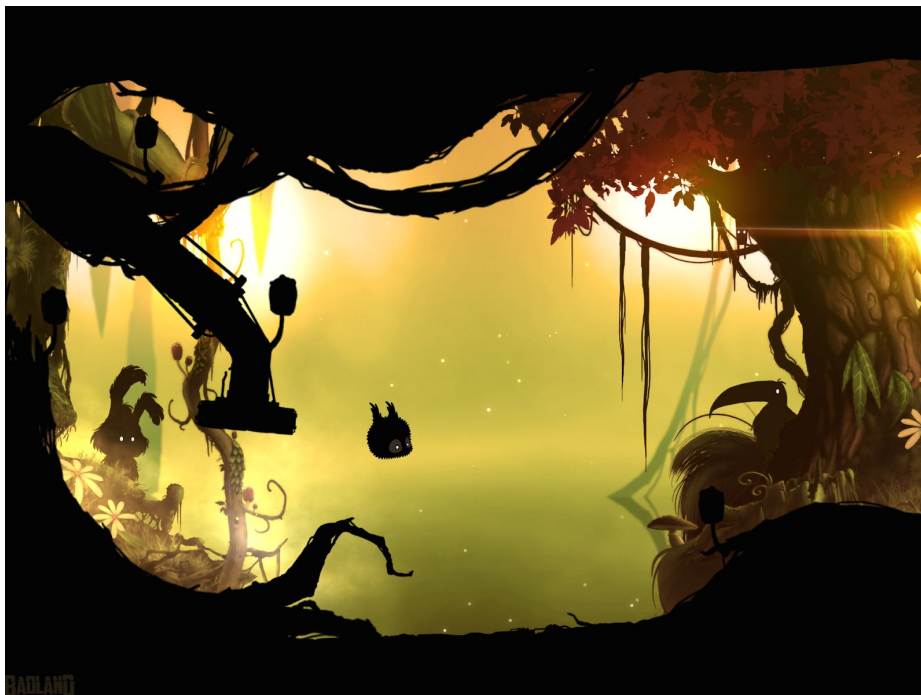


Figure 3. Screenshot of BADLAND



Figure 4. Screenshot of BADLAND 2

Exhibit E) Selected references

BADLAND: Game of the Year Edition- trailer:

<https://www.youtube.com/watch?v=ko4EeYfYsBI>

BADLAND Postmortem: Building on App Store Launch Success:

<https://www.gdcvault.com/play/1020984/BADLAND-Postmortem-Building-on-App>

Badland 2 gets a surprise release on iOS:

https://www.phonearena.com/news/Badland-2-gets-a-surprise-release-on-iOS_id76792

BADLAND 2 Release Trailer (iOS):

<https://www.youtube.com/watch?v=tesHfW-4uhM>

Frogmind Games Reveal Action-Adventure Game BADLAND:

https://indiegamesplus.com/2012/07/frogmind_games_reveal_action-a

Hall of Fame: Delving into the mind of Badland developer Johannes Vuorinen:

<https://www.pocketgamer.biz/hall-of-fame/63562/hall-of-fame-johannes-vuorinen/>

Indie Developer Focus: Frogmind:

<https://boardgamegeek.com/blogpost/21989/indie-developer-focus-frogmind>

Insider Q&A: Badland's Johannes Vuorinen:

<https://www.adweek.com/digital/insider-qa-badlands-johannes-vuorinen/>

Kuorikoski, J. (2015). *Finnish Video Games*. Jefferson, NC: McFarland.