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Measuring Service Quality in the Online Gaming Communities

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Extract this sheet and replace it with the assignment of the Master´s Thesis.

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Acronyms

E-RecS-QUAL – r-recovery service quality

E-S-QUAL – electronic service quality

PUBG – PlayerUnknown’s Battlegrounds

SERVQUAL – service quality

Introduction

Today the development of games is considered a huge worldwide business especially when developed games become incredibly popular. In 2017 gaming industry generated over $100 billion. The most revenue come from online games. Many companies try every year to create a game that will become the most popular. The competition in gaming industry is very tough and sometimes even the slightest mistake could lead to big losses. For that reason, in online gaming industry the satisfaction of players is considered the most important factor of online game's success.

The main goal for online game developers is not only to create good looking game that works without error but also to include the thoughts of their players into the development of the game. The more loyalty the developers have from their players the more chances they have that these players will spread good feedback across the internet and bring more popularity to the game which will lead to bigger profit.

The purpose of this work is to measure service quality in the online gaming communities. SERVQUAL will be used as a tool to measure service quality given by the online game developers to their players. Members of online communities of three different games (Overwatch, PlayerUnknown's Battlegrounds and Pokemon Go) at the website Reddit will be asked to answer to the questions of the survey that is constructed by the standards of SERVQUAL.

The first part of this work will introduce what are online communities and how and under what circumstances first gaming communities were created. It will explain consumer behaviour in these online communities and how the results of actions from online game developers can influence their loyalty and satisfaction. In the end it will be explained how this and consumer reviews affect sales. Next part will introduce and explain SERVQUAL. It is important to talk about the history of SERVQUAL, what criticism it went through and wether it can be used in the gaming industry. The third part of this work will present work with the data collected from members of online communities. The purpose of this part is to

analyse the data according to SERVQUAL standards and to make conclusions on wether players are satisfied with the service online game developers provide or not. Another important part is to discuss what online game developers can improve to kee their players satisfied with the game and service provided. Finally, there will be represented arguments regarding usability of SERVQUAL in the gaming industry.

1 Brand Communities around Gaming

Online communities played significant role in building up and advertising games of past years. They have been used by video game developers as a tool to receive important feedback from consumers, to retain and strengthen consumers‘ loyalty. Online communities have their own history and have been completly changed since the time they were implemented by video game developers. In this section it will be explained how and why online communities were created, how they help video game developers to improve their games and strengthen consumers loyalty. Another important part is how online communities‘ participants behave and interact with each other and what actions should be performed by videogame developers to ensure the consumers receive enjoyment from participating in community’s activities and keep how to keep them satisfied from developer’s actions. Nevertheless, it is important to explain the connection between importance of the online communities and how consumer’s online reviews affect sales.

1.1 Online Communities

At least 10 years ago video game developers started a new practice of creating online communities for their consumers. They were created to help video game developers communicate with their consumers. It was a strategical move that brought benefit to the developores.

In an online community, people communicate with each other by using electronic and virtual communication channels such as internet to exchange their ideas without being bound to a particular physical location or national culture (Hsu and Lu, 2007).

Created communities worked out bringing significant results. Some video game developers used first online communities to ask their consumers for a help in polishing different aspects of the game. Consumers, who actively participate in creation of game with their propositions and can see that the actions of themselves or their group is bringing real changes to the game, will become very loyal and satisfied with the new game. And it is not just about loyalty but at the

same time is the best way for the game developer to create the best possible version of the game that will attract more consumers to it. Each of the players can have their own unique ideas for the game that none of the developer team has. And all of these ideas are available for free. Game developers just need to look through enormous amount of suggestions and find some special ones.

It is really important for a game developer to help and support the player who has any question or some difficulties with the game. But what if the support team is overloaded and can't keep up with the answers in time? That's one more reason to have an online community. Players ask other players for help and they receive answers as fast as possible because there are lots of other players who had the same problem before.

The concept behind online communities provides a virtual place where that allows people to meet and socialize, to exchange experience they have and a possibility to create close connection with people without necessity of exposing their physical self. This leads to the point where it can be stated that online communities can be used to discover and explain new forms of social life and the invironment where such communities take place. There's almost no uncertainty that online communities have an important role of building relationships between people (Holstroem, 2001).

If people are shown they are listened to they start to try harder to provide more. Online community is a perfect tool for both game developer and the consumer. Both of this sides can feed each other with useful information and benefit from it while making their environment of communication better and better.

Now there is a new standard of online communities in the internet and online communities began to become recognizable with the growing importance of the Internet for business (Holstroem 2001). Of course the size of online community also matters. For any game a community with a size of few thousand people won't be enough to provide proper feedback. But a few million (for instance, there have been 13.2 million players at the open beta of Battlefield 1 and it has been

considered the biggest open beta test in history) people can help developers to move faster. But if the communities have to grow in numbers then there have to be people who can watch over the community by providing basic information to the newcomers and answering to the questions that had been asked countless times before, sorting the information, avoiding people insulting each other and restricting unnecessary information that doesn't belong to the corresponding online community. For this purpose, there are always administrators who are watching over online communities.

So more than 10 years ago video game developers created online communities to benefit themselves and their consumers. But nowadays it has changed and improved. For any slightly popular game the community will be created whether the developer has any knowledge about it or not. The developers of the game would highly benefit if they choose to support the most popular communities created specifically for their game because today online communities can present different possibilities.

Usually, online communities around games bring together a group of enthusiasts, who eagerly and openly share their views. Players exchange information about a game and its various features, tricks and tips. Aditionally, players provide one another with feedback, which might be helpful for subsequents success in the game. Game developers as well as well informed players could announce any technical as well as content related changes to the game. Online communities are used to arrange for tournaments and contests. Players share their thoughts on potential further development of their beloved online game and developers can test their future ideas with dedicated target audiences. Developers, who are active in relevant online communities, use them as communication platforms with their clientele and respond to market needs and wishes online in real time.

Any online community should be able to lure newcomers - people who open community's webpage for the first time and expect to find there all of the answers they need. First of all, the webpage should have understandable design so that the visitor doesn't spend 20 minutes to understand all of the links and buttons that can

be found there. Also any newcomer would like to read all of the most asked questions in hope that that will be enough. If not, then there should be easy and fast way to register and ask a question. So there are many things that should be considered during creation of online community. Of course today there exist some templates or websites where you can easily create your own community but that still will require to work with tons of details.

1.2 Consumer Behavior in Online Communities

Consumer behaviour is an important part of any business. It defines how consumers, who have different emotions, attitude and preferences, behave and how these factors influence their buying behaviour. The reaction of the consumers to one or another action of the service provider can be bring positive or negative consequences which can hugely affect the sales. For any service provider it is neccessary to study the behaviour of their consumers. Omly in this way they are able to make the right choices that would bring them loyalty of their consumers who can spread good feedback and bring more popularity to the service itself.

Any game developer that cares about the consumers is willing to participate in different events of online community created specifically for their game. For this purpose, there should be people who are going to monitor different topics and questions and decide if there’s something that really needs to be answered. Of course people who work on the creation of the game could easily answer all of the questions but they simply don’t have time for it. That’s why community managers are mandatory for successful company in video game industry. One of community manager’s works is to monitor the most popular online communities and to maintain the best communication between each other. Sometimes they deal with issues or questions they know the answer to but usually they send everything directly to the ones who work on the game and then reveal the answer to the public. There is a high possibility that online games without any decent community managers are going to rot with a time.

At the beginning in the first online communities there were only discussion about technical issues of the games (Holstroem, 2001). With a time, there started to appear more of personal discussions. Thr forum started to be used for people to reveal their opinion about the game. During the days of big discussion on forums most gamers were excited but beside them there started to appear problems with a few active gamers.

Different online communities can be composed from various people who respond differently to any information they receive. There could be communities where the majority of players are the ones who react calmly with understanding of what video game developers are trying to present to them but it could be vice versa. Thus the job of community managers requires them to be careful in their statements by predicting how the majority of the community will react. They have to filter what will be said to the consumers.

Online communities can change the whole concept of the development process. Instead of usual development tstructure which requires different stages being active step by step, online communitites changed it to “test”, “design” and “evaluation” that keep going continuously (Holstroem, 2001). At the same time consumers received opportunities to direct the development process. All the requirements can be collected and used durning the development process instead of specifyinguser,

But in any case there is a possible outcome when the communities are going to be mad with video game developer’s decisions and will demand for the changes. It is not commonly right to do what the community demands every time. Most of the concerns must have a response from community manager whether it would be the answer that the community will like or not. And there are also situations when some concerns could be ignored by the community managers in order to not cause more dissatisfaction.

In order to have a better understanding of this part there should be some examples of bad and good policies towards community management. These

examples are going to be based on two out of three games that will be reviewed in this thesis. **Pokemon Go** was an incredibly popular game in July-October 2016. It was a mobile game so there can be arguments whether they should monitor the communities of their game. Still the communities were created with amazing speed. Later the game lost its popularity compared to what Niantic (video game developer) had but they could save much more players if they would have at least any community management policies. At the beginning of August, the servers began to overload and high percentage of players could not enter the game. There were no explanations or fixes from Niantic. Still it was understandable as they did not expect the game to be such a huge success. But even after two weeks they did nothing. Players who paid with real money for in-game items could not activate and just lost them because they could not access the servers. At the same time players at communities started to think that Niantic's promises on releasing new content for **Pokemon Go** is just another thing they will be worried about. At that time at the website **reddit.com** there was the biggest online community for **Pokemon Go** which amounted close to one million subscribed accounts. People started to convince everyone to protest. The majority of online community wanted to return the money they paid via Google Wallet so that the players would have at least this as compensation and Niantic would learn a lesson. Google Play has a refund policy of crediting purchases from only the last 48 hours. After that the developer must be contacted for a refund. However, Niantic's listed email address was sending people to an auto-response stating that Niantic don't monitor the email which was a breach to Android Terms and Conditions. This caused another wave of hate. For the next whole month anyone who would enter this online community for the first time could instantly realize that 95% of topics there were about consumers hating the game and its developers.

On the other side **Overwatch** which was Game of the Year 2016 is an example of great community management. Lead designer of the game Jeff Kaplan was a well-recognized player of massively multiplayer online game Everquest in year 2000. At that time, he was known for his accomplishments and his commentary about Everquest posted to his guild's website. He caught attention of Blizzard (**Overwatch's** developer) and was invited to work there. Nowadays Jeff Kaplan is

known for being the heart of **Overwatch** community. With every update made for the game players can watch a new video where he explains reasoning behind implementing any of the changes to the game. At the same time Jeff Kaplan actively communicate with players at different **Overwatch's** communities and listen to new ideas which come to life if they are decent enough. He also has a good sense of humor and positively reacts to any jokes related to him made by players. Thus Jeff Kaplan is great at community management and provide best experience to consumers who are not indifferent about the game.

These two examples ideally show the difference between good community management and its absence. The majority of players are always willing to be heard by the video game developers when they have any good ideas about improvement of a certain video game. It shows how loyalty of the consumers can provide success to a video game.

1.3 Consumer Satisfaction and Loyalty

Consumers' loyalty is an important factor for any business which can save consumers, bring more profit, strengthen firmness in competition and also attract more consumers. The ability to form a strong bond with consumers will show a video game developer from the bright side. In recent years, online communities have been used by video game developers to improve consumers' loyalty.

Consumers's loyalty can be influenced by social norm and perceived enjoyment which is an important motivator, that has a crucial role in explaining how consumers behave in online communities and how much they are willing to take part in this process (Hsu and Lu, 2007). As stated above, it is important for video game developers to take part in online communities. Major part of people who join these communities expect to see their information from the developers. They also expect to find answers to difficult questions from the ones who create the game. This is the point where community manager's work is very crucial. The information shouldn't be simply delivered to consumers. It should be filtered and transformed so that it would cause positive response from the consumers. Even bad news can

be delivered in such way that it will cause understanding and good feedback. One mistake in delivery of the information will not bring awful results but the series of bad responses from video game developers in online communities can lead to consumers losing their loyalty and searching for satisfaction from the products of competitors.

Participants of online communities always tend to compare how video game developers deal with their requests and difficulties. How video game developers dealt with one situation in their game could be compared by online community by looking how the same situation was solved in a complete different game. Even If the compared solution is not acceptable for the game, participants of online communities will demand from developers to try it out. Sometimes ignoring such situations can lead to negative reaction from online communities and decrease in consumers' loyalty. Thus it is important for video game developers to monitor them and decide if it requires their immediate response.

It can be stated that the individuals, who do not receive enjoyment from the online community, are not interested to take part in its activities (Yang, 2009). Today most of the online communities are controlled by administrators who are not a part of video game developer. For example, on **reddit.com** any participant of the online community can voluntary apply for the position of a moderator (the ones who control certain game's online community). A group of moderators (the number depends on the size of the community) is in charge of the online community. They dictate the rules, how participants should behave and what kind of information should be acceptable (except information from the video game developer which is, in most of communities there, always at the top and can be seen by anyone who visits the online community). Thus, in such situation a voluntary group of participants of the online community influence loyalty of other participants to the video game developer. This situation could be considered risky for the developer but it always brings positive results. As a part of online community, moderators at **reddit.com** are usually successful in understanding the needs of participants and providing them with the best conditions to receive enjoyment. Easy-to-use interface in online communities is an important factor that provides enjoyment and

satisfaction to its participants and assures that they will stay in the community for long while bad design with difficulties of use will prevent people from participating and thus decrease their loyalty toward the community (Hsu and Lu, 2007).

Consumers' loyalty is very helpful tool that video game developers can use to their benefit. Loyal consumers are the ones who will provide the most important and complete feedback regarding actions of developers or game features. They can significantly help with their ideas in the development of the game as it will be the opinion of the consumers who will play the game for a long time.

1.4 Consumer Reviews Affecting Sales

A review of a video game is a feedback that players can leave about the game they played. It is usually possible to leave a review on the platform where the game was bought. Other people who would like to try the game can see the reviews and decide if they are willing to buy the game.

In the video game industry online reviews are considered a significant part of game advertisement. When the consumer has little information about the game it is a usual thing to search for reviews. Understanding the process of reviews' affecting sales is very crucial to the video game developers to learn how to spread information about their products more effectively (Zhu and Zhang, 2010). For different games the influence of consumers' reviews can differ because of product and consumer characteristics.

Online reviews have more influence on less popular games where for consumers revies become the main source of information regarding the game (Zhu and Zhang, 2010). When it comes to new and not popular games, for consumers it is important to check out how many reviews the game has, what percentage of reviews are positive and what – negative, what percentage of reviews are positive in the recent time. The consumers, who still decide if it is worth buying the game, will read only a little amount of positive but big amount of negative reviews (Jagdip, Shefali, 1991). Upset consumers tend to write more detailed reviews than

the ones who are happy with the game. That is why for video game developers it is better to monitor online reviews. Some of the negative reviews are written to specifically describe the game as poorly as possible. Video game company could benefit from commenting on negative reviews with the explanations of what the consumer could get wrong or what upgrades can the consumer await in next year that will fix previous faults. Consumers will see that the situation, described in the negative review, could be not that bad and they also will realise that developers care about consumers‘ opinions. It can also be useful to respond to positive reviews as this can encourage other consumers to write more positive reviews.

Online reviews can also influence very popular games but in other way. Very popular online game would usually have mostly positive online reviews. More people will choose the game because of its popularity but the minority will still read reviews. The minority but still big amount of consumers if it is about very popular game. In the following text there will be given an example of what can happen if video game developer upset their loyal consumers. Sometimes when the developers does something the consumers don’t like at all but they still want to stay loyal and don’t switch to other games, they could start massive submission of negative online reviews. Most of the reviews would still be positive but it will be shown to new consumers that recent reviews are mostly negative and they will know that the video game developer’s decision regarding the game can’t be trusted right now. Thus possible new consumers will decide to wait longer before they will be certain about the purchase of this game.

There are evidence to support the fact that the more experience consumers have in Internet the more influence on sales will have online reviews (Zhu and Zhang, 2010). Today Internet experience is not much required when most game platforms provide easy and fast access to the consumers‘ reviews. **Steam** game platform should be taken as an example. It is the most popular PC game platform in the world. Anyone can apply to submit their game to this platform. For new developers with no popularity at all online communities, advertisement and online reviews play crucial role. At **Steam**, when consumers visits the page of a game, one of the first things they can see, with the game’s description, is online reviews‘ summary.

If the summary states the majority of reviews are positive, the consumers will be pleased to know more about the game and read the reviews to decide if the game is worthy for purchase. If the majority of reviews are mixed or negative, then the consumer may instantly become uncertain about the game and will proceed to reading specifically negative reviews to figure out what issues the game has and why it is not worthy to be bought by the opinion of majority. The latter usually prevents high amount of consumers to spend money on the game. Thus, online reviews play crucial role in attracting new consumers, retain current consumer loyalty and affecting the sales.

Online communities not only play significant role in creating, building up and advertising the game. Online communities are one of the main tools that help game developers to communicate with their consumers. This has high importance as consumers, in the world of video games and internet, can help the game to increase its popularity. Players of the game are able to spread different information through online communities. No matter if the information will have positive or negative influence on the online game developer, it is going to spread though other online communities and the whole internet. Information provided by game enthusiasts and experienced players will be rated by their peers for accuracy, hence falseful statements are not likely to spread.

1.5 Conclusion

That's why it is important for video game developers to monitor main online communities of their games. The role of a community manager (thread moderator) is to look after online communities, answer questions of the players or issues (and sometimes send the valuable information about the problem to the game developers) and provide the consumers with important information regarding any news about the game. Many popular video game developers use this approach to be able to control the situation in online communities created for their games, as it is better to show the consumers that they are valuable for the video game developer, and that their opinion and feedback has high importance and helps in the development of the game. The community without attention of the video game developer may result in negative feedback that would influence game's popularity,

while cummunication with gaming communities is likely to bring and spread positive feedback about the game and have ultimately high influence on the gaming company’s profit.

2 SERVQUAL

SERVQUAL is a tool that can provide ample opportunities for managers to improve customer's satisfaction. Certain aspects of this instrument help to determine the areas of weaknesses and strengths. With SERVQUAL service managers can be always in check about how customers evaluate the service and if their service meets or exceeds the demand of the customers. With such information service managers can precisely determine the issues with the service that should be targeted with the highest priority. There are more benefits from SERVQUAL. It can be used for the possibility of taking the lead in a competition. With this tool service managers can not only measure their own quality of service but to compare it to the competitor. The results of this analyse can provide various date that can be used to overtake the competitors.

Through regular administration of SERVQUAL it is possible to evaluate the level of expectations and the level of perceptions of the customers. Of course, the results will vary between different segments of customers but it still will provide valuable information for the improvements of service provided. In the end service managers should also be aware that SERVQUAL was produced within American context therefore caution is needed when it is used in other countries or cultures but still, with the ability to adapt SERVQUAL for their purposes, service managers can use received data to ensure best relationship with the customers. This chapter will present SERVQUAL by explaning how it was created and how it works. The main points of this chapter are the details of the five dimensions of SERVQUAL and theoretical and empirical issues that can arise with some aspects of SERVQUAL.

2.1 Definition and utilization of SERVQUAL

SERVQUAL is an important tool that has been created for the measurement of customer's satisfaction from the specific given service. Its principles are based on the view that all of the customer's service evaluations have the highest importance. The evaluation is considered as the gap between what the customers expect from service providers of some specific range and their grade for the given

service from one cocncrete service provider (Buttle, 1996). In the beginning for SERVQUAL there were identified ten main components (Parasuraman, 1985):

1. Reliability;
2. Responsiveness;
3. Access;
4. Courtesy;
5. Competence;
6. Security;
7. Credibility;
8. Communication;
9. Tangibles;
10. Understanding/knowing the customer.

These ten components represented the main idea of how different service providers can be evaluated by the customers by the means of SERVQUAL. After 1988 they were rearranged into five new dimensions: assurance, reliability, responsiveness, tangibles and empathy. 22-item instrument was developed to measure customer's recognition and expectations from the service provided and these items were assigned to the five new dimensions mentioned above (Buttle, 1996).

In the following text it will be explained how each of the five SERVQUAL dimensions are defined. Nevertheless, it is important to show how the first of SERVQUAL representations can be in use for the measurement of quality of service from video game developers today.

The **assurance** dimension was defined as the ability of employees to use their knowledge about the customers and please them so that the customers would feel satisfied from the service provided. It is also important to show the customers that they can trust the employees and have confidence in any actions done by them. This dimension had five SERVQUAL items in it. In the world of online games video

developers collect and use any information about the target audience of their current games. This information is also used for the purpose of using maimum resources they have to create a new game that would satisfy their predicted target audience. For the same purpose community managers communicate with the players in online communities. They show their customers that they are aware of any existing problems or ready to implement new features that players desire so much. These actions create trust from online communities in the actions of video game developers. The assurance dimension evaluates by the means of SERVQUAL all of the necessary factors that guarantee customer's loyalty.

The **reliability** dimension was defined as the ability to provide any given service reliably. Any service should be accurately executed with the consideration of all customer's desires. It is important for customers to see that others received everything they needed from the service provider. This will lead to the gain in customers and their loyalty. This dimension consisted of four SERVQUAL items. For games the reliability dimension means that any game should be completely polished by the video game developer before initial release and will not cause any distress to the customers. The game itself should not have any bugs (errors or failures in the computer program or system that leades to the unexpected results). The game must have stable online connection between the game client (a network client which connects the user to the main game server) and online game servers. All of the real money payment systems must work correctly and as fast as possible to instantly provide customers with the services they paid for.

The **responsiveness** dimension was defined as the ability of service provider to support customers in all of their problems and uncertainties. It also demands the possibility of instant provision of any service. The faster the customers receive the service the stronger the company that provides the service will lead in the competition. Customers tend to spread how fast and easy it was for them to receive the service compared to other companies. Thus other customers might switch their service provider when they see better options which will be a very profitable consequence for the company they switched to. For the same reason it is important to support the customers with any help they need. Customer support

must always be fast and understandable which requires specifically trained employees that can solve any problems or provide advice in various of possible difficult situations. If one company will solve all of the support requests withing a week and the other one of the same class can always solve it within a day, then it is very probable that the customer will switch to their service. The responsiveness dimension had four of the SERVQUAL items in it. In online gaming the support is a necessary part of providing the best services for the customers. There always will be issues or error that cannot be solved by the “list of most common questions”. This issues must be solved by the support team as fast as possible. **Pokemon GO** in the first two months of its massive popularity was an example of horrible customer support. For some time, there was an auto-response system at the support mailbox of **Pokemon GO** and it was not possible to report any issues. Then the problem was solved but it still was taking at least one week for the requests to be answered. The participants of the **Pokemon GO’s**, online community were realy mad. People were complaining about how horrible the customer support was and how game developers, with the amount of money they had from millions of people playing the game, couldn’t hire more support staff to deal with large amount of support requests. This has caused an event where a simple mistake from the support team would make an online community making huge amount of jokes regarding game developers in which customers didn’t take seriously the game and the services provided. One of the biggest examles of such situations was a moment when one of the issues reported to the support team was answered with a single letter “r” instead of the proper answer. This was instantly submitted to the main **Pokemon GO** online community at **reddit.com** and reached the top within one hour to be seen by hundreds of thousands of players. Players made their own assumptions that the mistake was created because the support team didn’t worry about helping players with their specific issues but intead were copying the same text for everyone who submitted any reports about their issues. The online community came to a conclusion about how **Pokemon GO** developers had zero interest in supporting their customers and failed in the reliable provision of services. After this started to spread to other online communities, creating more disappointment from players and decreasing developers’ reputation. This situation also could be prevented if there had been immediate answer from the community

manager and the developers would have a possibility to regain their customers' trust. But the game developers didn't have any community managers monitoring online communities.

The **tangibles** dimension was defind as the ability of service providers to have best appearance of their facilities, communication materials, personnel hired and the available equipment. The appearance of the facilities influence customer's first and further impressions of the company. The customer must feel satisfied with what they see from the inside and outside. It is important to have the best qualified and competent personnel as much as to have enough personnel to be able to serve required number of customers in time. There must be all of the required equipment that assists in the best and fastest provision of the services to the customers. The equipment must be regularly checked on being properly functioning and instantly updated when necessary. The tangibles dimension cinsists of four items of SERVQUAL. All of the above is in high demand for the video game developers who are willing to have the most profit from their own games. Only the facilities are not the things that are being judge by customers during the evaluation of the service provided. But to have the proper equipment is essential. In online game industry there must be the best available equipment for the employees who develop the game because this process requires very powerful equipment that cost a lot of money. Video game developer must also always monitor the amount of players playing the game at the moment. If during the month the numbers increase very rapidly, it means it will be important to obtain more equipment to keep stable connection for all of the players which requires huge amount of expenses for the most popular games. It is always important to have enough staff to deal with different aspects of the game development: video game animators, audio engineers, video game designers, video game programmers, video game artists, writers, level editors, video game testers, interpreters and translators, assistant producers, support team, community managers.

The **empathy** dimension was defined as the ability of the service provider to show the customers individualized attention. Customers need to see the care from the

services provider. They want to feel special and that their opinion is important. Another way of showing care is to provide special offers just for the certain customers. This offers could be created individually with the consideration of customer's demand. This attitude is also one of the possible ways to keep customers loyal. In this way they are willing to provide necessary feedback and propose various things that could be implemented and used by the service provider. Video game developers tend to create various special events or propositions that will keep their customers happy, satisfied and enthusiastic about the game. For popular games most of the propositions would be the same for the certain percent of players but in the end everyone loves to receive something special in the game that the majority of players doesn't have. It is possible to keep players loyal and feel important when they are gifted with special rewards for playing the game for the certain amount of time. It will also make customers willing to keep play and possibly spend more money on it. Another way to keep not lose the number of players is to reward the ones who come back to the game after long time of not playing. At the online communities the community managers usually give players the information about the progress the game developers did and show how various propositions from the players were implemented in the game itself. This show the players how their opinion is important and will cause more players to provide important feedback about the game. At the same time game directors of some games might communicate with players in online communities. Most of the times they make "ask me anything" event where players can ask all of the questions they want to know more about the life of those game directors, how the idea for the game was created, what obstacles were there before the release of the game, how are they feeling about the game being popular, what updates can players expect in the future, what plans do they have for the game and for their company etc.

2.2 SERVQUAL Issues

Different kind of instruments were proposed for the measurement of the service quality along with SERVQUAL. But the SERVQUAL has been recognized the most out all of them. The SERVQUAL approach was being applied to numerous service setting with success (Ladhari, 2009). However, in the literature it has been raised

that SERVQUAL has some theoretical and empirical issues, that have a relation to:

- the use of difference scores
- the reliability of the model
- its convergent validity
- its discriminant validity
- its predictive validity
- its emphasis on process (rather than outcome)
- the hierarchical nature of service-quality constructs
- the use of reflective (rather than formative) scales
- the applicability of a generic scale for measuring service quality in all service settings
- the applicability of SERVQUAL to the online environment
- its applicability to different cultural contexts

The first issue was **the use of difference scores**. It was questioned if the required data could be definetly provided from measuring the quality of service by comparing what customers expect from the service and their satisfaction from it when the service itself is provided. It was asserted that the difference scores cannot provide any additional information besides the one that is already contained in the concept of SERVQUAL.

Next issue was **the reliability of the model**. Most of the researchers constantly have been using Cronbach's alpha coefficients to determine the reliability of SERVQUAL. Hovewer, this method was criticized as not the most appropriate for psychometric quality evaluation. There also was an implification that the most apporopriate method for the evaluation of SERVQUAL reliablility depends on who is performing that rating and the type of attribute in the construct.

The convergent validity of SERVQUAL also had an issue. Different studies revealed weakness in the convergent validity of SERVQUAL. It appeared that

different items in that studies had much higher loadings on the dimensions and that was far different from the ones that were suggested for these items.

Discriminant validity was also a concern. The biggest portion of criticizing has dropped on the dimensional part of SERVQUAL structure. Various researchers failed to approve the originally proposed concept of SERVQUAL's five dimensions, that should be able to measure service quality of any industry, and were able to find more than five of these dimensions.

The fivth issue was the **predictive validity** of SERVQUAL. The issue questioned here is how the scores of one construction of SERVQUAL could be strongly related to the score of other constructs with the similar concept. The predictive validity of SERVQUAL has been confirmed and supported by some studies (cite), while other studies (cite) did not find SERVQUAL to be a valid instrument for predicting customer perception of services.

Emphasis on process takes another big part. SERVQUAL focuses mainly by targeting the service-delivery process and accordingly was criticized for not focusing on encounter of the service. In this regard SERVQUAL relies mostly on the functional aspects of evaluating attitude and the responsiveness of customers can be a misspesification of service quality.

Another part of SERVQUAL that is being questioned is **the hierarchical structure of service-quality constructs.** It was implied that SERVQUAL model is not only multidimensional but also is hierarchical. This means that for each of the dimensions the customers use different sub-dimensions to evaluate the service provided. This information leads to doubting in the stability of existing SERVQUAL constructs.

At the same time appeared concerns regarding SERVQUAL's **use of reflective scales** development. Because of that, the proposed "formative" models were seen as the better alternative to "reflective" ones. The difference between these two models lies in how the direction of casuality is perceived. In "reflective" models the

direction of casuality is from construct to measure, while in “formative” models – from measure to construct.

Applicability of a generic scale for measuring service quality in all settings was questioned. The main point about this concern was that instead of using the only generic scale it would be more effective to apply industry-specefic measuring instruments. SERVQUAL’s approach of adapting each item for various situations was seen as an insufficient solution.

Applicability of SERVQUAL in the online environment was also met with doubts. All of the five dimensions did not fit the online environment in necessary way. In result, Parasuraman (2005) created new scale that was names “E-S-QUAL” and consisted of 22 items but in four dimensions: efficiency, system availability, fulfillment and privacy.

The last issue of SERVQUAL was **cultural context**. All of the performance and expectations items could be translated differently into different countries. That means the results of each research in different countries would have results that would be hardly comparable with each other. Thus, it is required to properly adapt SERVQUAL items for each country specifically for the purpose of receiving needed results.

But even with these issues SERVQUAL was still a very useful tool for practioners and researchers. It was recognized as an important tool for the purpose of service quality measurement. SERVQUAL was very appealing to practioners and researchers even though it suffered numerous critics. The review of various critiques, of SERVQUAL, the conclusion can be done that even with the uncertainty about the validity of the scale, it is still a functional tool for the purpose of measurement and management of service quality (Ladhari, 2009).

At the same time, it should be noted that SERVQUAL does not need to be used as it is in all conditions. Instead the researchers have a choice. First variant is to create their own instrument for the purpose of managing and measurement of

service quality for specific study or industry. The SERVQUAL methodology must be adapted in the process. The second way is to check the instrument for that accuracy of measurement with the use of validity and reliability analysis.

2.3 E-S-QUAL

After SERVQUAL was criticized as a tool which is not able to be used in online environment, Parasuraman used his experience with SERVQUAL and created E-S-QUAL in 2005. E-S-QUAL stands for “electronic service quality” and is an adapted example of SERVQUAL. One of the examples where E-S-QUAL could be used is online banking.

E-S-QUAL consists of 22 items but in four dimension instead of five compared to SERVQUAL. Each dimension gives a respondent a possibility to evaluate performance of a certain website. The respondents are given a possibility to scale each item from 1 (strongly disagree) to 5 (strongly agree). First dimension, **efficiency**, allows the respondent to evaluate how easy it is to access the website and how fast is the website working. Second dimension, **fulfillmen**, allows to evaluate the availability of items at the website and primises regarding the delivery. Third dimension, **system availability**, which allows to evaluate functioning of the website. And the forth dimension, **privacy**, helps to evaluate how much the customer’s information is protected.

Additionaly, for the purpose of analyzing the quality of recovery service that is provided by the websites, E-RecS-QUAL (e-recovery service quality) was created (Parasuraman, 2005). It consists of 11 items spread across 3 dimensions. First dimension, **responsiveness**, helps to evaluate how fast and easy any problems and returns are handled. Second dimension, **compensation**, allows to evaluate to what extent the website compensates their customers for problems. Third dimension, **contact**, helps to evaluate availability of the support staff through telephone or the website.

E-S-QUAL and E-RecS-QUAL are not able to be used for the evaluation of research of this diploma thesis. Thus, SERVQUAL is used as it is easily adaptable for this situation.

2.4 Conclusion

SERVQUAL is a useful tool for the purpose of evaluation of what customers expect from the service providers and how they evaluate received service. 22 items that are placed across 5 dimensions, allow to create proper conclusions regarding service provider and their serice. SERVQUAL have its own flaws and was seriously criticized for it. Nevertheless, when all of 22 items are adapted properly, it is possible to receive expected data for accurate results.

3 Empirical Research: SERQUAL Analysis of Three Online Games

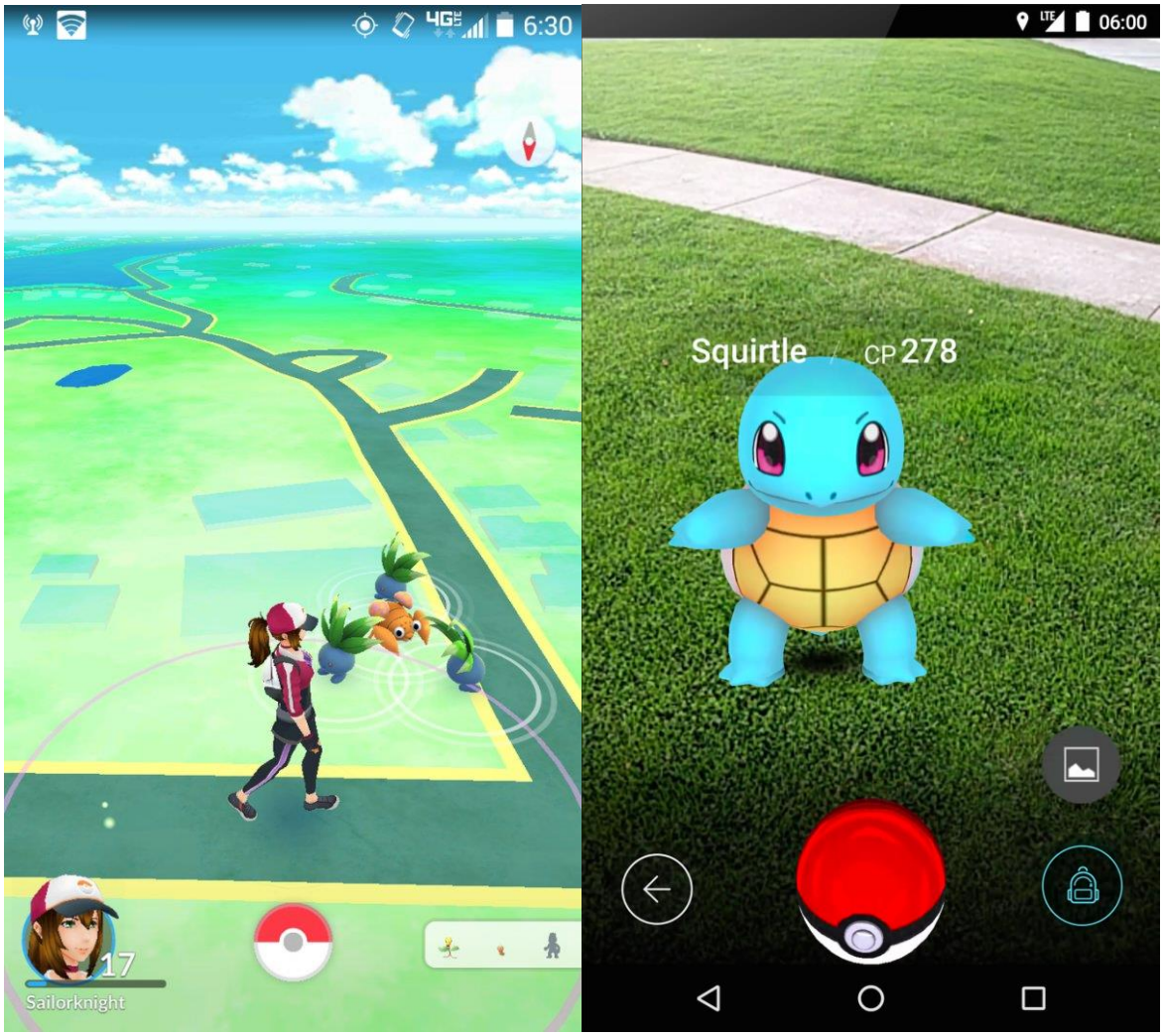
To compare service quality between three games, three different surveys were created and posted at the Reddit website. Reddit is a social media, discussion and web content rating website. Members who have registered an account can submit various content to the website. It could be text posts, links or images which would be voted up or down by other members. The content submitted by members is organized by “subreddits” – user-created boards. These subreddits could have any possible specific theme. Content that has decent amount of vote show on the top of subreddit and, if have high enough number of votes, can even be placed at the front page of the whole website.

Reddit is the website with the biggest online communities for most of the games. Many of the game developers of popular game have their attention to the online communities at this website. Most of the community managers from these games spend a lot of their time in these communities communicating with the players to help them with their concerns and issues. That was the main reason of choosing it for the data collection. A single popular game usually has many subreddits – the main one with the great amount of members and additional ones with slitly different theme but with very little amount of members. I have posted a link to google forms with the survey at various subreddits for each of three games. In the survey was used the usual approach for SERVQUAL. Each survey consisted of 44 questions (items of SERVQUAL): 22 questions to evaluate customer’s expectations from excellent online games and 22 questions to evaluate customer’s perception of the given game. When the results were received, questions were divided into five groups according to dimensions they belong to so that it could be seen what are the average score for each dimension. Then the gap score was found which is the difference between the average of all 22 questions from customer’s expectations and average of all 22 questions from customer’s perception. Full list of questions can be seen in the appendix.

In this chapter all of the three games used for data collection will be presented and briefly explained. Then for each game there will be a story of one of the situations related to the game and to which the community had big attention. It will be shown

how the developers reacted or did not react to the given situation. Next will be the results of the SERVQUAL data collection for each game and gaming industry in total.

3.1 Pokemon Go



Source: CollegeHumor.com, Serbii.net

Figure 1. Pokemon Go screenshot

Pokemon Go is a free-to-play game that was developed by the Niantic company. This is augmented reality game which is based on location and is accessible for Android and iOS. The game was created as a result of two companies working together: Niantic and Nintendo. The release date of Pokemon Go was July 2016 and by that date was only for a certain set of countries, while after release Niantic continued by adding more of new countries to the Android and Apple stores week by week. The game is using GPS on the mobile devices of players for the purpose of locating in-game virtual creatures, called Pokemon, and then to have a possibility to capture them, train them and to use them in battles with the Pokemons of other players. The creatures show up on the game in the same way as they would be seen in the real world in the same location as the player is.

3.1.1 Overview of Pokemon Go

Satoru Iwata and Tsunekazu Ishihara from “The Pokemon Company” were the ones who conceived the concept for the game in 2014. In the beginning it was intended as an April Fools’ day project with Google and was called the Google Maps: Pokemon Challenge. Tsunekazu Ishihara was enjoyed by Niantic’s work on their previous augmented reality game, Ingress, and decided the whole idea of the game would perfectly fit for a new game from Pokemon series. Niantic used the data that they have from the game Ingress to create PokeStops and gyms in Pokemon Go at the same places as they were in Ingress. Then they used data from Google maps so that the Pokemons would spawn at specific places accessible for the players and used map display from OpenStreetMap since December 2017. The Director and Product Manager for Pokemon Go was Tatsuo Nomura, who began working at Niantic company in 2015. Junichi Masuda was the one who wrote soundtrack for the game and assisted with the work on game’s design. He is a longtime composer for Pokemon series. Previous employee of Google and the creator of Gmail’s logo, Dennis Hwang, was one of the game’s graphic designers.

Niantic required players who would help in polishing the game before it is released so they have announced a beta test that was exclusive specifically for Japan on March 2016. With a time, the beta test was also opened to some other countries. The announcement about beta test’s expansion to New Zealand and Australia was done on April 7. After this United States also receive the ability to register for the test. Beta testing of Pokemon Go was over on June 30.

Pokemon Go was released on July 6, 2016, but only Australia, United States and New Zealand had access to it. Since the start there was incredibly high demand unexpected by Niantic, therefore Niantic’s CEO John Hanke announced that they had to pause the release of the game in other region until they fix the issues. Pokemon Go entered were available for Europe on July 13. Ten days later the game was available for the most countries on the continent. Most of the Southeast Asia and Central and South America received releases of the game in the beginning of August. In China players had to find other ways to play the game. In

Chine the Great Firewall blocks Google services that are necessary to play the game. Players had two choices here. First was to cheat which means they used App Store IDs from Australia and used GPS spoofing app for Google services to fake their location. Second choice is to play other game instead, City Spirit Go, which was a clone of Pokemon Go and was available for China almost after the beta test of Pokemon Go in Japan.

After the release of Pokemon Go on July 7, the share price of Nintendo instantly rose by 10% and then by July 14 it rose, to the amusement of investors, up to 50%. Niantic's stake was not revealed to the public but Nintendo's owned in the Pokemon franchise only 32% stake, and despite that, just after five days since the release of Pokemon Go the market value of Nintendo rose by $9 billion. The game gathered people together every day to take walks of playing the game. There were 1.1 billion interactions that mentioned the game on Facebook and Instagram for the whole July that were connected to 231 million people. Pokemon Go was called as "social media phenomenon".

3.1.2 Examples of Customer Service Interactions with the Gaming Community

In July 2017, there was an event organized by Niantic for their players. People would come to Chicago's Grant Park, catching new introduced and rare Pokemon and communicate with other players full day. This event did not go as Niantic planned from the first place. Developers had various issues with their game that they did not expect for that day. The servers were overloaded because of the high number of players and that situation led to Pokemon Go's servers stop working. The game stopped working even before they were able to open the gates to Chicago's Grant Park. Players were angry. They were even throwing things at the stage and in the end sued the company.

Niantic's first solution was to return back to the players the money back for every ticket that was bought for that event and additionally they would give $100 of in-game currency to the players. But out of 20,000 estimated attendees there were a lot of people would come from another cities and spent money on transportation,

hotels, etc. For this matter the settlement proposal from Niantic was $1,575,000 which would cover all of the costs for airfare, hotels, parking fees, car rental, tolls and mileage (Kumparak, 2018).

It was stated in the documents that were filed in a Chicago court that an official website for the matter of this settlement must be up by May 25th, 2018, while all of the attendees must receive an email with the information about this. There also were conditions for people regarding this settlement that the players must be checked in to GO Fest using the game and that anyone requesting more than $107 in their expenses must have receipts. “In no event will money revert back to Niantic” is written in the documents. Any money left would be split evenly and donated to the nonprofit organization Chicago Run and to the Illinois Bar foundation.

3.1.3 Survey results

Table 1. Pokemon Go's players survey results

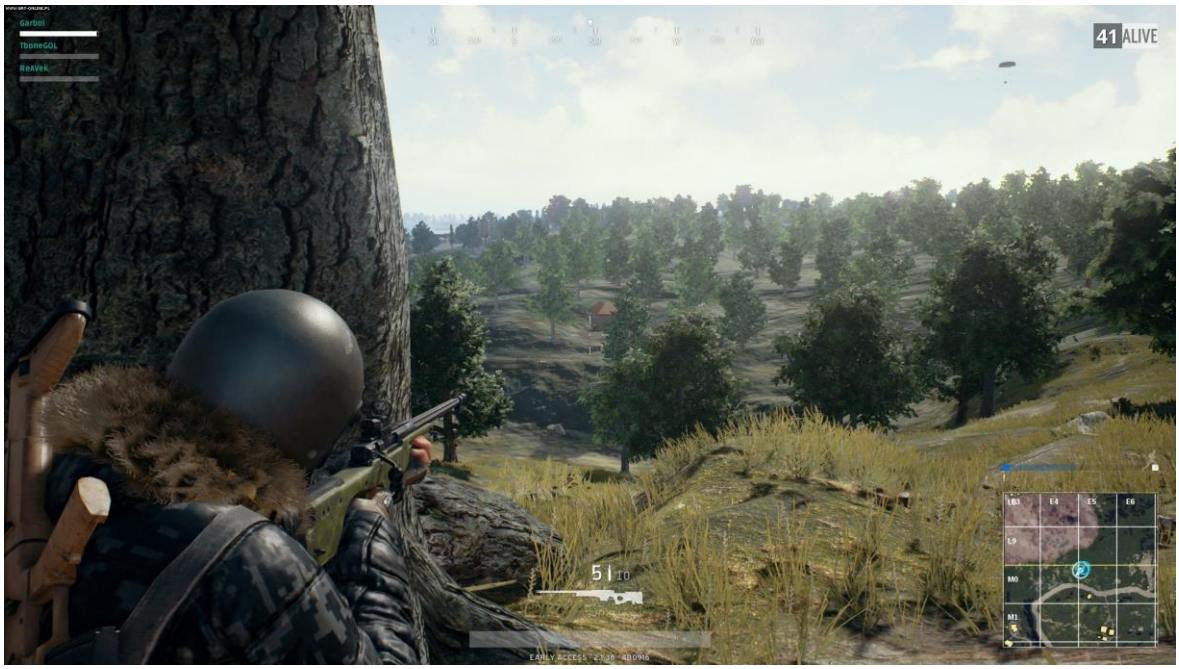
	Pokemon Go audience (71 respondents)
Excellent online game	
Tangible	5,92
Reliability	6,09
Responsiveness	6
Assurance	6,21
Empathy	5,71
Total	29,93
Average	5,986
Reviewed game	
Tangible	5,25
Reliability	4
Responsiveness	4,14
Assurance	4,79
Empathy	3,81
Total	21,99
Average	4,398
Gap scores	1,588

The gap score shows that the audience of Pokemon Go's players are not satisfied with the perception of the game compared to their expectations from it. Moreover, from the scores for Reliability, Responsiveness and Empathy it can be seen that Pokemon Go's players don't have trust in the Niantic (Pokemon Go's developers) and they are not much loyal to the game. The absence of communication with players has shown its consequences.

The highst score for the game is in the Tangible dimension but from the expectations we can see that performance is almost the least players want to see there. The main part for them is Assurance which contain the part which questions player's loyalty.

Niantic, as a game developer made their community upset lots of times since the release of the game, and when they had their chance to improve everything, the situation with the festival has led to community starting to remember all their mistakes from the past. Right now for Niantic the best advice would to start communicating with the community to let players know that they are listened to, which is the best path to loyalty. Another good thing to do is to implement various propositions from the players which they describe in the communities everyday: some of them could bring big results to the game.

3.2 PlayerUnknown’s Battlegrounds



Source: GamePressure.com

Figure 2. PUBG screenshot

PlayerUnknown’s Battlegrounds (PUBG) is a multiplayer online game in the genre of battle royal. It was developed and released by the subsidiary of publisher Bluehole company, PUBG Corporation. The creator of the whole idea, Brendan “PlayerUnknown” Greene, was inspired by the movie Battle Royale and used its ideas to create mods (changes or games inside a game) that lately transformed into one big game with Greene as its creative director. In this game one hundred players must to parachute on an island to wander around, search for equipment and weapons and kill each other. The game map area gets smaller with a time to push all players together to make game more tense and interesting by making players encounter each other. The last team or player alive wins the round.

3.2.1 Overview of PlayerUnknown’s Battlegrounds

Full release of the game was on December 20, 2017, but before that date since March 2017, the game could be bought through Steam’s (platform for games) early access beta program. Early access allows to buy the game but it states by its own definition that, even though the game is not ready yet, it can be accessed

earlier to help with its development. The game was also released for the Xbox One by Microsoft Studios during December 2017 and sold five million copies of the game by March 2018. Windows version of PUBG had over thirty million copies sold by March 2018, and currently holds the record for peak concurrent player count which is 3.2 million players. The previous record was held by the game Dota 2 and was 1.2 million players.

PlayerUnknown's Battlegrounds was evaluated by critics during its early access period and on final release. In total, it was stated that, even though the game still needs lots of things to be done to be considered a complete polished game, it represents a new style of gameplay that can be easily understood by players of any range gaming skills. The game was nominated for the Game of the Year and some other awards of 2017. Some of other games added battle royale mods to their games that were very similar to the gameplay of PUBG. There also was a number of clones of PlayerUnknown's Battlegrounds which mostly were from China.

During first three days after the game was released for Steam's early access, PUBG made $11 million. The second week of April 2017, brought one million players to the game which meant one million copies sold bringing $34 million. This led the game to be put in the list of top 10 highest grossing revenue games of that month. PUBG's revenue even exceeded the revenue of such games as Overwatch and Counter-Strike: Global Offensive. Two million copies of the game were sold by May 2017 and brought total gross revenue of $60 million. $100 million in sale revenue was brought by the game after three month of early access while the number of copies sold became five million.

Because of PlayerUnknown's Battlegrounds, Bluehole's value had increased five-fold at the time since June to September 2017 and valued at $4,6 billion. It was announced by PUBG Corporation on December 2017 that there already were over 30 million players at Windows and Xbox versions together. Approximately $712 million in revenue was brought by PUBG during 2017. In March 20178, the

president of Valve Corporation, which owned Steam, announced that the game took the place of the third highest-grossing game of all time on Steam.

3.2.2. Examples of Customer Service Interactions with the Gaming Community

PlayerUnknown's Battlegrounds developers had an issue with their own online community. There was a player who was suspended from the game and the reason for it was "stream sniping". Because of this situation the community of PUBG was split in their opinions on whether or not these types of suspension are acceptable.

Stream sniping is considered as a form of cheating in multiplayer games that have livestream audiences. There is a website Twitch where players can livestream their game to other people. Livestreamers from that website have their own channels and the most popular of them have big audience. Players are considered stream snipers when they watch a stream of a game on Twitch and play the same game themselves in the same match while using the stream to read the position of the streamer and spoil a game for them by killing or messing around 9Allegrax, 2017). This is forbidden by the game's official rules of conduct (see Appendix for the list of rules). But stream sniping is usually hard to prove.

The situation happened a player killed in a game match one of two famous Twitch streamers that were playing together and lost many games that day due to other stream snipers. The streamers instantly called out stream sniping which resulted in a weeklong ban for the player. The player later said to the community that this was a false accusation and he was suspended from the game for no reason because he doesn't even watch streams on Twitch.

PlayerUnknown's Battlegrounds online community on Reddit started demanding proves from the game developers that the player indeed was steam sniping. They received an answer from one of community managers that they would look into in-game data to make sure that the ban was correct and they will life the an if it was indeed issued incorrectly. Later lead director and designer Brendan

“PlayerUnknown” Green stated that he had seen an in-game data and that the ban was justified. Part of the community calmed down after this. Another part of community didn’t like that the game director just said this information without proving his words.

In the end, big part of PlayerUnknown’s Battlegrounds online community didn’t like the fact the rule regarding stream sniping existed from the first place. They mentioned that it is not just hard to prove whether a player is stream sniping or not but also is a problem of streamers and should not be a reason to be suspended from the game. Players from online communities stated that this rule exists only for the reason that streamers bring big amount of players to PUBG and its developers are afraid to make streamers upset. PlayerUnknown’s Battlegrounds developers didn’t react to these statements in any way. This has led to the part online community being disappointed in the actions of PUBG’s developers and was a reason for some players to lose their trust.

3.2.3 Survey results

Table 2. PUBG's players survey results

	PUBG's audience (69 respondents)
Excellent online game	
Tangible	5,59
Reliability	5,93
Responsiveness	5,99
Assurance	4,88
Empathy	5,57
Total	27,96
Average	5,592
Reviewed game	
Tangible	4,48
Reliability	3,88
Responsiveness	4,2
Assurance	4,73
Empathy	4,13
Total	21,42
Average	4,284
Gap scores	1,308

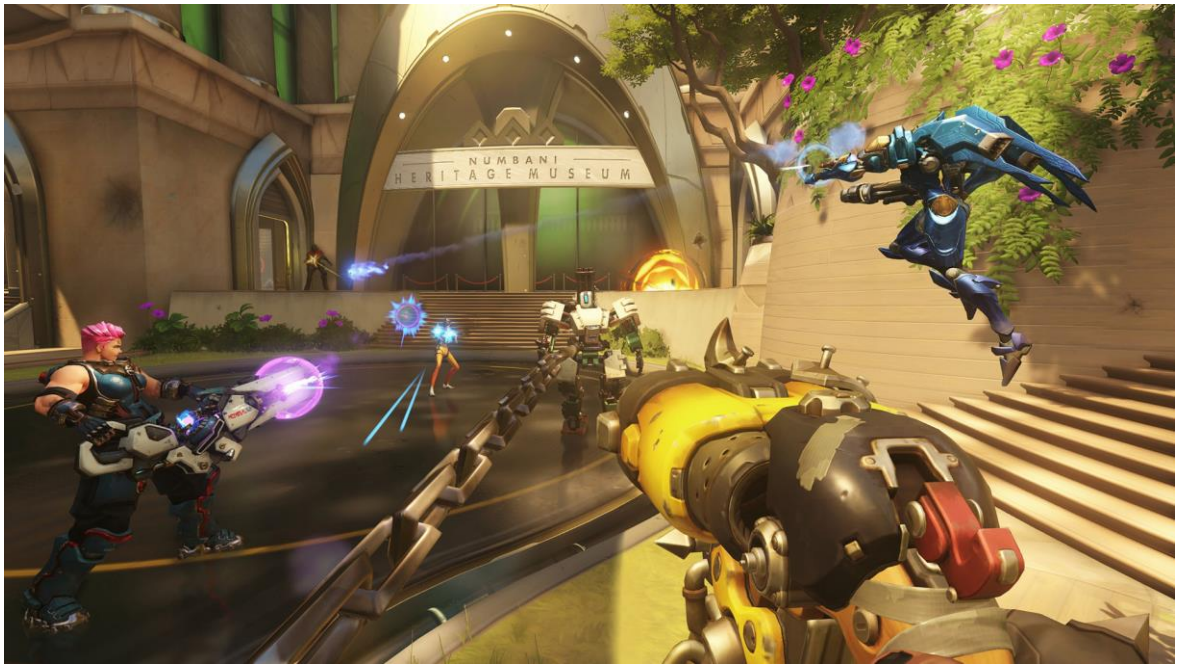
The same way, as with Pokemon Go, the gap score is not so different and shows that the players are not satisfied with game's perception compared to their expectations. From the data on dimensions we can see that for PUBG's audience of players Tangible dimension has third place of importance and in the perception it is on the second place out of all five but it is still low compared to other two games. During first half year players were not satisfied with how cheap cheam or medium priced PC could not run the game without high performance decrease. Reliability and Responsiveness have very low scores, thus Empathy is also low.

And it can also be seen that PUBG's audience expects the most Reliability and Responsiveness. This is the consequences of the described situation with stream snipers and at the same time because at the first half of year Bluehole (developers of PUBG) almost never had the exact date for their game's releases and updates, and always had to postpone the dates which they already had announced. With

this they have lost player’s trust. But the Assurance is the highest in perception because they managed to hold player’s loyalty by making their updates if not in time but wonderful. At the same time the results with Responsiveness are not high but not because of lack of communication but because the community was not happy with the given responses.

For Bluehole it would be a good advice to have more value to the opinion of players if it is supported with good facts and reasons, and to keep doing their job as even with such service quality results, they have all of the possibilities to improve them in future.

3.3 Overwatch



Source: GeForce.com

Figure 3. Overwatch screenshot

Overwatch is a multiplayer video game which is a team-based multiplayer first-person shooter that was developed and published by the company Blizzard Entertainment. The game was released on May 24, 2016 for various platforms: Windows, PlayStation 4 and Xbox One. In Overwatch players are being divided into two teams of six and are given a choice out of over 20 characters, that are known as “heroes” game, that have a unique style of play and are divided into four general categories by their roles: Offense, Defense, Tank and Support. Players of one team have a limited time to capture the points on a map or push the payload across the map while players of another team have to prevent this by defending their positions within set time. In the game players can receive cosmetic items that are not affecting the game play and can receive them either by playing the game or buying them with real money. The game is being constantly worked on and updated with new heroes, maps and items.

3.3.1 Overwatch overview

Before Overwatch Blizzard had multiplayer online role-playing game Titan that as cancelled in 2014. A part of this game's concepts were taken to create Overwatch. Overwatch was presented at BlizzCon in 2014 and in a completely developed state. There was a closed beta of the game from late 2015 until early 2016. In May 2016 an open beta was held which had 10 million players as participants. The release of the game followed after animated short videos that introduced players to the game's story and its characters. After the release of Overwatch it received positive feedback from the critics for game's appeal, design, gameplay and accessibility. By the end of 2017 the game had over 35 million players and during the first year of its release brought in revenue over $1 billion. Overwatch was awarded as Game of the Year at The Game Awards 2016.

Overwatch was released on May 24, 2016 for 3 platforms: Microsoft Windows, Xbox One and PlayStation 4. Only in a week from Overwatch's launch, there were over 7 million players that together collected a playtime of 119 million hours. By the middle of June there already were 10 million of players which in October 2017 transformed into 35 million players. Overwatch remained the fastest selling game during 2016. In May 2016 it brought in revenue $269 million and then $565 million at the end of 2016 which was for personal computers only. This led Overwatch to became the highest generator of revenue as non-free-to-play game for PC in 2016.

To play the game it is only enough to pay for it ones and have full access to the game. Developers keep improving the game by introducing new updates with new events, maps, items and characters. Any of the additional content that comes with the updates does not require any of the additional payment. It is instantly available to the ones who own the game. Blizzard had they hopes to keep their customers happy with an approach like this.

3.3.2 Examples of Customer Service Interactions with the Gaming Community

Blizzard are doing great job in communicating with their online communities. In Overwatch's online community usually can be seen the topics where players are pleased with developers and even when they joke about them. These jokes are silly and are not offensive to the developers. Such examples are the videos from the Youtuber Dinoflask who received big popularity within the community by doing exactly one thing: he is remixing videos that Jeff Kaplan, director of Overwatch, makes for every update of the game. In his own videos Jeff Kaplan tells players about the changes done, why these changes are done and what can they expect in the future. In his remixes Dinoflask plays with the positioning of words and sounds Jeff Kaplan makes to create his own text that would be funny to hear for the players of Overwatch from its director.

Some videos contain only funny moments while other videos could contain joke that show all of the issues an online community is worried about. In this way Dinoflask became an important part of Overwatch's online community that gladly accepted him. Jeff Kaplan had admitted that he is a big fan of Dinoflask's videos, even though some of the could be seen as an insult for any other person. Because of this Dinoflask had an opportunity to meet face-to-face with a person he has been using such a long time to create his own comedy.

"Blizzard has weekly meetings for all the developers, so they played my video for all the developers, and then they were like, 'Oh, one more thing.' Then I had to come out in front," said Dinoflask about his experience of meeting Jeff Kaplan (Grayson, 2017), Youtuber was happy to get have a dinner later with the director of Overwatch.

Situations like this shows that it is never a problem to communicated with online community in a right way in any situation. Even when there is huge amount of critique it is possible to use it to your own advantage. Overwatch show great example of how to keep online community satisfied.

3.3.3 Survey results

Table 3. Overwatch's players survey results

	Overwatch audience (134 respondents)
Excellent online game	
Tangible	5,75
Reliability	5,97
Responsiveness	5,92
Assurance	6,22
Empathy	5,65
Total	29,51
Average	5,902
Reviewed game	
Tangible	6,05
Reliability	5,31
Responsiveness	5,27
Assurance	5,93
Empathy	5,25
Total	27,81
Average	5,562
Gap scores	0,34

For the Overwatch case it can be seen that even with nearly same expectations score, there is huge difference in perception compared to other games. The gap score is only 0,34 and the lowest dimension score in perception equals to the highest one from two other games.

The game was perfectly polished and it explains the highest score in Tangible dimension but it was polish in all of possible aspects. The most demanded dimension from player's expectations here is Assurance and at the same time it has the highest score in perceptions.

Blizzard (Overwatch developers) are doing excellent job on improving the game, keeping it stable and communicating with the community. Although it can be seen that Overwatch's audience are still demanding a little bit of more Reliability and Responsiveness and it is connected to the small situations when players were not

happy with how Blizzard don’t listen to their requests to balance the gameplay of some characters. This is what Overwatch’s developers could work on.

3.4 Conclusion for the gaming industry in total

First three subparts of the empirical research part show how audiences of different games perceive the quality of provided service compared to what service they expect from the games they play. This allows to see what each of the game developers can change in their approach to reeive more loyalty and positive feedback which can lead them to bigger success. Service quality is important part of the gaming industry where most of the success depends on how players will spread news and the information about the game across the internet and will influence its popularity.

Now in this part all of the responses for expectations and perception of all three games will be connected into one table of total results. This will be not the average of three previous tables but all of the responses from different audiences connected and calculated separately in a new table. This will show what all of three audiences expect from games together and how far game developers were able to satisfy the needs of their clients in the gaming industry.

From this data any company who are willing to create new popular online game would be able to understand what players expect from them: would it be the design of the game or the stability of the connection to it, or communication with the community, or reliability of the information the developers announce etc. Moreover, the existing online game developers (even the ones who are discussed in this thesis) could use this information to improve their existing online game to give their players more satisfaction from playing them. This will show how SERVQUAL can be used in the gaming industry.

Table 4. Results of all three surveys together

Excellent online game (for 3 audiences)	All three audiences
Tangible	5,75
Reliability	5,99
Responsiveness	5,96
Assurance	5,88
Empathy	5,65
Total	29,23
Average	5,85
Reviewed game of 3 audiences	
Tangible	5,45
Reliability	4,61
Responsiveness	4,71
Assurance	5,33
Empathy	4,59
Total	24,69
Average	4,94
Gap scores	0,91

Many conclusions can be made from these results. In expectations it can be seen that the players expect the most from Reliability and Responsiveness dimensions. The results were taken from the players from online communities and they confirm that the communities expect from online game developers to communicate with them. Players expect that the developers will always give reliable information regarding game issues, promt information regarding future changes and updated, they expect to give this information in time and to do everything what the developers promised in the exact time when they promised it. The Empathy dimension is the last by the scores of expectations which can mean that the players expect the game developers not to like the players specifically but to show with actions that online game developers are able to provide the best gaming experience for them.

In the perception results it can be seen that the players are mostly happy with the Tangible dimension which means all of the three online game developers were able to provide their games with the best quality. But quality of the games (graphics and connection stability) is not what players expect the most even though it has high importance. The most demanded Reliability and Responsiveness have quite low scores and this could also be the reason for Empathy to be the lowst in perception even if it was the same in expectations.

In total the results show that online gaming developers need to work on the communication with their communities. This is why online communities were created from the start. Players are willing to be the part of game's creation and development. They are wishing that online game developers would listen and value their opinions. Communication with the communities is already a part of the online gaming industry and should advance more and more with a time.

From the work done it can be seen that SERVQUAL is a tool that can be valuable for the gaming industry. Online game developers could use it to determine what players, inside or outside online communities, expect from them and their game and how they perceive it. SERVQUAL can help determine what specifically players see as strengths and weaknesses of online game developers. The problem here could be that SERVQUAL is difficult regarding the ability to perfectly adapt it for the specific needs of gaming industry to receive required results. It is not a perfect tool it definetly can bring results when used properly.

Conclusion

The purpose of this work was to measure service quality in the online gaming communities and to show if SERVQUAL is suitable for the gaming industry. At least ten years ago first gaming communities were created for the players to share their knowledge and opinions in order to assist game developers in the development of games. The communities were a success and now they exist independently from the influence of online game developers. For this reason, online game developers have to communicate with players in online communities in order to show players that they are valuable. Moreover, they have to be careful with how they communicate and provide the information regarding their own games. Players inside communities tend to overreact to incorrectly given information or even get mad because of the information they don't like. This could lead to this disappointment to be spread across the internet and influence even the players outside online communities. In the same time when the players inside online communities are treated properly and receive needed attention from the online game developers consequentially, they will be the reason for the increase of online game's popularity. This is why online game developers usually require to hire community managers who will monitor online communities to interact with players, give them requested information, make announcements and transfer important information from players to developers.

Satisfaction and loyalty are the important loyalty in any business. They can save customers, bring more profit, strengthen firmness in competition and at the same time attract more consumers. Online communities are the perfect opportunity to increase customer's loyalty and satisfaction when they are treated properly by online game developers and their community managers. Another big part that can shows players satisfaction and loyalty are the reviews that players can write about the game. Any reaction from an online community, would it be positive or negative, can lead to players leaving reviews for the game. This factor is very important as the review can will show other players, inside or outside of online communities, how good the game is.

In this work SERVQUAL was used as a tool for data collection. This tool helps to determine the areas of weaknesses and strengths and can provide ample opportunities for managers to improve customer's satisfaction. SERVQUAL helps to determine what consumers expect from service providers and how they perceive the provided service. It consists of 22 items which are divided into 5 dimensions: assurance, reliability, responsiveness, tangibles and empathy. At one point SERVQUAL receive various criticism about different issues that need to be fixed: the used of difference scores, the reliability of the model, its convergent validity, its discriminant validity, its predictive validity, its emphasis on process (rather than outcome), the hierarchical nature of service quality constructs, the use of reflective (rather than formative) scales, the applicability of a generic scale for measuring service quality in all service settings, the applicability of SERVQUAL to the online environment, its applicability to different cultural contexts. Nevertheless, SERVQUAL function properly and give required results when it is adapted properly to the certain industry.

The data collection for this work was taken in the for of surveys, adapted by the standarts of SERVQUAL. Members of online communities of three games, the were compared in this work (Overwatch, PlayerUnknown's Battlegrounds and Pokemon Go), were proposed to answer 44 questions: 22 questions (each for one item of SERVQUAL) regarding their expectations from an excellent online game and 22 questions regarding their perception of the specific game they play. The numbers of participants were: 71 participants for Pokemon Go, 69 participants for PUBG and 134 participants for Overwatch. The results of these surveys were arranged into average scores for five dimensions of SERVQUAL to receive the gap scores – a difference between customer's expectations and perception of the service provided. Then all of the responses from players of all three games were used to create the results of what players expect from the gaming industry in total and what was provided by the game developers. These scores helped to understand what developers of these games are missing currently and what other online game developers could do ti improve player's satisfaction and loyalty. For the most part players inside online communities were disappointed with how online game developers communicate with them. Many players inside online

communities are not happy with online game developers who are not wishing to give the information regarding their issues with the game when they request it, who are giving false information, do not keep their promises, are not doing things in time when they promised to or even are not communicating with their community at all. Wether online game developers are communicating with players inside the communities or not, it as the main issue they should keep working on. In this work SERVQUAL proved to be difficult to adapt but valuable and useful when used properly.

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Figures and Tables

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Appendices

Appendix No. 1

Survey questions for an excellent online game

1. Excellent online game will have stable servers to provide the best connection.
2. The design of an excellent online game should be visually appealing.
3.Community managers and other employees who communicate with players of an excellent online game will be delicate and polite.
4. All of the possible web pages connected to an excellent game would be visually appealing.
5. When the developers or other employees of an excellent online game promise to do something by a certain time, they do.
6. When a player has a problem, excellent online game's developers or other employees will show a sincere interest in solving it.
7. Excellent online game's every new version will be usually released containing a minimum of bugs.
8. Any game related features/service of an excellent online game will be provided at the time it is promised to do so.
9. Excellent online game's developers or other employees will make sure to not give false information.
10. Community managers/other employees of an excellent online game will tell players exactly when services will be performed.
11. Player support of an excellent online game will give prompt service to players.
12. Player support of an excellent online game will always be willing to help customers.
13. Player support of an excellent online game will never be too busy to respond to customers' requests.
14. The behavior of employees of an excellent online game will instill confidence in customers.
15. Players of an excellent online game will feel safe with their transactions.
16. Employees of an excellent online game will always be courteous with the players.

17. Employees of an excellent online game will have the knowledge to answer customers' questions.
18. Community managers/other employees of an excellent online game will give individual attention to the players inside communities.
19. Excellent online games will provide their service during the operating hours convenient to all their players.
20. Excellent online game will have employees who give players inside communities personal attention.
21. Excellent online game's developers will have their players' best interests at heart.
22. Excellent online game's developers will understand the specific needs of their players.

Appendix No. 2

Survey questions for the game Overwatch as an example

1. Overwatch has stable servers to provide the best connection.
2. The design of Overwatch is visually appealing.
3. Community managers and other employees who communicate with players of Overwatch are delicate and polite.
4. All of the possible web pages connected to Overwatch are visually appealing.
5. When the developers of Overwatch or other employees promise to do something by a certain time, they do.
6. When a player has a problem, Overwatch developers or other employees show a sincere interest in solving it.
7. Overwatch's every new version is usually being released containing a minimum of bugs.
8. Any game related features/service of Overwatch is being provided at the time it is promised to do so.
9. Overwatch developers or other employees make sure to not give false information.
10. Community managers/other employees of Overwatch tell players exactly when the service will be performed.
11. Player support of Overwatch gives prompt service to players.
12. Player support of Overwatch are always willing to help customers.
13. Player support of Overwatch are never too busy to respond to customers' requests.
14. The behavior of employees of Overwatch instills confidence in customers.
15. Players of Overwatch feel safe with their transactions.
16. Employees of Overwatch are always courteous with the players.
17. Employees of Overwatch have the knowledge to answer customers' questions.
18. Community managers/other employees of Overwatch give individual attention to the players inside communities.
19. Overwatch provide its service during the operating hours convenient to all its players.

20. Overwatch have employees who give players inside communities personal attention.
21. Overwatch developers or other employees have their players' best interests at heart.
22. Overwatch developers or other employees understand the specific needs of their players.

Appendix No. 3

PlayerUnknown’s Battleground Rules of Conduct

1. Do not use any discriminatory language, including but not limited to any language regarding ethnicity, nationality, race, gender, religion, sexual preference or personal beliefs.
2. Do not use extremely foul language, including but not limited to excessive profanity or language that is graphically sexual, grotesque, or violent.
3. Do not make threats of real-world violence or other intended harm to other players or our employees.
4. Do not harass, stalk, or purposely do things to make someone else feel uncomfortable or threatened.
5. Do not share personal information about yourself or other individuals.
6. Do not engage in, request, arrange, or offer illegal activities or materials.
7. Do not impersonate other individuals.
8. Do not spam, be it in text or voip.
9. Do not cheat: do not use third party programs, macros, client-side hacks, edited game files or anything else that may give you an unfair advantage in the game. This includes promoting or posting links to websites that provide or promote cheats or hacks.
10. Do not team: teaming is defined as two or more players in the same match working together in a larger group than is intended for the selected game mode.
11. Do not team kill: there is no excuse for non-accidental team kills. If your teammate is breaking these rules, report them to us instead.
12. Do not stream snipe: this is a form of cheating and you will be banned if you do it.
13. Do not exploit bugs or glitches: If you find a bug or a glitch in the game that provides an unfair advantage, let us know about it instead of using the exploit for your own benefit.
14. Do not share your account: your account is for your use and your use alone. Do not grant access to your account to anyone else, and do not access anyone else's account, even with their permission.

These rules are neither final nor exhaustive - we reserve the right to suspend disruptive users even if their behaviour doesn’t fall under any of the above rules directly. Be nice, play fair and respect others and yourself.

ANNOTATION

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SUMMARY	**In this work the quality of service in online gaming communities was measured. SERVQUAL was used as a tool to compare what players in online communities expect from online game developers and the perception of service provided. Three games were chosen for this work: Overwatch, PlayerUnknown's Battlegrounds and Pokemon Go. Different players in online communities of these three games at the website Reddit went through surveys that were made by the standards of SERVQUAL. Another part of this work was to point out from the results of the surveys done any issues between players and the developers of all three games which could be avoided during the development of an excellent online game. The results of this work help to understand whether SERVQUAL can be used in online gaming industry.**
KEY WORDS	**Online game, online community, online game developer, SERVQUAL, service quality, Overwatch, PlayerUnknown's Battlegrounds, Pokemon Go**

THESIS INCLUDES UNDISCLOSED PARTS: No