Sakari Naumanen

Creating a Guide for PlayStation 4 Publishing Process

Bachelor of Business Administration

Autumn 2018

Tiivistelmä

Tekijä(t): Naumanen Sakari

Työn nimi: Oppaan tekeminen PlayStation -julkaisuprosessia varten

Tutkintonimike: Tradenomi, Tietojenkäsittely

Asiasanat: pelijulkaisu, julkaiseminen, videopeli, PlayStation

Tämän tuotteistetun opinnäytetyön tavoitteena oli tehdä PlayStation 4 -videopelikonsolin julkaisuprosessin opas. Oppaan tarkoituksena on ohjeistaa kehittäjiä PlayStation -projekteissa ja tiivistää informaatiota julkaisuprosessin aloittamisen helpottamiseksi.

Opinnäytetyö koostuu kahdesta osasta; julkisesta teoria osasta ja itse oppaasta, joka on Kajaanin Ammattikorkeakoulun (KAMK) ja Evocat Games Oy:n (EG) välisen salassapitosopimuksen alainen, koska se sisältää vain Sony Corporationin kumppaniorganisaatioille jaettua tietoa. Julkisessa osassa opinnäytetyö tutkii videopelien julkaisemista, PlayStation -pelikonsolia sekä sen luonutta yritystä, Sony:a. Rajoittamattomassa osiossa käydään läpi Sony:n kehittäjäyhteistyön julkinen osuus, opinnäytetyön tilaaja, Evocat Games Oy, sekä KAMK:n PlayStation -kehitysosaston tilanne. Opinnäytetyötä valmistellessa haastateltiin KAMK:n henkilökuntaa ja opiskelijoita sekä pelinkehittäjiä yrityksistä Evocat Games ja Housemarque, tarkoituksena tutkia PlayStation -kehityksen ja -julkaisun tilannetta kyseisissä organisaatioissa ja analysoida tämän opinnäytetyön tarpeellisuutta ja tärkeyttä.

Opinnäytetyön tutkimus sisälsi kysymyksien valmistelemista tarkoituksena kerätä informaatiota ennalta valituilta yksilöiltä. Opinnäytetyön aineisto ja työskentely-ympäristö oli paljolti salassapidettävän aineiston läpikäymistä ja sisäistämistä sekä sen analysointia sellaisella tavalla, että sen voisi julkaista. Informaatio täytyi tiivistää käytännölliseen muotoon, jotta tulevat kehittäjät ymmärtäisivät PlayStation -julkaisun monivaiheisen prosessin ja pystyisivät tehostamaan työskentelyään oppaan avulla. Pelijulkaisemisen teoriaosuus yhdistää hyödyllistä tietoa pelialalle, sillä pelijulkaisemisesta on vain vähän tutkimuksia olemassa.

Abstract

Author(s): Naumanen Sakari

Title of the Publication: Creating a Guide for PlayStation Publishing Process

Degree Title: Bachelor of Business Administration

Keywords: game publishing, publishing, video game, PlayStation

The goal of this practice-based thesis was to create a guide on publishing video games on Sony's PlayStation 4 video game console. The guide was designated to educate developers working on PlayStation projects and to summarise information in a compact way to ease the start of the publishing process.

The thesis consists of two parts; a public theory section and the guide created, which is under a non-disclosure agreement between Kajaani University of Applied Sciences (KAMK) and Evocat Games Ltd (EG), because it contains information shared only to Sony Partner organizations. In the public section this thesis researched video game publishing, the video game console PlayStation and the company behind it, Sony. The unrestircted section continued to Sony's Developer Relations going through public information, the client of this thesis, Evocat Games Ltd, and the PlayStation development department in KAMK. Interviews from the students and personnel of KAMK and from the game companies EG and Housemarque were used to gain understanding on the situation of PlayStation development and publishing in the studied organizations and to analyse on the importance and need of this practical thesis.

Part of this thesis' research was preparing and selecting questions to gather information from selected individuals. The thesis environment included going through classified information and then analysing it in a way that it could be shared to the public. Creating the guide was about collecting and understanding vast amount of information and then summarising it in a useful compact way to help future developers to understand the many steps on how to publish products on PlayStation. The theory section about video game publishing brings useful information for the industry, as there are little to none studies on the subject.

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1   Introduction

This practice–based thesis is about creating a summary documentation (Guide) about video game publishment process for Sony Interactive Entertainment (SIE) PlayStation 4 (PS4) entertainment system. During my studies I became to think that developing and publishing a video game for PS4 seems more difficult than other platforms. I did research on the subject and the company that I was working for during my studies, Evocat Games (EG), requested that I would create my thesis from the subject. Kajaani University of Applied Sciences (KAMK) found the subject useful as the university is SIE's development partner and KAMK students have access to PS4 development software and hardware.

EG is a Virtual Reality video games company. EG was founded by KAMK students and alumni in 2017. The company is located in Oulu, Finland, and it employs six people. Evocat Games is developing their first PS4 video game title, Nemesis Realms, and suggested a thesis that would summarise the publishment process. The goal for EG is to simplify and shorten the process of the next PS4 title publishment.

The publishment process for PS4 includes multiple steps and many game development student teams in KAMK have tried to publish a product on PS4 and failed to do so. PS4 publishing requires planning actions before the start of the development. The developer or publisher needs contracts, registration, software, hardware and understanding of the vast processes of development and quality assurance. It also requires constant approvals from SIE regarding the decisions made by the developers. Because of these factors, it takes longer time and more steps to develop and publish a product on PS4 than many other entertainment platforms, making it a harder process to succeed on.

The reason to select this subject as practice-based thesis is that the end product will be valuable to both EG and KAMK. The purpose of the guide is to optimize the complicated publishment process for EG as a company and KAMK student teams. The level of education in KAMK would increase and the possible career paths for individuals would become more diverse, generating a healthier ecosystem in the Finnish games industry, which is weighted more to mobile and PC over consoles such as PS4. For EG the guide will act as a resource saving tool for making the PS4 publishing process faster. The guide can also increase the future employment rate of individual KAMK students as they are able to access professionally used development environment more efficiently.

The guide includes classified information and it is a separate documentation with a non-disclosure agreement (NDA) and it is only shared to the organizations of EG and KAMK and to their personnel who have signed the NDA.

2 What is PlayStation

The next chapters go through what is the PlayStation video game console, its creator Sony Corporation, and Sony's relevant subsidiary companies. These chapters are to provide understanding on PlayStation's history, reputation, technical specifications and basic use scenarios.

2.1 Sony Interactive Entertainment

Sony Interactive Entertainment (SIE) is a part of Sony Corporation (Sony). The Sony organization includes all sub companies regarding software and hardware manufactured under the brand "Sony". (Sony Corporate Subsidiaries, n.d.)

Sony's major fields of industry are mobile communications, games, network services, imaging products and solutions, home entertainment and sound systems, semiconductors, electronic components, pictures, music and financial services. Sony employs 128 400 people. Sony was founded in May 7, 1946 in Japan. With 29 affiliate companies in Japan and 75 outside of Japan, Sony's combined yearly revenue is 69.7 billion USD and common stock value of 7.9 billion USD reported on March 31, 2017. (Sony Corporate Info, n.d.)

SIE is the operator in charge of Sony's games and network services. SIE is divided in three regional operators, SIE Americas, SIE Japan and SIE Europe. Each one of the SIE operator's main areas of business are sales, research and development of software, hardware, content and network services in their respective geographical areas under the brand PlayStation.

SIE Japan also operates outside of Japan covering other parts of Asia. Company full name is Sony Interactive Entertainment Inc, it was founded in 1993 and it is located in Tokyo, Japan. Its capitalization is 1 million USD and its representative and President is John (Tsuyoshi) Kodera. John (Tsuyoshi) Kodera is also the President and Chief Executive Officer (CEO) of SIE Americas with 2 million USD capitalization, which was founded in 1994 and is located in San Mateo, California, United States of America. SIE Europe is located in London, United Kingdom, and it was founded in 1995. Its full name is Sony Interactive Entertainment Europe Limited. (Sony Interactive Entertainment Corporate Info,

n.d, PlayStation About n.d, Sony Interactive Entertainment Corporate, n.d, Sony Interactive Entertainment History, n.d)

SIE operators were renamed on April 1st 2016, when the Sony sub companies in charge of PlayStation businesses in Europe, Americas and Japan changed their company names and websites. Earlier names were originated from name Sony Computer Entertainment (SCE). (Corporate Name Change and New URL For Corporate Website, 2016.)

This thesis will go through connections and cooperation with SIE Europe and SIE Americas as they are the partners who have been working with EG and KAMK.

Image 1: The headquarters of SIE Americas in San Mateo, California, USA. (PlayStation Corporate About, n.d)

2.2   PlayStation 4

PlayStation and "PS4" are registered trademarks of Sony Interactive Entertainment Inc. PlayStation is a home entertainment system device brand. PlayStations are categorised

as video game consoles. Most common uses are playing video games, watching movies, listening to music and browsing internet. (PS4 Features, n.d)

Basic setup for PlayStation 4 is to use it with television. PS4 is connected to the television via HDMI cable and the television is used as a display to show the user visual image of the current action on the console. Computer monitors and video projectors equipped with HDMI can also be used as displays. PS4 package includes one DualShock -controller that is used to control or play with the console. DualShock -controller can be used with USB cable or wirelessly via Bluetooth connection as shown in Table 1. Maximum of four Bluetooth or USB devices are allowed to be used simultaneously on PlayStation 4. Other peripheral types available for PS4 are camera, gun controller, steering wheel controller, pedal controller, flight stick controller, stick controller, keyboard, mouse, headphones, media remote and battery charging stations. (PS4 Accessories, n.d)

External dimensions	Approx. 265×39×288 mm (width × height × length) (excludes largest projection)
Mass	Approx. 2.1 kg
BD / DVD drive (read only)	BD × 6 CAV DVD × 8 CAV
Input / Output	Super-Speed USB (USB 3.1 Gen1) port × 2 AUX port × 1
Networking	Ethernet（10BASE-T,100BASE-TX, 1000BASE-T）×1, IEEE 802.11 a/b/g/n/ac, Bluetooth®v4.0
Power	AC 100-240V, 50/60Hz
Power consumption	Max. 165W

Operating Temperature	5 ºC – 35ºC
AV output	HDMI™ out port (HDR output supported)

Table 1: PlayStation 4 technical specification (PS4 Tech Specs, n.d)

PlayStation 4 (PS4) is the fourth version in the PlayStation entertainment system device family. It was released in 2013 and it has sold approximately 73,6 million copies as of December 31, 2017. In 2016, SIE released an updated version of PS4, PlayStation 4 Pro (PS4Pro). The second version of PlayStation, PlayStation 2, is the most sold video game console in the world with 155 million units sold, reported in 2013. (Ben Gilbert 2018, PS4 Pro Launch 2016, Xbox 360 beats Wii as the UK's best-selling console, 2013.)

PlayStation Network is a service used on PS4, where users can track and share their activities and achievements. PlayStation Network has features similar to social medias, as it is used to like and share user's and their friends' content, for example screenshots or videos. PlayStation Network also has a store feature, PlayStation™Store, where users can purchase games and track their account purchase history. To find people with similar interests, users can find or create communities focusing on a certain video game title on PlayStation Network. (PS4 Activities, n.d, PS4 About Communities, n.d).

PlayStation 4 has features familiar from Linux, Mac and Windows computers. PS4 includes music services, PlayStation™Music, which enables the usage of popular music streaming service, Spotify, for its users. PS4 includes an internet browser to get access to other web services. (PS4 Using the Browser, n.d, PS4 Music n,d.) In total 2191 video game titles have been released to PlayStation 4 and 83 titles have been categorised as "Coming Soon", waiting to be released on the platform. (PS4 Games, n.d).

PlayStation 4 is the main platform for publishing in the research of this thesis. It is the current flagship entertainment system from Sony Interactive Entertainment and the goal platform for both KAMK and EG cooperation with SIE.

Image 2: PlayStation 4 -console with DualShock -controller. (PlayStation Image, n.d)

3   Video game publishing

The definition of the word 'publishing' by Merriam-Webster, leading dictionary service in The United States of America founded in 1828, is "the business or profession of the commercial production and issuance of literature, information, musical scores or recordings, art, newspaper or software." Video games are considered as software. (Publishing Definition, n.d).

The functions peculiar to the publisher also include selecting, designing and editing the material, arranging its production, distribution, accountability on the financial risk and responsibility for the entire operation. (Unwin, P. n.d; Unwin, G. n.d; Tucker, D. n.d.)

According to Pelitutkimus, an open Finnish scientific study on video games, video games can be produced into two different formats; physical and digital. Physical copy means that the video game is installed from physical object such as CD, DVD or Blu-ray disc. Digital distribution is executed through online stores, where products are downloaded with internet connection. Before 2005 video games were distributed mostly as physical copies and the distribution of digital console games was started around that time. (Kemppainen, J. 2016). Digital products on PC have overtaken the sales of physical copies and all mobile games are distributed digitally. Console manufacturers are more protective on their sales figures than PC or mobile publishers. In 2016, 74% of video games sold in The United States of America were sold digitally. The number includes digital format subscriptions, digital full games, digital add-on content, mobile apps and social network gaming. (Breakdown of U.S. computer and video game sales from 2009 to 2017 by delivery format, 2017.) Same kind of straight numbers on the sales percentages on digital versus physical are not available for the most significant video game consoles; SIE's PlayStations, Microsoft's Xbox series and Nintendo's products.

Video game publishing can be categorised in two forms; self-publishing and using a publisher. Self-publishing means that a video game developer publishes the product themselves and using a publisher implicates using an external organization that does the publishing process for the developer's product. SIE's PlayStation market is dominated by large scale development companies using publisher organizations. (Kemppainen, J. 2016).

The focus of this thesis is self-publishing digital-only products, as the current state of business on both KAMK and EG apply only to those formats. Considering the areas of

research, the way physical video game publishments are executed or how working with a publishing organization is performed are irrelevant to this thesis, but understanding the difference and their existence is important.

4   Sony Interactive Entertainment developer relations

Creating a guide that is under a non-disclosure agreement means that most of the information is classified. The next chapters will provide information on the process and partners that were involved in creating the end-product "Guide for PlayStation Publishing Process" that can be shared to the public audience. To understand the actual use case of this thesis' end product Guide, it is necessary to know the organizations, developers and the environments they work at.

4.1   Public Information

Public information on SIE Developer relations is very limited. SIE is focused on sharing information regarding development and publishment of products for their platforms to only registered parties. Registered parties are tied with non-disclosure agreement and can not share information given by SIE to third parties that have not been granted access to the delicate information. This is also the reason why this thesis produces a guide that is under a non-disclosure agreement. This section of this thesis provides you the information that is public.

SIE is interested in partnerships with the following types of organizations, quoted from their website: (SIE Partners, n.d).

- Game Developers:

    o Small start-ups to global game studios, ready-to-play or just a high-concept pitch, we're interested. And we'll support you through development.

- Game Publishers.

    o Whether you're an organization or an individual, we'll take the digital content you're managing and help it find the right audience.

- Video, Media, and Content Apps.

    o Broadcasters and media publishers of all kinds will find toolkits and support teams dedicated to their vertical, from creation to publication.

- Tools and Middleware.

    o If you made something useful – or want to – there's a license program for that. We can help get your tools into game developers' hands.

- Academia.

    o We work with universities to foster the next generation of creators, helping them get hands-on time with tools, hardware, and SDKs.

Accessing SIE web services requires an organization registration. The organization needs to whitelist its static IP addresses, a non-public domain email address, for example emails ending in @gmail.com or @outlook.com are not eligible, as Outlook and Gmail are public email domains. Email@kamk.fi or email@evocatgames.com are legitimate non-public domain email addresses.

The applicant also has to provide an official document identifying all the Directors of your organization as a PDF file. One or more of the following can be used to provide this information: Certificate of Incorporation, latest annual return report or financial statement or a copy of your entry on commercial register within your country or region. The applicant is required to provide a document defining their planned projects for PlayStation platforms.

The process can be started at SIE Partners website. (SIE Partners, n.d). Partners website leads the applicant to the company registration (SIE Company Registration, n.d), select "PlayStation Partners". Net is filling out the organization's legal information at Partner Information website. (SIE Partner Info, n.d).

After registration and signing SIE's contracts, the organization is considered a partner and will be shared more information through SIE's webmaster and will be allowed access to the developer and publisher websites. Because these websites are under limited access, they will be addressed in the thesis' end product Guide.
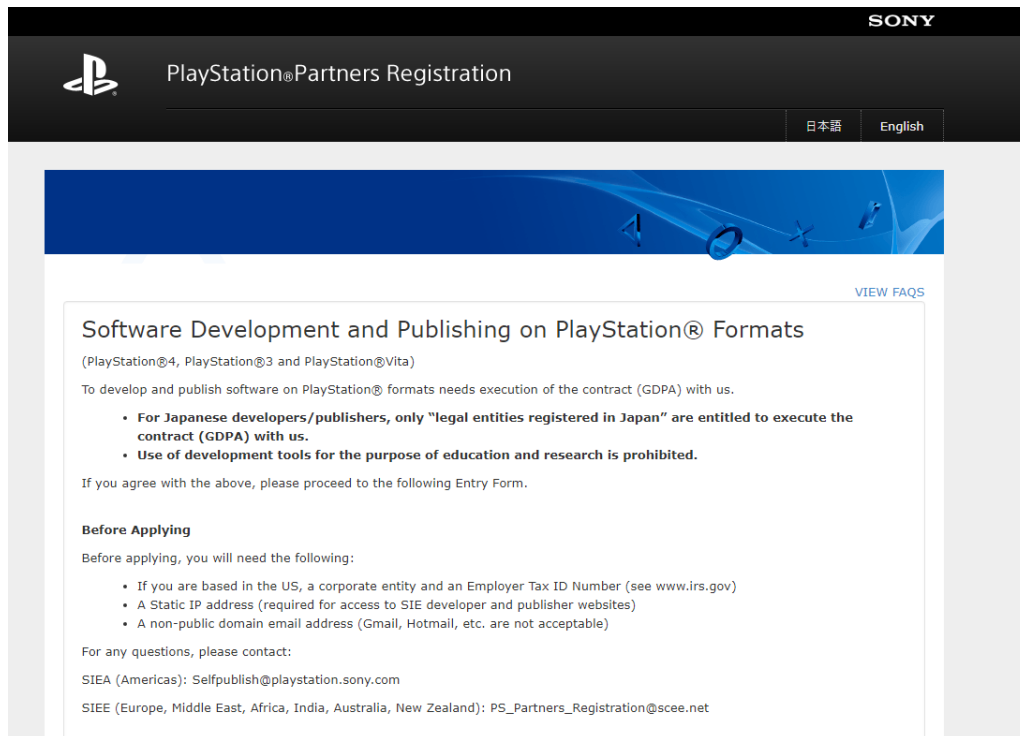
Image 3: PlayStation Partner registration at their website. (SIE Partners Registration)

4.2 Evocat Games: Creating Nemesis Realms

Evocat Games (EG) is a virtual reality video games company. EG was founded in July 2017 in Helsinki. The founders were Kajaani University of Applied Sciences game development students and alumni. The founders met in KAMK and started working together in summer 2016. The team started working on building the company and simultaneously started developing Nemesis Realms (NR) in January 2017. (Evocat Games, n.d, Nemesis Realms Steam, 2018)

The company was founded in Helsinki after the team was selected to participate in Nordic VR Startups (NVS) accelerator program. NVS is a joint venture between Nordic entertainment company Nordisk Film and Japanese mobile gaming company Gumi. The accelerator program lasted for six months providing the selected companies office spaces, financial investment and mentoring. Nordc VR Startup's mission is: "to contribute and improve the competitiveness of the Nordic VR and AR ecosystem and accelerate the growth of our accepted portfolio companies." (Nordic VR Startups Program, n.d).

Some of the EG founders had been introduced to PS4 development in KAMK facilities before forming the current team to found the company. With prior experience from KAMK,

the EG team was able to start their PS4 production and testing with the university's equipment. EG founders contacted Sony Interactive Entertainment Europe in the end of 2016. EG personnel visited SIE in London, United Kingdom, in January 2017 with the help of a local entrepreneurship organizer, Kainuun Etu. Evocat Games introduced the project to SIE and they approved the game concept of Nemesis Realms later via formal project proposal. NR was then developed for high-end PC virtual reality devices and released to early access in Valve Corporation's Steam Store in January 2018 and a full version of the game was released in April 2018. PlayStation development and publishing process was still active and EG personnel noticed that it will take longer than expected. (Evocat Games, n.d, Nemesis Realms Steam, 2018).

Evocat Games started with a goal to publish Nemesis Realms to PlayStation Virtual Reality (PSVR). Evocat Games' research showed that there are five developers for PlayStation 4 in Finland; Housemarque, RedLynx, Frozenbyte, Kyy Games and 10ton Entertainment. According to Evocat Games, there are no PlayStation Virtual Reality (PSVR) games released yet from Finland. EG's goal is to publish their game on the PlayStation platform and while doing so, they want to be the first Finnish company to release a PSVR game.

Image 4: Evocat Games team wearing their purple hoodies at Nordic VR Startups office. (Image: Ahlapuro, J. 2017)

4.3   PlayStation development at Kajaani University of Applied Sciences

Kajaani University of Applied Sciences started cooperation with Sony Interactive Entertainment in 2015. SIE has provided all the necessary hardware and software to develop and publish projects for PlayStation 4 entertainment system for KAMK. The cooperation is part of SIE's larger project, PS First Academic Partner -program, and KAMK was the first university in Nordic countries to be a partner in the program. Now SIE lists six Nordic universities as their PlayStation First partners, two of them in Sweden and four in Finland. (Attachment 2: Interviewing Leena Heikkinen, PS First, n.d).

Leena Heikkinen, representative for PS First -program in KAMK states that the students in KAMK have traditionally been developing PC and mobile games. The goal of the PS First partnership is to provide students the possibility to learn console game development during their studies in KAMK. The PlayStation development possibilities are also hoped to raise interest towards the KAMK game development field of study between potential candidates while applying to the university's study programs. (Attachment 2: Interviewing Leena Heikkinen).

KAMK students are required to write non-disclosure agreement before they are granted access to PlayStation development environment. Inside KAMK, the development environment is located in a small game development laboratory that is being locked around the clock. Students are required to mark down development dates and times they have spent in the PlayStation laboratory. Access to the online services of SIE are also open to computers outside of the PlayStation laboratory, expected that the student has proper login information to the services.

So far four student teams have been developing games for PlayStation 4 in KAMK. None of the teams have succeeded on publishing their product to the platform. This was interesting discovery while researching for the Guide, as KAMK development teams have been able to develop and publish games on mobile and PC, but not on consoles such as SIE's PlayStation or Microsoft's Xbox series.

A questionnaire to Leena Heikkinen and some of the members in the KAMK student teams that have been working on PlayStation development and publishing process was done to collect information on the situation. KAMK student development teams worked around ten or eleven months on their projects. Some teams recruited more students to their teams to help the PlayStation development process. Many of the students stated that they had overscoped their projects for the PlayStation because they did not understand the

workload coming from doing the technical requirements of development and the goal of publishing for PlayStation. The answers indicate that the development and publishing processes for PlayStation are both very challenging for university level students. Guidance and support to achieve the technical requirements were found hardest categories on development side of the questionnaire. On the publishing side of the questionnaire, it seems that direct support or help from SIE was not active enough and that the publishing process was not clear to most of the questionnaire participants.

The questionnaire results indicate that guidance and support material are needed for PlayStation development and publishing in KAMK. Preparation, understanding the workload and the actual process of what to do and when have been very unclear among the students in KAMK when working with PlayStation.

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Attachment 1: Questions on PlayStation publishing and development

1. KAMK teams where students have worked on PlayStation 4 development:

2. How many PlayStation projects did you work on while studying in KAMK?

3. For how long did you develop those PlayStation projects?

4. What was your role in the development team?

5. Did your team manage to publish products on PlayStation Store? If not, what was the reason?

6. What were the hardest parts in PS4

   a. developing process?

   b. publishing process?

7. Extra: Your personal tip for possible future PS developing teams.

Evocat Games personnel:

1. When did EG and Sony co-operation begin?

2. What is the goal for EG in the Sony co-operation?

3. What are the hardest parts in PS4

   a. developing process?

   b. publishing process?

Leena Heikkinen, KAMK personnel, PS First representative:

1. When did KAMK and Sony co-operation begin?

2. What is the goal for KAMK in the Sony co-operation

3.   How many KAMK student teams have been developing for PlayStation 4 and how many of those have succeeded on publishing a product for it?

Mikael Haveri, Head of Publishing, Housemarque

1.   How many products have you been publishing for PlayStation?

2.   Do you think PlayStation publishing is different from publishing to other platforms? If yes, why is that?

3.   Does PlayStation development or publishing experience increase a candidate's chances to get hired when Housemarque is recruiting new personnel?

4.   Is it easy to find personnel with PS development or publishing experience in Finland?

5.   Do you see university level game development students with PlayStation development or publishing experience useful for:

a.   Housemarque?

b.   Finnish games industry?

Attachment 2: Answers on PlayStation publishing and development questions

Tommi Krogerus, KAMK team 1, Producer

1.   How many PlayStation projects did you work on while studying in KAMK?

a. One

2.   For how long did you develop those PlayStation projects?

b. 11 months

3.   What was your role in the development team?

c. Producer

4.   Did your team manage to publish products on PlayStation Store? If not, what was the reason?

d. No. Too ambitious project

5.   What were the hardest parts in PS4

developing process

a.   Not having any guidance on how to approach PS4 requirements from the beginning of the project

publishing process?

b.   We only got to the beginning of the process and it seemed simple enough. No problems

6.   Extra: Your personal tip for possible future PS developing teams for KAMK students:

-    Don't do it, just don't. Your time will be so much better spent on projects to platforms that do not have so many special requirements. Keep your projects small and make many of them.

Santeri Arpo, KAMK team 2, Producer

1. How many PlayStation projects did you work on while studying in KAMK?

   a. One

2. For how long did you develop those PlayStation projects?

   a. 10 months

3. What was your role in the development team?

   a. Producer

4. Did your team manage to publish products on PlayStation Store? If not, what was the reason?

   a. No. The main reason is that the scope of the project was too big for a student team and the work on the actual platform took more resources than first anticipated.

5. What were the hardest parts in PS4

   a. developing process

   b. Optimization

   c. publishing process?

   d. working on the publishing process without enough support.

6. Extra: Your personal tip for possible future PS developing teams:

   a. Discuss and setup a proper roadmap for the projects with your publisher and third party partner. You should go over the publishing process carefully and realisticly estimating the time needed for the different phases, and at which point of the project you need to start them.

Teemu Siipola, KAMK team 2, Programmer/PlayStation port

1. How many PlayStation projects did you work on while studying in KAMK?

   a. One

2. For how long did you develop those PlayStation projects?

   a. Five months

3. What was your role in the development team?

   a. PlayStation port

4. Did your team manage to publish products on PlayStation Store? If not, what was the reason?

   a. No. There was not enough resources dedicated for the port, the porting work started too late, I didn't have experience in Unreal Engine, PlayStation, or some of the plugins that needed to be compatible with each other. The publishing pipeline never got very far and the game was not well optimized, which made it unplayable in PlayStation. There wasn't enough time to even get it running well, not to speak of the actual work regarding the TRC.

5. What were the hardest parts in PS4

   a. developing process?

      i. In that instance, the hardest part was to build a working package

   b. publishing process?

      i. I wasn't involved in the publishing process that much, but it never got too far likely due to the build not being remotely playable. I heard that keeping any contact with Sony was very slow.

6. Extra: Your personal tip for possible future PS developing teams:

   a. Start the PlayStation work early, don't switch engine versions if not absolutely necessary. If the game doesn't run well, fix it. If only some of the

team members are involved with PlayStation, keep the rest of the team in the loop and the PlayStation guys in the main development loop.

<u>Teemu Siipola, Evocat Games Personnel, Programmer</u>

1.   When did EG and Sony co-operation begin?

   a. January 2017

2.   What is the goal for EG in the Sony co-operation?

   a. To publish a PSVR game and keep a healthy relationship for future games.

3.   What are the hardest parts in PS4

   a. developing process?

      i. There's a lot of work and the documentation isn't very user-friendly especially for beginners.

   b. publishing process?

      i. Finding someone in the Sony end who is good and eager at communication.

<u>Leena Heikkinen, KAMK personnel, Teacher, PS First representative</u>

1.   When did KAMK and Sony co-operation begin?

   a. Yhteistyö alkoi virallisesti helmikuussa 2015. KAMK oli ensimmäinen pohjoismainen oppilaitos, joka pääsi mukaan PS First Academic Partner – ohjelmaan.

2. What is the goal for KAMK in the Sony co-operation?

    a. KAMKin pelialan opiskelijat ovat perinteisesti kehittäneet paljon mobiili- ja PC-pelejä. PlayStation- yhteistyön ansiosta voimme tarjota opiskelijoille mahdollisuuden tutustua konsolipelien tekemiseen jo opiskeluaikana. Kajaanin pelialan koulutus on ollut haluttu opiskelupaikka ja toivomme, että PlayStation-yhteistyö herättää jatkossakin kiinnostusta potentiaalisten hakijoiden keskuudessa.

3. How many KAMK student teams have been developing for PlayStation 4 and how many of those have succeeded on publishing a product for it?

    a. Neljä opiskelijatiimiä on vuosien varrella kehittänyt määrätietoisesti peliä PlayStation-alustalle. Yksikään tiimi ei ole vielä saanut peliä julkaistua osittain työlään julkaisuprosessin takia.

Mikael Haveri, Housemarque, Head of Publishing

1. How many products have you been publishing for PlayStation?

    a. Only 1 that we published on our own, but Sony has published a lot of our games that we've done with Xdev.

2. Do you think PlayStation publishing is different from publishing to other platforms? If yes, why is that?

    a. Not really different, there is a lot of Quality Assurance to go through, as with other consoles. Compared to PC it is a bit different, as PC is usually more lenient with updates and changes.

3. Does PlayStation development or publishing experience increase a candidate's chances to get hired when Housemarque is recruiting new personnel?

    a. Not really, we are currently hiring based on Unreal expertise and development history, meaning we are more or less platform agnostic. If one knows the process really well it is a plus, but likely won't affect the hiring process.

4. Is it easy to find personnel with PS development or publishing experience in Finland?

   a. Not sure, as that has never been a criteria for us. There are a handful of teams in Finland who have published on a PS platform, so it is quite easy to narrow down the possible personnel.

5. Do you see university level game development student's PlayStation development or publishing experience useful for:

   a. Housemarque?

      i. Overall we see value in development, not publishing. The experience can be on any platform, but console and PC experience is crucial for us.

   b. Finnish games industry?

      i. Development again being the main focus here. A good portfolio speaks for itself