

Gamification and work motivation

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Abstract <p>Motivation is a reason to do something. It is the force that directs, energizes and sustains people's behaviour. Recently, organizations have turned into using forms of non-monetary rewards to motivate employees. This study focuses on gamification, which is a motivational technique using elements familiar from the video games. The use of gamification as a motivational tool has increased in the recent years, together with development of computer games and mobile applications.</p> <p>The research problem of this thesis was the issue of work motivation in the case company. The research explored the impact of the gamification on motivation and aimed to determine if gamification would be a good solution for case company's needs to improve work motivation. The qualitative research approach was used as the research approach and the research phenomenon was addressed by an exploratory case study approach. The study was a cross-sectional case study with semi-structured interviews. Seven informants were interviewed. Theoretical framework of the study was Flow Theory. Theoretical framework allowed to recognize positive impacts of gamification.</p> <p>The research suggests that gamification can have many positive impacts on work motivation but also have negative impacts as well. It is noticeable, that in work communities such as the case company of this study, it might be impossible to successfully introduce game elements for workers with very different roles and responsibilities. Therefore, the conclusion of this study is that gamification would have negative impact on work motivation in case company.</p> <p>This study emphasizes the importance of work roles in work community. This study addressed a research gap in the meaning of work roles and responsibilities as well as work status (employee or volunteer worker) while applying game elements into a work community. More studies should be conducted in this type of work environments to understand if it is possible to use gamification as a motivational tool in this type of relatively rare work communities.</p>		
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<p>Tiivistelmä</p> <p>Motivaatio on syy tehdä jotain. Se on voima, joka sekä ohjaa että ylläpitää ihmisten käyttäytymistä. Organisaatiot ovat hiljattain alkaneet käyttämään ei-rahallisia palkintoja työntekijöidensä motivointiin. Tämä tutkimus syventyi pelillistämiseen, joka on motivaatiotekniikka, jossa käytetään tietokonepeleistä tuttuja elementtejä. Pelillistämisen käyttö on kasvattanut suosiotaan viime vuosina, tietokonepelien ja puhelinsovelluksien kehityksen rinnalla.</p> <p>Tutkimus keskittyi case-organisaatiossa ilmeneviin työmotivaation liittyviin ongelmiin. Sen tarkoitus oli tutkia pelillistämisen vaikutuksia työmotivaatioon ja selvittää, voisiko työmotivaatiota parantaa pelillistämisen avulla. Tutkimus toteutettiin kvalitatiivisena ja eksploratiivisena tapaustutkimuksena. Tutkimus on poikittaistutkimus ja se toteutettiin käyttäen puolistrukturoitua haastattelumenetelmää. Tutkimukseen haastateltiin seitsemää vastaajaa, jotka toimivat eri rooleista case-organisaatiossa. Tutkimuksen teoreettisena viitekehystenä käytettiin Flow teoriaa, joka tarjosi hyvät edellytykset pelillistämisen positiivisten vaikutusten tunnistamiseen.</p> <p>Tutkimustulos antaa laajan kuvan siitä, että pelillistämellä saattaa olla monia positiivisia vaikutuksia työmotivaatioon, mutta tämän lisäksi myös negatiivisia vaikutuksia voi ilmetä. Työyhteisöt, kuten case-organisaatio, jossa toimijoilla on toisistaan huomattavasti poikkeavat työtehtävät ovat erittäin haastavia, ellei mahdollisia pelillistettäviä. Tästä johtuen tutkimus esittää, että pelillistämellä olisi negatiivinen vaikutus case-organisaation työntekijöiden työmotivaatioon.</p> <p>Tämän tutkimuksen tulokset painottavat työroolien ja -tehtävien merkitystä työyhteisössä organisaatiota pelillistettäessä. Tutkimus osoittaa myös aukon pelillistämistutkimuksessa työtehtäviin sekä toimijoiden statukseen liittyen (työntekijä vai luottamustoimija). Tämän vuoksi tutkimus painottaa lisätutkimuksen tarpeellisuutta pelillistämisen käytöstä case-organisaatiota vastaavissa työyhteisöissä, joissa työntekijöiden työtehtäviä ja -rooleja ei voida verrata toisiinsa.</p>		
Avainsanat (asiasanat) Työmotivaatio, pelillistäminen		
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1 Introduction

Every business and organization want to be successful and achieve its goals. According to Manzoor (2012), individuals in any organization are the most essential resource, and this why they need to be persuaded and influenced towards tasks fulfilment. Most employers have realized that if they want their organizations to be successful the performance of people determine it (Muogbo 2013).

People have their individual needs and habits which must be met and managed if they are to contribute to organizational development and growth (Osabiya 2015). There has been active research about motivation at work ever since the modern corporation was invented by Frederick Taylor, Henry Ford and Alfred Sloan. Moreover, a considerable consensus around what motivates humans has been actively generated by researchers (Spencer 2013). According to Hanaysha and Majid (2018), employee motivation plays significant role in organizations, and thus, it is important for decision makers and employers to identify the needs and concerns of their team members.

The research problem of this thesis was the issue of work motivation in the case company The Student Union of Vaasa University of Applied Sciences (later VAMOK). The objective of this study was to find new ways to maintain and improve employee and board member motivation. The research explored the impact of the gamification on motivation and aimed to determine if gamification would be a good solution for VAMOK's needs to improve their employee and board member motivation. The key concepts of this thesis are employee motivation and gamification. The literature areas reviewed in this study also focused on these fields.

Background

Motivation is a reason to do something. It is the force that directs, energizes and sustains people's behaviour. According to Matallaoui, Hanner and Zarnekow (2017, 12), Nevid (2012) defines motivation as *"a process that initiates, guides, and maintains goal-orientated behaviours. It involves biological, emotional, social, and cognitive forces that activate behaviour"*.

According to Hanaysha and Majid (2018), Chaudhary and Sharma (2012) stress that the word motivation emerges from the concept of motive which defines a person's needs that are fundamental for achieving certain desires. People are motivated when they can expect that their actions will lead to the attainment of a goal and a valued reward (Armstrong 2012). According to Spencer (2013), Big Gallup studies on engagement by Buckingham and Coffman (1999) and Coffman and Gonx'zales-Molina (2002) capture these key points on motivation:

“Motivating factors and demotivating factors are different from each other. For knowledge workers, for instance money is not a strong motivator but, if it is perceived to be given unfairly, it can be a strong demotivator. The strongest motivator for a knowledge worker is the belief that one's contributions matter, that they make a difference and serve a useful purpose”.

Recently, companies and organizations have turned into using forms of non-monetary rewards, and this study focuses on one of them called gamification, which is a motivational technique using elements familiar from the video games (Kim 2018). According to Seiffert-Brockmann, Weitzl and Henriks (2018), Seaborn and Fels (2015) defines the concept of gamification as *“the use of game elements and mechanics in non-game contexts”*. It is the application of some video game elements such as badges, points and leaderboards to organizational processes to encourage participation (Spencer 2013.)

Gamification is a relatively new tool, but researchers can agree that it triggers diverse human behaviour and attitudes (Seiffert-Brockmann et al. 2018). The use of gamification has increased in the recent years, especially in the development of computer simulation games and rapid development of mobile applications (Lowman 2016). According to Lowman (2016), Seaborn and Fels (2015) stress that the business world has also started to see gamification as an opportunity as more millennials (who are more gamer friendly) are entering worklife, and the benefits of gaming are better recognized.

Motivation for the research

As stated above, the aim of this study was to find how gamification would impact on employee and board member motivation in the case company VAMOK. Therefore, it is important to start this research by focusing on how one person can make another

do what he or she wants. This is a significant and common question for employers and leaders. (Kim 2018). According to Manzoor (2012), Shadare and colleagues (2009) highlight that employee motivation is one of the procedures of leaders to increase effectual job management amongst the company's employees. To achieve high performance, organisations need well-motivated people who are prepared to exercise discretionary effort (Armstrong 2012). Organizations need motivated employees because motivated employees are the most productive (Lindner 1998), and in today's often chaotic and turbulent environment a company's success depends on employees using their full potential (Osabiya 2015).

According to Augustin, Thiebes, Lins, Linden and Basten (2016) Detering and colleagues (2011 a) emphasize that gamification aims to motivate people by applying game elements in a non-game context. The use of gamification as a motivator has been discussed in various domain (ibid.). AlMarshedi, Wanick, Wills and Ranchhod (2017) stress that gamification can encourage people to change their behaviour, and it promotes desired attitudes in many fields. According to Kananen and Akpinar (2015) McGonigal (2011) emphasises that deconstructed games with elements characteristic to work activities can be engaging and pleasing, which results in more motivated employees.

Many studies on gamification have a positive approach towards it and its implications on people, but there are also negative effects, such as game addiction and ethical issues. Many researchers have expressed their worries about such limitations. According to Hyrynsalmi, Smeds and Kimppa (2017) Knaving and Björk (2013); Silpasuwanchai, Ma, Shigemasu, and Ren (2016); Marlow, Salas, Landon and Presnell (2016) emphasize that users can be optimizing the end-result of a game for example, their positions in leader boards and not the actual task at hand, and that single person games can create competing against teamwork, thus hindering the team to achieve the best performance. According to Broer (2014), scientific research on gamification provides mixed results rather than a clear picture, and most of them show that its impact on motivation is far lower than what the extensive publicity around it would make people believe. The low number of relevant results indicates the need for more empirical studies to understand the impacts of gamification. (ibid.) According to Augustin and colleagues (2016), Flatla and others (2011) underline that

empirical findings indicate that the use of game elements in repetitive and monotonous tasks makes them more enjoyable to employees.

I am highly interested in leadership and it was the driver for my personal motivation to conduct this study. To become a successful leader, a person needs to understand the sources of employee motivation and the ways to improve and maintain it. New ways to increase work motivation are always welcome to all managers and gamification is a relatively recently introduced and possibly effective motivational tool. I was curious to conduct this study to learn more about how gamification works and how it would impact on employee and board members motivation in VAMOK which is my current employer. Choosing my employer as my case company for this study derives from my personal motivation as a manager, wanting to find new ways to improve the motivation of my employees and the board members who have volunteered themselves into this lobbying work.

VAMOK has employees and volunteer board members, and some of them have faced motivational problems throughout the years that I have been working there. The employees are in long-term work relationships, and the board members are selected each year. Some of them have been participating into this volunteer work for the longer periods of time, but most commonly the board members participate in this work for one calendar year. Varying levels of motivation is a well-known challenge among the individuals in VAMOK but we have not tried to actively apply any new motivational tools in our everyday work for many years.

I wanted to conduct this study since the time had come to start to think of new ways to improve motivation at my workplace. Gamification is a relatively new motivational tool, and it can be an effective motivator especially for younger generations. Therefore, the aim of this study was to see if gamification is a good fit for VAMOKs needs. The opportunity to conduct this study about gamification was highly beneficial for me in my own job as an Executive Director of the student union. While conducting this study, I had an opportunity to hear about people's experiences and opinions related to their work motivation by interviewing them about this topic. I was collecting highly valuable information for myself as well as for my employer.

Research question

The research question of this study was: How would gamification impact on work motivation? The study aims to research impacts of potential use of gamification as a motivational tool for employees and volunteer workers in student union. The goal is to find out if gamification could be a tool to increase motivation or could it lead to more unwanted outcomes.

The qualitative research approach was chosen to be the research approach of this thesis. The qualitative approach is naturalistic, meaning that the researcher does not try to affect or manipulate the phenomenon of interest and that it always takes a place in a real-world setting (Patton 2002). According to Adams, Khan, and Raeside (2014), qualitative research aims to describe reality as it is experienced by the informants and to explore social relations. The goal of qualitative research is to describe, understand and explain social phenomena from the inside in multiple different ways; this can be done by analysing individuals or groups' experiences, communications and interactions or by analysing documents or comparable traces of experiences or interactions (Flick 2018).

The qualitative research approach fitted to the research question of this study since the goal of the research was to find the answer to the question about the employees' and board members' experiences related to their work motivation and if gamification could have an impact on it. More detailed information of the research method used in this study is provided in the Methodology chapter in Chapter 3.

Structure of the thesis

The introduction Chapter 1 provides a short introduction into the key concepts of this study, the background and the motivation for conducting the study from the society need and from my personal perspective. The literature used in this study is reviewed in Chapter 2 including research articles on motivation and gamification mainly from international scientific journals and books on those two fields. Chapter 3 introduces the qualitative research method which was chosen to be used in this study and states why an exploratory case study was selected as the research approach. It describes how the empirical data of this study was collected by using

semi-structured interviews and how the collected data was analyzed. Verification of the results is also included in this chapter. Chapter 4 reveals the results of this study and Chapter 5 is dedicated for the final discussion.

2 Literature Review

This chapter defines the key concepts of the study and presents the literature review. The key concepts are employee motivation and gamification and they are defined in the following sections. The theoretical framework of the study is presented in the last section of this chapter.

2.1 Employee motivation

2.1.1 Definition

According to Muogbo (2013), in the view of Bulkus and Green (2009), the word motivation is derived from the word motivate, which means a push or an action to proceed for accomplished a want. According to Hanaysha and Majid (2018), Chaudhary and Sharma (2012) also stress that the word motivation commence from the conception of a motive which characterizes a person's needs and drives, which are vital for achieving specific desires.

Motivation is not performance nor behavior itself; it concerns action and the external and internal forces which affect an individual's choice of action (Azar and Shafighi 2013; Osabiya 2015). According to Srivastava and Barmola (2011), Vroom (1964) defines motivation as the choices that people make among other forms of participatory activity. A plain definition of motivation is "something which makes people put real effort and energy into what they do" (Srivastava and Barmola 2011, 106). When defining motivation, it is important to take into account that what is important motivator to one might not be important to another (Azar and Shafighi 2013).

There are many definitions of employee motivation in literature. George (2013) defines employee motivation as a reflection of the stage of the engagement, energy

and creativity which they bring to their jobs. According to Srivastava and Barmola (2011), Pinder (1998) propose employee motivation to be a set of forces locating both in and outside of the individual and triggering a person's work-related behavior as well as specifying their duration, direction, form and intensity. It is the force that makes employees reach towards the objectives and goals set by the organization (Shahzadi, Javed, Pirzada, Nasreen and Khanam 2014). According to Korzynski (2013), Nohria, Groysberg and Lee (2008) define employee motivation as set of following components: commitment, engagement, satisfaction, and individuals aim to either stay or leave the company. It can also be described as an inner will to express his or her knowledge and skills to achieve a given goal for a certain reward (Hanaysha and Majid 2018).

2.1.2 Motivation theories

The concept of motivation has been studied by multiple psychologists, and they have conducted many theories. These theories are guidelines for the employers to find the best ways to motivate their employees in all their work. (Sandhya and Kumar 2011.)

Maslow's Hierarchy of Needs

Maslow's Hierarchy of Needs is the most famous motivation theory in the world (Osemeke and Adegboyega 2017). The basic idea of this theory is the assumption that people try to satisfy their basic needs before reaching the more developed needs (Vito, Brown, Bannister, Cianci and Mujtaba 2016). According to Sandhya and Kumar (2011), Maslow (1943) describes the needs as a pyramid divided in five levels. These five levels are arranged in a hierarchy of their importance for people (Osabiya 2015).

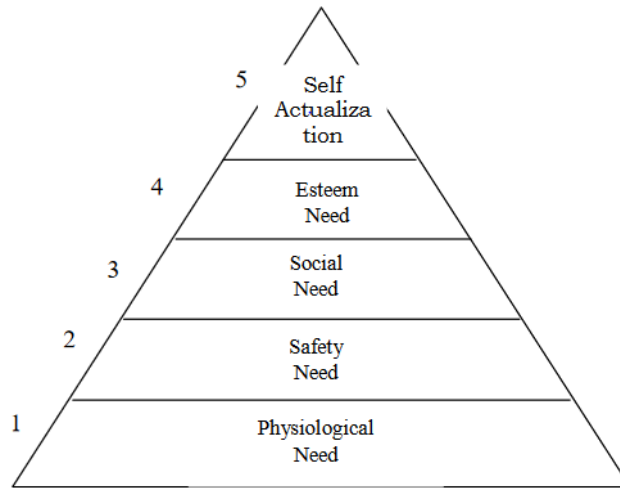


Figure 1. Maslow's Hierarchy of Needs (Adapted from Chukwuma and Obiefuna 2014)

If employee's Physiological Needs are not satisfied, the focus on their job will come decrease. Safety Needs point to all those factors that affect the employee's well-being, such as personal and financial security, health, and family issues. Social needs make it important to employees to feel that belong to their work community and will be identified with the rest of the workforce. Esteem needs give the employee a feeling of being important and providing them opportunities to participate. The highest stage, Self-actualization, is the stage where employee's full potential is achieved in their career and in their personal life. (Sandhya and Kumar 2011).

Before Maslow published his theory, most of the employers assumed that money was the primary source of employee motivation, and this theory presented a new and workable framework for them (Chukwuma and Obiefuna 2014). The guideline given in the theory was to find the ways to motivate employees by practices and programs which aimed to satisfy unmet or emerging needs (Ramlall 2004).

Maslow's theory is criticized to be flawed on many levels, and the first critique is the impression that there are standardized ways and solutions for employee needs (Dartey-Baah and Harrley 2010). According to Dartey-Baah and Harrley (2010), Martin (2005) argues that employee attitudes and motivation are influenced by their age, time, work experience and type of job among other things. Maslow's theory also stresses that people's needs are mainly satisfied through their work and this is

criticized by Dartey-Baah and Harrley (2010) because people will not satisfy their needs only through their work. The truth is that people can experience high-level motivation anywhere and anytime (Osemeke and Adegboyega 2017). According to Dartey-Baah and Harrley (2010), Martin (2005) emphasize that there is no clear separation between the behavior and the needs and this is why the application of standardized solutions is not possible. Maslow's theory is based on the idea that it applies to everybody, and this attracts criticism that it is not able to explain the variations between different cultures and individuals (ibid.).

Herzberg's Two Factor Theory

Herzberg was one of the earliest researchers studying job redesign and its affection on motivation (Ramlall 2004). He developed a theory called Two Factors, which is similar to Maslow's theory (Vito et al. 2016). According to Ramlall (2004), these two sets of factors are called Hygiene factors and Motivator factors. The Hygiene Factors are related to Maslow's bottom levels were the Motivating Factors are similar to Maslow's higher levels, and will produce the most motivation, along with strong commitment and satisfaction (Vito et al. 2016).

According to Ramlall (2004), Steers (1983) emphasizes that the Motivating Factors include satisfying employee experiences, such as recognitions, achievements, advancements, responsibility, and the work itself. Hygiene Factors on the other hand, include dissatisfying experiences resulting from non-job-related factors, such as relations, management styles, coworker relations, company policies and employee relationships. The factors that lead to job satisfaction are distinct and separate from those that lead to job dissatisfaction (ibid., 57).

According to Ramlall (2004), Steers (1983) stresses that the motivation and satisfaction appear only when using Motivators. By having evenly less Motivators and Hygiene factors employee has less job satisfaction and higher job dissatisfaction, just as by having more Motivators and Hygiene factors he or she will have higher job satisfaction and virtually no job dissatisfaction (Vito et al.2016). Determination of the reasons of dissatisfaction will not automatically result in a stage of satisfaction or motivation but lead in a neutral stage (Ramlall 2004). The implication of Two Factor

Theory is clear; motivation can increase through changes in the employee's work and that is why jobs should be re-designed to allow raised responsibility and challenge. Moreover, this creates favorable circumstances for the employee's personal growth and recognition (ibid., 57).

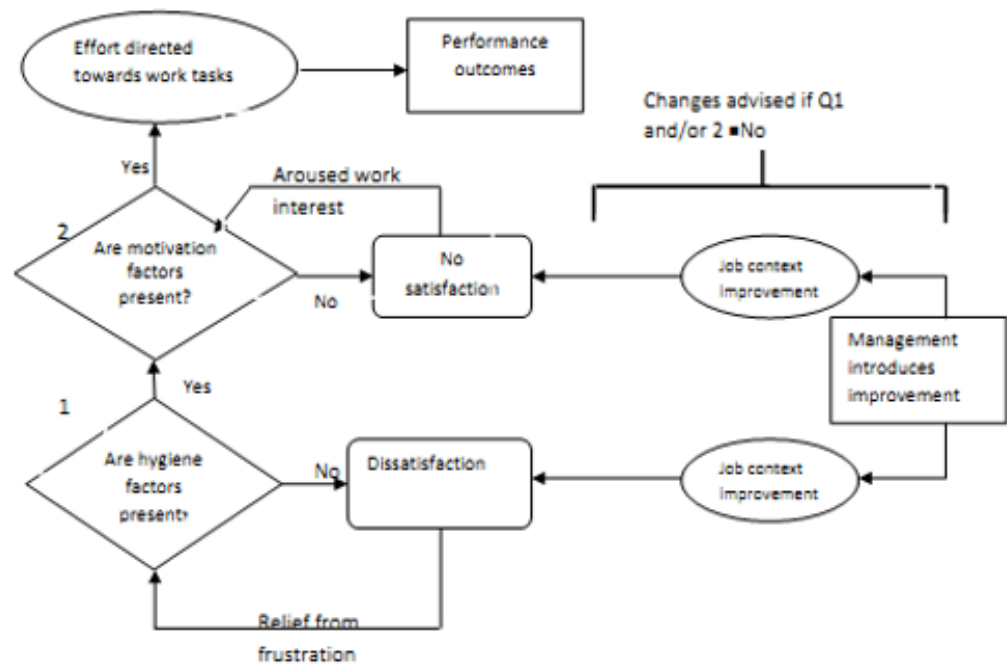


Figure 2. Herzberg's Two Factor Theory of motivation (Adapted from Bloisi et al. 2003)

Many researchers have criticized Herzberg's theory and stated that it explains job satisfaction but not employee motivation (Osemeke and Adegboyega 2017). According to Dartey-Baah and Harlley (2010), Bowen (1980) stresses that the theory is not applicable to all categories of workers since it was created by studying engineers and accountants. The methodology of Herzberg's research, the critical incident technique, is being questioned by scholars since it can cause people to remember the most current experiences (Osemeke and Adegboyega 2017). Despite criticism Herzberg's theory is a fine attempt to virtually look at the study of motivation (Dartey-Baah and Harlley 2010). Moreover, according to (Osemeke and Adegboyega 2017), Sungmin (2009) emphasize that most researchers consider Herzberg's theory the best model of predicting employees' job satisfaction.

McGregor Theory X and Theory Y

McGregor published a philosophy that sets a great contrast between two different types of employees and the way these groups should be managed at work (Osabiya 2015). According to Kananen and Akpinar (2015), McGregor classifies people as either as work shy (employees in Theory X) or as committed and self-directed (employees in Theory Y). How employees are valued and treated in their work matters the most in these theories (Chukwuma and Obiefuna 2014).

The first theory is the Theory X category which refers to an authoritarian management style and assumes that employees in this category do not like to go work, they try to avoid their responsibilities, and the only way to make them accomplish their job well is the threat of punishment (Sandhya and Kumar 2011). According to Osabiya (2015), Bloisi and others (2003) emphasize that Theory X sets the assumption that people act in order to realize their basic needs, and this why they do not voluntarily commit to their employer's aims. They have a lack of self-motivation, and for this reason, managers need to motivate them to work (Sandhya and Kumar 2011), which can be done by punishing, rewarding and controlling those individuals who do not strive to grow and learn (Osabiya 2015).

The second theory is Theory Y which assumes that employees are capable of controlling and directing themselves when they are committed to particular objectives (Dartey-Baah and Harlley 2010), and the management's task is to facilitate them to act towards their high growth needs and allow them to achieve their personal goals and accomplish the employer's objectives (Osabiya 2015). This is called participative management style and it works the best when employees are self-driven and when they are seeking additional responsibilities (Sandhya and Kumar 2011).

Goal Setting Theory

Locke and Latham have incorporated almost 400 studies about goals (Lunenborg 2011) and premised that performance and motivation are higher when an individual has a specific goal to achieve, and feedback from his or her performance is available (Osabiya 2015). Humans are directed by intentions and conscious goals, and those

affect people's choices of tasks. Furthermore, task performance is the basis for direct behavior and motivation (Srivastava and Barmola 2011). Nearly every modern company has some form of goal setting in their operations, and it can be a powerful technique for motivating employees when it is used under the right conditions (Lunenburg 2011).

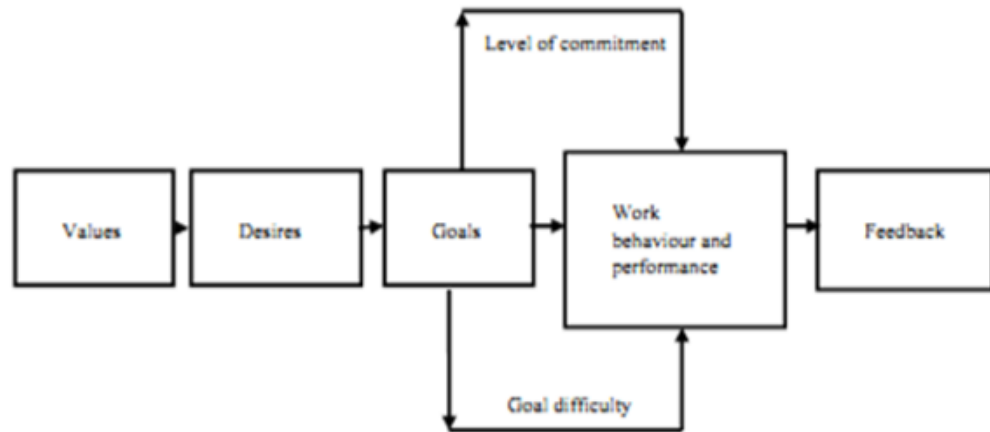


Figure 3. Illustration of the Goal Setting Theory (adapted from Mullins 2015)

There are conditions that need to be met before achieving the positive influence of goal setting performance: performing employees must be aware of set the goal and what needs to be achieved must be clear to him or her. It is also vital that the employees accept the goal. (Srivastava and Barmola 2011). According to Muogbo (2013), Locke and colleagues (2008) highlight the importance of personally meaningful and interesting goals. Goals should be specific and difficult (Srivastava and Barmola 2011), since it is pointed out that employee's with difficult and specific goals are performing better than those with easier and vague ones (Osabiya 2015). The effectiveness of a goal can be improved by setting deadlines. Performance goal orientation leads to lower performance than a learning goal orientation, and group goal setting seems to be as important and effective as individual goal setting. (Lunenburg 2011).

According to Lunenburg (2011), Locke and Latham (2002) admit that there are some limitations in the goal setting process. If goals are combined with a monetary reward, it can motivate the employees to set too easy rather than challenging goals, and this may even lead to behaviour where the employees try to convince a manager to set a goal that has been already achieved. Goal setting can focus too much on measuring

performance indicators and ignore the aspects of job performance that are difficult to measure, and that can lead to the problem of “what gets measured is what gets done”. The third limitation is that goal setting is not necessarily an effective motivator when employees are learning new complex jobs and that is why it should be used only in established jobs. (ibid.,5.).

2.1.3 Extrinsic and Intrinsic Motivation

According to Shahzadi and others (2014), Williams (2004) highlights the importance of the continuous work of an organization to keep their employees working (salary, bonuses etc.), but a much more important factor to keep them engaged and involved in their work is motivation which can be either extrinsic or intrinsic. According to Osemeke and Adegboyega (2017,) Osterloh and Frey (2007) stress that extrinsic motivation is defined as the influence coming from an external source and Warr, Cook and Wall (1979) define intrinsic motivation as a stage where a person wants to perform well from his or her perspective to achieve inner satisfaction.

According to Kalhoro, Jhatial and Khokhar (2017), Khan and colleagues (2013) have discovered that both types have alike importance to employee motivation. According to Shahzadi and others (2014), Scott and Bruce (1994) emphasizes that rewards, both extrinsic and intrinsic, are very meaningful to employees. The sources of extrinsic motivation are such things as money and grades, whereas intrinsic motivation comes from the joy and satisfaction achieved from accomplishing certain work task.

According to Kalhoro and others (2017), Tahir (2011) has identified the extrinsic factors as fundamental ones, whereas the intrinsic factors are crucial for providing the inner motivation. Kalhoro and colleagues (2017) and Shahzadi and others (2014) present the hypothesis that extrinsic and intrinsic motivation are both significantly and positively related to employee performance.

2.1.4 Factors affecting on employee motivation

No one works for free, nor should we expect them to do so (Manzoor 2012).

According to Muogbo (2013,) Sara and others (2004) stress that there is no other motivational tool or incentive that comes even close to it when measuring the

influential value. Money has supreme to fascinate, maintain and motivate employees towards higher performance (Manzoor 2012). According to Manzoor (2012), Kalimullah and colleagues (2009) state that research has suggested that reward causes satisfaction to employees and this directly effects on their performance and Reena and others (2009) are pointing out that all businesses are using promotions, bonuses and other types of monetary rewards to encourage and motivate employees towards high level of performance. According to Muogbo (2013), Adeyinka and others (2007) suggested that when salaries are used as a motivational incentive, managers should consider salary structure which include payment according to employee performance, benefits, special or personal allowances, pensions and so on. According to Hanaysha and Majid (2018) Delaney and Huselid (1996) agree that employers can increase the employee motivation focusing on a reward system on a continuous basis. According to Cerasoli, Nicklin and Ford (2014), Condly, Clark, and Stolovitch (2003), Jenkins and others (1998) imply that at least two meta-analyses have found that providing financial incentives is associated with higher performance of employees backing these believes. Not all agrees with the power of monetary rewards being the most powerful one. Armstrong (2012) reminds that people are not equally motivated by money and he is stressing that it is naive to think that it will transform everyone as motivated and high performing employee. Motivators such as money can have a powerful and immediate affection, but they will not last long (ibid., 10).

According to Mougbo (2013), Rukhmani (2010) stresses theories to indicate that leader and followers increase one another to higher levels of motivation. Emeka, Amaka & Ejim (2015) claim, that motivation is simply and purely a leadership behaviour and it originates from a want to do what is right for the organization and for people. According to Manzoor (2012), Baldoni (2005) states that motivation and leadership are active processes. Armstrong (2012) emphasizes that leadership is enhancing the motivation by setting direction, stimulating, and encouraging achievement, providing support for employees and improving their performance broadly. It is important for leaders to know each of their employees to understand what motivate each one individually (Osabiya 2014).

According to Osabiya (2014), Mullins presents that Cartwright (1999) revealed nine key motivational factors: (1) Identification; motivation through influencing others and get influenced by others (2) Equity; a balance between expectations and rewards; notion what is fair (3) Equality; everybody should be treated with same respect and equal pay for equal employees should be used (4) Consensus; deep mutual understanding (5) Instrumentality; a device or a tool by which something is effected (6) Rationality; scientific approach to problem-solving and management which is highly motivating (7) Development; self-improvement as a motivator, developing employee through education or training (8) Group dynamics; group motivation created through commitment towards mutual goals, individual loyalty to the group and consensus (9) Internalisation; determining employee attitude, behaviour, conviction and it is the most permanent and powerful of all nine motivational factors.

People's drive to bond is a very important factor for motivation (Korzynski 2013). According to Emeka and others (2015), Egwurudi (2008) emphasizes that sense of belonging, delight and enthusiasm will make employees to execute their finest novelties and this is supported by Korzynski (2013) who stresses that many scholars underline the importance of belongingness as a vital issue for employee motivation. Organization's values and norms are influencing on employee motivation and motivation is higher in companies which are valuing and rewarding their employees. A reasonable degree of employee autonomy and using the competences and skills are affecting on employee motivation. (Armstrong 2012).

2.2 Gamification

2.2.1 Definition

Gamification is a relatively new concept and several attempts have been made to define it though there are still quite few definitions available in the literature (Kamel, Watfa, Lobo and Sobh 2017). According to Kim and Werbach (2016, 157), Deterding and others (2011); Werbach and Hunter (2012); Werbach (2014) define gamification also known as gameful design as "use of elements and techniques from game design in non-game context. This definition recognized the four fundamental components of

gamification. First component; gamification deals with gaming as reversed to playing; gaming refers to playing within a set of rules with a target of obtaining specific outcome whereas playing refers to expressive and improvisational behavior. The second component is the design; gamification refers to the use of only some set of game elements unlike traditional games. Together these two compose the third component, which refers to the features or characteristic that can be found in most games or contribute to gameplay such as game mechanics, conceptual principles and models and design patterns and methods. The fourth component is its use in a nongame context. (Lowman 2016). The last component and aspect of definition of gamification is vital because it draws a line between gamified systems and games, shifting the focus from creating and entertaining a full gaming experience to studying the ways how game elements influence the behavior (Shpakova, Dörfler and MacBryde 2017).

According to Hamari (2015, 7), Huotari and Hamari (2012) define gamification as “a process of providing affordances for gameful experiences which support the customers’ overall value creation”. The main way the definition made by Deterding and others (2011) and Huotari and Hamari (2012) differs from each other is the point where the ‘gamefulness’ demonstrates. Deterding and colleagues (2011) states that the gamefulness is situated in the system design whereas Huotari and Hamari (2012) proposed that the gamefulness emerges from the psychological consequences which conduct from using the gamified system. (ibid.,7).

According to Shpakova and others (2017, 145), other known definitions are “Applying game-like accelerated user interface design to make electronic transactions both enjoyable and fast” by Pelling (2011), “The process of using game-thinking and mechanics to engage users” by Zicherman and Cunningham (2011), “ The use of game mechanics and game design techniques in non-game contexts to design behavior, develop skills or to engage people in innovation” by Burke (2012).

Table 1. Elemental aspects of definitions of gamification by Detering and colleagues and Huotari and Hamari (Hamari 2015, 10)

Source	System elements / affordances	Psychological mediators / outcomes	Behavioural outcomes / goal	Context of gamification	Focus of the definitions
Detering et al. (2011)	"game design elements" – elements that are characteristic of games	N/A	N/A	"non-game contexts" – Argumentation by the authors: adding game design in games is paradoxical	System
Huotari & Hamari (2012)	"(motivational) affordances" - not explicitly restricting the set of design elements	"gameful experiences" – referring to, but not limited to, a set listed in Table 1	"value creation" – derived from service marketing literature with the aim to refer to whatever set of activities that are gamified	N/A – Argumentation by the authors: it is impossible to objectively distinguish a game and a non-game context since the experience of 'gamefulness' is subjective and experiential	User experience

2.2.2 Game elements

To create a game that user will find motivating is essential to understand what constitutes an effective game and what are the game elements. An effective game root in user senses of problem-solving or curiosity, accomplishment, autonomy and finally mastery. Games should provide immediate feedback from user's success or failure, which increment user's motivation to continue to play. Usually games begin with a story which offers context to the game and a challenge for the player. (Washburn 2017).

According to Sailer, Hense, Mayr and Mandl (2016), Detering and colleagues (2011) as well as Werbach and Hunter (2012) emphasize that game elements are the base and the building blocks of all gamification applications. When talking about game elements researchers usually refer to such components as points, badges, leader boards, progress bars, rating, etc., but diversity of game elements expands beyond these most commonly cited types (Shpakova et al. 2017). According to Kananen and Akpinar (2015), Hamari and others (2014) lists ten game elements which can be used in gamification: a story or a theme, clear goals, points, achievements and or badges, rewards, progress, leaderboard, feedback, levels and challenges. Researchers follow diverse strategies in their attempts to create lists of elements; one is to create

permissive sets of elements which can be found in any game. Second strategy is to provide constrained element set which are unique to a particular game. (Sailer, Hence, Mandl and Klevers 2013). Game elements are classified by their level of abstraction, but there is a disagreement in the terminology and in the levels in the literature (Shpakova et al. 2017). For example; according to Shpakova and others (2017), Zicherman and Cunningham (2011) and Werbach and Hunter (2012) are the authors of two most commonly cited books and they are defining three levels, but in dissimilar way; Zicherman and Cunningham (2011) call points and badges mechanics whereas Werbach and Hunter (2012) refer them as components. Despite the differences all authors acknowledgement such elements as leaderboards, points, and badges, and these are the basic building blocks and the constitute, the objects that user is interacting with (ibid.,147).

2.2.3 Gamification of labor

Gamification is everywhere; it can be found in companies HR, in sales and marketing, in recruitment, in schools, in kindergartens and in universities. It is introduced where motivation is missing. (Sobocinski 2017). It has demonstrated positive prospects since its advent in 2002 and it was estimated to gain market growth of 5 billion dollars by the year 2018. This reflects the expand use of gamification for companies to retain and engage workforce. It is well acknowledged tool for employee development in terms of learning, skills development, and behavior modification. (Bhattacharyya, Jena and Pradhan 2018). Gamification is not only about fun, it is a factor on the way, not the actual goal (Sobocinski 2017).

By raising engagement and motivation companies want to change the behavior of participants (ibid.,136). According to Kim and Werbach (2016), Hamari and colleagues (2014) emphasize that gamification can efficiently motivate employees to perform certain behaviors that employer want them to perform while gameful elements increase excitement and workplace morale. According to Kamel and others (2017), Hay (2014) highlights gamification in the context of increasing and enhancing employee involvement and response in corporate data governance implementation. Washburn (2017) stresses that gamification achieves behavioral changes in three crucial ways – through a person’s behavioral, motivational and abilities triggers. All

these elements need to be addressed to change the behavior, even if there are trade-offs between ability levels and motivations that needs to be taken into consideration. A person with strong ability tends to require less motivation to accomplish a task, because he or she will find it relatively easy to perform, meanwhile a person with less ability will most likely require growth motivation to accomplish same task because of the challenge and difficulties it presents. (ibid., 47). According to Kumar and Raghavendran (2015), Pink (2009) stresses that gamification mechanics work efficiently in roles which are transactional, instead of roles which demand autonomy, mastery and a sense of purpose. In that kind of roles, intrinsic motivation and positive inner work life need to work together to trigger fundamental changes in organizational culture that support autonomy, mastery and meaning. (ibid.,4).

Before a company launches gamification initiative it is important to plan it well with bright understanding of the company's goals and objectives for pursuing the initiative. Managers need to think carefully if gamification is appropriate and are the employees ready for such an innovative and new approach. (Washburn 2017). It is preferred that employees should be involved in the design of gamification. Without coordinating their needs, activities to be supported and their work context, gamification might most likely fail. It should not be seen as a magic tool for employee motivation but as a means to be deliberately and cautiously incorporated into organizational structures to support a motivational culture. (Kamel et al. 2017).

It should be noted that gamification does not necessarily suit every company's challenge. According to Kumar and Raghavendran (2015, 3), Werbach and Hunter (2012) stresses the best candidates are processes that address four core questions:

- 1. Motivation: Where would you derive value from encouraging behavior?*
- 2. Meaningful choices: Are your target activities sufficiently interesting?*
- 3. Structure: Can the desired behaviors be modeled through a set of algorithms?*
- 4. Potential conflicts: Can the game avoid conflicts with existing motivational structures?*

Serious consideration needs to be given to wide scale of motivations people might have to participate and play the games because what motivates one individual might

not work for another. That is why it is important to recognize different personality types in the company or department targeted for gamification and understand their possible dissimilar motivational triggers. (Washburn 2017).

2.2.4 Impacts of gamification on employee motivation

Positive impacts

According to Hyrynsalmi and others (2017), Hamari, Koivisto and Sarsa (2014) state that gamification have been showed to increase the motivation of, e.g., improving performance and motivation. All kind of contest about scores, points, levels etc. which are part of the games stabilize motivation. Success, incentives, and respect - all enabled by clear marks like rewards, badges or feedback results positive motivation. (Robra-Bissantz and Lattemann 2017). According to Sailer and colleagues (2016), Antin and Churchill (2011) as well as Hamari (2013) underline that badges symbolize players membership in certain group of those who own this particular badge and they can exert social influences on player, especially if they are hard to earn or rare. Badges, performance graphs and leaderboards seem to contribute to an increment in perceived task meaningfulness and they can create social pressure to increase employee's level of engagement, learning and participation. (ibid., 378). Progressing elements together with a background story and roles that divert from the surrounding real world may lead to creativity, divergent thinking, and motivation. (Robra-Bissantz and Lattemann 2017). Gamification leverages social media to raise the power of social circles, which impacts positively on motivation by allowing users to enlist encouragement from friends and co-workers amplifying the value of what they have achieved (Burke 2014).

Gamification can be used to make boring and monotony job tasks fun and so increasing the employee satisfaction and effectiveness. According to Augustin and others (2016), Flatla and colleagues (2011) highlight that empirical findings indicate that use of game elements into monotone and repetitive tasks will make them more pleasing for employees. According to Kananen and Akpınar (2015), Csikszentmihalyi (2008) emphasizes that a continuous challenge providing for players will keep the motivation levels high.

Good example of this type of gamification can be found from United States. By the mid 2000's North American retail company Target added game mechanics to their checkout lines to decrease the customer complaints about slow checkouts. Game was simple; it showed the appropriate rate of speed per each customer transaction to the cashier and it was a success, it made checkout lines move faster than ever and game is still in the use today. (Kim 2018). According to Kim (2018) Zicherman and Linder (2013), report that Target employees took personal pride in their high score results and better still beating them. Augustin and other (2016) stress that gamification helps to make non-game applications more engaging and motivating for the user. As Target's game shows very simple game elements can provide a huge different and, as according to Kim (2016, 29), Edery and Mollick (2009) say: *"[g]ames can cause people to do amazing things, purely for the sake of fun."*

Negative impacts

Despite of positive results mention above, all employees will not respond to gamification. According to Spencer (2013), Croson and Gneezy (2009); Niederle and Vesterlund (2013) point out that women are less likely to participate in competitive situations than men. Some employees can feel that gamification is too childish for them and this can easily block the motivation effect. This is a fact that needs to be taken into the serious consideration when aiming to increase the work motivation in general and the motivation to use company's systems. (Augustin et al. 2016) Gamification can increase perceptions of selfishness and unfairness (Spencer 2013). According to Hyrynsalmi and others (2017), Marlow, Salas, Landon, and Presnell (2016) emphasize that gamification can present competing interests against teamwork; situation like this can appear if game elements are profitable for single person, thus effecting negatively on team performance. It is also important to note that even if gamification is often used to motivate the player, it does not add anything extra if there is already enough motivation to accomplish a certain task (ibid.)

According to Sailer and colleagues (2016), Werbach and Hunter (2012) stress that leaderboards can act as demotivators if players found themselves at the end or at

the bottom of the leaderboard. According to Kim (2018, 29), Robertson (2010) calls gamification "*pointsification*" and emphasizes that it lacks genuinely important motivation elements other than badges and points. According to Hyrynsalmi and others (2017), Knaving and Björk (2013), Silpasuwanchai, Ma, Shigemasu, and Ren (2016) emphasize that users might start optimizing the end-result of the game for example their positions in leader boards and not the actual work task at hand. There is also place for ethical consideration when gamification encounter with areas such as game addiction and gambling (ibid.).

One demotivator in gamified systems can be the fact that employees make real change increasing the productivity of their job but may receive only virtual rewards such as badges and points, not real rewards like money (Kim and Werbach 2016). According to Kim (2018, 29), the leading persuasive game designer Bogost (2011a, 2014) criticized the gamification of labor calling it "*exploitationware*" and abusive digital work motivation system. Attaching numerical scores to employee's productivity can be seen as an act which expresses inappropriate attitudes such as insult, humiliation and offense (Kim and Werbach 2016). According to Kamel and colleagues (2017), critics are calling gamification as a buzzword that companies are using as their marketing tool and argue that gamification cuts motivational factor of games to a numbers of ineffective game mechanics that are not adequate to motivate employees.

According to Kim and Werbach (2016, 166), and Kim (2018, 29), Lopez (2011) highlights the story of Disneyland in California introducing the gamification for its laundry and housekeeping staff. The game generated embarrassment, shame and anxiety among the employees who called it "*the electronic whip*". Because of the game employees started to skip their breaks in panic, having a major concern that the game might cause them to lose their jobs.

2.3 Theoretical framework

Based on the literature reviewed in section 2.2, it can be stated that there are many different theories about employee motivation. Based on these factors, new tools for increasing motivation in workplaces are created and introduced to the managers.

Gamification is a relatively new motivational tool, and it is used to improve motivation by providing the player with such elements as challenges, goals and immediate feedback which are the motivational factors identified in many motivational theories. These elements are all present in Csikszentmihalyi's Flow Theory which was chosen to be the theoretical framework of this study. Besides motivational factors mentioned above, according to Shernoff, Csikszentmihalyi, Schneider and Steele Shernoff (2003), Csikszentmihalyi (1997) stresses that also interest in, concentration on and enjoyment in the activity need to be experienced in order for flow to occur.

For gamification, it is expected that the impacts of intrinsic rewards could be explained by the concept of flow (Bittner & Schipper 2014). According to Paras and Bizzocchi (2005), researchers suggest the Flow Theory for implementing and understanding motivation. According to Bittner and Schipper (2014), Muntean (2011) stresses that using of game elements is expected to enable individuals to experience flow. This state can be achieved by achieving a balance between frustration and boredom during a task (ibid.) According to Urh, Vukovic, Jereb and Pintar (2015), McGonigal (2011) states that the feeling of flow in gamification is triggered by four elements that good games have in common: voluntary participation, rules, goals and feedback.

Flow Theory

According Nakamaru and Csikszentmihalyi (2014), Getzels and Csikszentmihalyi (1976) emphasize that Csikszentmihalyi, the creator of the Flow Theory, discovered flow when he was researching a creative process in the 1960s. When an artist working on a painting was doing well, he persisted single-mindedly, disregarding fatigue and/or hunger and irritation. However, the artist immediately lost interest in artistic creation when the work was done (ibid.) According to Kananen and Akpinar (2015), Csikszentmihalyi (2008) describes The Flow to be a state of mind where a person is focused on one activity. According to Bittner and Schipper (2014), Csikszentmihalyi (1991) stresses that Flow puts people into a state of intense concentration, absorption and with the simultaneous loss of self-monitoring. According to Shernoff, Csikszentmihalyi, Schneider and Steele (2003), Shernoff

(2003), Nakamura and Csikszentmihalyi (2002) highlight that the activities will become worth of doing for their own sake since, they are pleasurable when people are performing in a flow state. A symbiotic relationship between the challenges and skills for meeting them is the base of the Flow Theory, and flow will occur when a person stretches the limits of his or her abilities to meet challenges so that skills are neither underutilized nor overmatched (ibid.).

According to Silberschatz (2013), Sato and Han stress that it has been demonstrated that flow is recognised across a wide spectrum of cultural and social groups from Japanese motorcycle gangs all the way to American and Italian high school students, to name only a few. Age, gender or ethnic background do not seem to matter either. Csikszentmihalyi noticed this and the fact that the same factors resonated with people irrespective of whether they were doing completely different things while he conducted his studies on the Flow Theory. (Beard 2014). Over the years, Csikszentmihalyi refined the Flow theory by defining its nine dimensions:

“(1) challenges and skills are balanced, enabling the establishment of (2) clear goals with (3) immediate feedback. These dimensions allow for (4) the merger of action and awareness, a level of involvement that creates (5) a sense of control, (6) excludes distractions from consciousness, and (7) eliminates self-consciousness. This generally coincides with (8) a distortion of one’s sense of time. Finally, the experience is described as (9) ‘autotelic’ or ‘enjoyable’ in itself. “ (Silberschatz 2013, 15).

According to Beard (2014), Csikszentmihalyi has claimed that the Flow theory can point the way wherever there is a need for improvement in life. According to Paras and Bizzocchi (2005), Chan and Ahern see the Flow Theory as a method for implementing and understanding motivation; because it explains the phenomenon that many people feel when they reach the state where there is a pure balance between frustration and challenge and where the end goal is so clear that obstacles fall out of view. Since a flow state is intrinsically rewarding to people and it leads them to seek new challenges, this will develop their skills and capacities (Shernoff et al. 2003).

Use of the Flow Theory in an empirical study

As described earlier, there are several motivational factors that can link the Flow Theory to gamification and create the feeling of flow for the player as well as

increase their work motivation. According to Bittner and Schipper (2014), Deci and Ryan (1985) emphasize that when people are in a flow state, they feel like time is flying and they are perfectly challenged.

The Flow Theory was chosen to be the theoretical framework of this study, and the empirical part of the study focused on whether flow experiences existed among the employees of the case company and if so, how it impacted on their work motivation. The empirical study of the thesis was conducted by using semi-structured interviews focusing on the following hypothesis related to the elements of the Flow Theory (Nakamaru & Csikszentmihalyi 2014):

- The user has an intensive focus on what he or she is doing at the given moment
- The user's actions and awareness are merging
- The user loses the awareness of oneself as a social actor
- The user feels distortion of temporal experience (usually it feels like time has passed faster than normal)
- The user feels that the activity is intrinsically rewarding so that its goal is only an excuse for the project

3 Methodology

According to Silverman (2006, 13), methodology is *"A general approach to studying a research topic"*. It refers to all decision that researchers need to make about their study; what methods to use for data gathering, forms of data analysis, planning and then conducting the study (ibid.).

A research method is a specific research technique (ibid.). Research method literature classifies three research purposes: explanatory, exploratory, and descriptive, although research can sometimes have more than one purpose. The exploratory approach can be used to find answers to the questions how and why (Saunders, Lewis and Thornhill 2009,139, 142). Therefore, the research question of this study *"How would gamification impact on work motivation?"* fits in the

exploratory category. The exploratory approach is flexible and open towards the research phenomena (Swanborn 2010, 30) and according to Saunders and colleagues (2009, 139), Robson (2002) defines exploratory study as very important way to find new insights or discover what is happening.

3.1 Research approach

The qualitative research approach was chosen to be the research approach of this study. The qualitative research approach is naturalistic, meaning that the researcher does not try to affect or manipulate the phenomenon of interest and that it always takes place in a real-world setting (Patton 2002, 39). According to Adams, Khan and Raeside (2014), qualitative research aims to describe reality as it is experienced by the informants and to explore social relations. The goal of qualitative research is to describe, understand and sometimes explain social phenomena from the inside in multiple different ways: by analysing individuals or groups experiences, communications and interactions or by analysing documents or comparable traces of experiences or interactions (Flick 2018, 5). According to Silverman (2006), the main power of qualitative research is its capability of studying phenomena which are simply non-existent elsewhere.

The qualitative research approach fits to the research question of this study since the research question is about finding the answer to people's experiences in their work. In most case studies, the researcher tries to keep a maximal openness towards unknown aspects, which implies for most cases an exploratory approach (Swanborn 2010, 17) which was chosen to be the methodology of this study. The study was cross-sectional case study with semi-structured interviews, and it took place in a specific time horizon which in this case was two weeks.

According to Silverman (2006), when the researcher is interested in concrete facts, such as, for example, students' perceptions of their job prospects, a large quantitative survey with a large number of informants would be more appropriate than a few interviews. In my research, I was interested in concrete facts about peoples experiences and opinions about motivation, but instead of using a quantitative method, I chose a qualitative method based on the fact that my case

company employs only 13 people (including myself). Moreover, I knew that I would be able to interview over half of them, which I considered a good sample size and sufficient for conducting a reliable qualitative study.

3.2 Research context

The research question of this study “How would gamification impact on work motivation” is looking for the answer to the questions “how” which can be answered comprehensively by using the case study strategy. According to Silverman (2013), Punch (1998) points out that the idea of case study is that (only) one case is researched in detail, using methods that the researcher sees to be appropriate for him or her.

According to Adams and colleagues (2014), the case study strategy is usually used in exploratory research which is the purpose of this study and a supportive fact to choose this strategy. According to Saunders and others (2009), Morris and Woods (1991) stress that a case study strategy is a good choice when wishing to gain prosperous understanding of the context of the research and processes it includes. According to Saunders and others (2009), Yin (2003) identifies four case study strategies based on two discrete dimensions as follow: holistic case versus embedded case and single case versus multiple case. Holistic case versus embedded case cite to the unit of analysis. This study is concerned only with one company VAMOK, as a whole, which makes this study a holistic case study.

VAMOK is a service and lobbying organization inside the Vaasa University of Applied Sciences for its students. Its appearance and obligations are based on the law of Universities of Applied Sciences. The student union has approximately 1800 members. VAMOK employs 3 employees, one Executive Director and two specialists. Along with full time employees there are 8 volunteer board members including the chairperson and vice chairperson of the board. All the board members are having their own responsibility areas which they are taking care of. Along with their own responsible areas, all of them are obligated and engaged to take part of the general actions that are not specified under any of the board member responsibilities. Where

the employees are receiving normal monthly salaries, board members, excluding the chairperson of the board (who are paid monthly) are receiving small monetary reward from their service twice a year. Board members are also rewarded by the Vaasa University of Applied Sciences with ECTS, that they can include into their study records as part of their elective studies.

3.3. Data collection

The qualitative data collection is the production and selection of semantic or visual material for analyzing and understanding social fields, phenomena, collective and subjective experiences, and the related meaning-making processes. It aims to provide material for an empirical analysis of the researched phenomena. (Flick 2018, 7). There are three data collection methods commonly used in case study research: observing, interviewing and document analysis.

Since I am working in my case company, I would have had a good opportunity to conduct my study combining two methods: interviewing and observation. After considering this for some period of time, I came to the conclusion pointed out by Silverman (2006), that combining two methods usually only complicate researcher life and end up being too time consuming. This why I gave up of idea to collect any data by observing people and conducted data collection only by using interviews.

According to Simons (2009, 43), Patton (1980) and Rubin and Rubin (1995) stress, that interview can vary from structured to unstructured interviews, each having different purposes and types of questions to ask. According to Silverman (2006), Noaks and Wincup (2004) share interviews in 4 different types; structured-, semi-structured-, open-ended – and focus group interviews. All these types are requiring different skills from the interviewer.

Table 2. Typology of interview strategies (adapted from Noaks and Windcup 2004).

Type of interview	Required skills
Structured interview	Neutrality; no prompting; no improvisation; training to ensure consistency
Semi-structured interview	Some probing; rapport with interviewee; understanding the aims of the project
Open-ended interview	Flexibility; rapport with interviewee; active listening
Focus group	Facilitation skills; flexibility; ability to stand back from the discussion so that group dynamics can emerge

Semi-structured interview was selected as the data collection method of this study. This is because semi-structured interviews have a specific research agenda and they are focused yet allows interviewee answer with their own words and in their own time. It is not necessary for interviewer to ask questions in the same way from all interviewees, but semi-structured interview structure ensures that all the important information will be collected. (Holloway 1997, 95).

The empirical data was collected from people working at VAMOK and it includes primary data. The data was collected by using semi-structured face to face interviews. Interviews were audio recorded which is progressively important part of the qualitative research (Silverman 2006). Interviews were transcribed word -for - word into written form in Word document. Language used in interviews is Finnish which is the native language of the informants and mine as well. Seven people were interviewed. I wanted to collect information from people in various roles to get a holistic picture of possible impacts of gamification on work motivation.

Interviewees should be knowledgeable and experienced in the area that research is about. This is critical to make sure that research results are convincing. (Rubin and Rubin 2005, 64-65). I interviewed two employees, chairperson of the board, vice chairperson of the board, one board member, chairperson of representative body and vice chairperson of representative body. Interviews were conducted in VAMOKs office throughout 2 weeks' time. The length of the interviews varied from 35 to 80 minutes. The interviews were conducted anonymously to encourage the informants

to share their experiences more willingly than under their names. Interview questions can be found in Appendix 1. Number of the interviewees is based on the fact, that after conducting these seven interviews, similar type of answers and themes started to occur in every one of them, and it seemed like no new information could be received by conducting more interviews.

3.4 Data analysis

According to Saldana (2011, 93), unlike quantitative research, qualitative research has no standardized methods of data analysis though there are primary methods that are applied during a qualitative study. According to Holloway (1997, 34), content analysis is *“a form of analysis which is applied to the content of documents or other form of communication”*. According to Silverman (2006, 163), Marvasti (2004) points out that there is no doubt that content analysis has advantages for qualitative research: *“the method offers convenience ... in simplyfying and reducing large amount of data into organized segments.”* The content analysis is a systematic way to conduct analysis and that is why it was chosen to be used as analysing method in this study. While conducting a content analysis, a researcher is creating a set of categories and then counting the number of cases that belongs to each category. (ibid.) For my content analysis categories I chose to use the nine dimensions of the Flow Theory which is the theoretical framework of this study. Along with them I used negative and positive thoughts, and general concerns of gamification as three more categories in my analysis. I used Excel for coding instead of any software planned for that purpose. All the codes were determined by the research question *“How would gamification impact on work motivation”* and the Flow Theory which is the theoretical framework of this study.

3.5 Verification of results

Holloway (1997, 159), stresses that reliability together with validity are important elements to establish the authenticity and the truth of research. The reliability of qualitative research is often questioned. The quality of the research refers to the transparency of the whole process; credibility pertains to the validation of findings and results. These issues have been associated with discussions of the reliability of

methods and validity of data for a long time. (Seale, Gobo, Gubrium, and Silverman 2004, 377). According to Holloway (1997, 159), Kvale (1989) and LeCompte and Preissle (1993) see the terms of reliability and validity as justifiable in all research. According to Holloway (1997), Kirk and Miller (1986) and Maxwell (1996, 1992) disagree for the retention of these concepts in the qualitative research, though agreeing that the qualitative research use distinctive procedures to establish reliability and validity, than those who use quantitative approach. Thus, there are two main strands of thought of validity and reliability of qualitative research (ibid., 159).

According to Fielding and Warnes (2013), Yin (2003) highlights four tests to evaluate empirical case-based study's quality: construct validity, internal validity, external validity, and reliability. Construct validity can be unsure if the researcher is using ineffective research methodology. Internal validity can be uncertain if researcher makes incorrect interpretation. External validity is concerned about if the results of the study can be applied beyond this exact case study. Reliability of research is the final concern; is it possible to follow the same steps and replicate measure what they are meant to measure. It is important that all research steps were recorded, and data is saved into safe place. (2013, 285).

The research method of this study was chosen carefully and both exploratory method and qualitative research approach are after answering to the questions "How?". To make sure people could feel more open and share their real thoughts about motivation and gamification, interviews were conducted anonymously. This allows people to share also possible negative thoughts of their employer's operations what they would not be willing to share under their own name.

According to Silverman (2006), Kitzinger and Rapley (2004) point out two issues when collecting data by interviewing: it might be difficult to access to the facts or to events through interview and they do offer indirect "representations" of peoples experiences rather than telling directly about their experiences. Despite of these facts I am satisfied of the quality of the data I collected.

The interview questions were easy to understand, and I told to my interviewees to ask me more information, if there was anything unclear. Having simple and understandable interview questions was making sure that same answers would be received if interviews would be conducted again. The reliability of interviews was verified by recording them and transcribing them, not just relying on my own memory and notes.

3.6 Ethical considerations

Use of the qualitative data collection methods brings multiple ethical issues to the surface because of the personal nature of this activity. The qualitative research includes an integral aspect of the need to be responsive to interpersonal relations. It is critically important for a researcher to be aware of how to conduct themselves in an ethical manner, especially during the data collection. (Mertens 2018, 33). According to Holloway (1997,55), a researcher must apply the principles that will protect the informants in the research from any risk or harm; individuals should never be harmed and it is important to make sure that their participation is volunteer and researcher must follow the rules of anonymity and confidentiality. As mentioned earlier all the interviews were conducted anonymously and confidently since people can be more willing to share their thoughts when they do not need to do it under their name.

What needs to be taking into ethical consideration is my own position in the case company. I am an employee there, working as an Executive Director as well as I am a manager for the other employees. Even if I were conducting these interviews as a researcher trying to be as neutral as I could, fact is that this could have some impact on their will to share all their opinions and experiences with me.

4 Results

In this chapter, the research question of the study” How would gamification impact on work motivation? “is being answered. The results are divided and answered in two sub chapters: Positive impacts and Negative impacts. The results are structured and presented this way since it provides a clear answer to the research question of

the study. To support the results, citations from the interviews are used. The respondents are numbered from 1 to 7. The results are summarized in the figures following both sub chapters. As the research method of the study is qualitative numbers are not used to present results. Instead the results provide interpretations of the positive and negative impacts on work motivation made by researcher from the interviews conducted. As mentioned in the Methodology chapter, the language of the interviews was Finnish but all the citations in this chapter are translated and written only in English.

4.1 Positive impacts

All respondents saw possibilities to increase work motivation by adding game elements into their everyday work. Although there are some disagreements, a clear thought of positive impacts can be found from all the answers. All respondents saw that gamification can provide some positive opportunities and impact their work motivation positively. A variety of perspectives were expressed in the interviews and some themes emerged stronger than the others, as pointed out below.

A possibility to be rewarded

According to all respondents, a possibility to achieve rewards would increase their work motivation. They saw it to be the most important motivator of gamification and agreed that it would absolutely have a positive impact on their work motivation. According to answers, this applies only for real life rewards, virtual rewards wasn't seen as attractive and effective. Most of the respondents were sceptic against the idea and possibility to create an engaging, joyful game app that would motivate people with only virtual rewards. Only few respondents thought that playing the game at work could be rewarding itself, and still, they stressed that achieving the rewards would be the real and only goal for them to play.

Respondents emphasized that it could not be possible to create a work-related game app, which would be so exhilarating, that it would give them pleasure and enjoyment, making playing the game worth of doing for itself. As respondent 4

stressed: *“I do not think it is possible to develop in this type of game as you do in video games, which makes them enjoyable and addictive”* other one continued:

“I think it would be the rewards that would motivate me... quite some game you need to create to motivate me any other way... And still, I don't know if it would be possible... I don't know about others, but I think if there would be only points and virtual rewards to achieve, it would not motivate me at all” (respondent 1).

Some respondents saw a minor possibility to improve the motivation with only the game itself, as respondent 5 stated: *“First I would definitely go after the reward but maybe with time I would learn to like the game itself and it would motivate me but mostly, it would be about the rewards”*.

When discussed about the nature of the rewards, monetary rewards were seen as the best motivator among all respondents. They stressed that it would provide employees and board members an opportunity to influence on their incomes. This is an important factor, especially for the board members, who are students, mostly living with student benefits and have no other incomes. All respondents had similar comments on rewarding people with monetary rewards. Respondent 4 said: *“I am sure it would motivate people if your income would increase by making more points”* and respondent 5 continued: *“Money is always motivating students and I think people would work much harder because they would see this as a relatively easy way to earn more money”*.

Some respondents on the other hand discussed about non-monetary rewards to be a better option than money, even if money would motivate them the most. They stated that non-monetary rewards could be a less displeasing option, what it comes down to the feelings of those who do not get rewarded. In their opinion, non-monetary rewarding would create less negative atmosphere inside the workplace, as emphasized in interview:

“I think money would motivate people the most but there could be a problem that the game would get too competitive in a negative way and it could start to create problems. So maybe non-monetary rewards would be a better option in this case, maybe a gift card for a restaurant or something similar” (respondent 3).

According to some respondents, non-monetary rewards can also be beneficial. They could provide an opportunity to achieve something that people would not

necessarily buy with money. Respondent 1 emphasized that even if people would have money, there are things that they do not dare to buy with it, but what they would still appreciate to have. This could be the case especially with the board members who are students with low incomes.

“I think it would be really motivating, if a well-known, non-monetary reward, which everyone would like to own but cannot afford or dare to buy because when these people have an extra 200 euros, they do not spend it to Moccamaster. This way non-monetary rewards would be beneficial, providing a chance to achieve something that they would never buy with their own money. A student would never buy a pillow that costs 200 euros, but I am sure that they would appreciate to have one” (respondent 1).

Overall, the result demonstrated that the possibility to be rewarded would have a positive impact on employee and board member work motivation at VAMOK. The interviews indicate that it is the most important positive factor of gamification and all the respondents agreed that it would be beneficial to increase their work motivation. Although rewarding people might have a positive impact on work motivation, it might lead to negative impacts as well. Negative impacts of gamification related to rewarding people and possible negative competition are discussed further in sub-chapter Negative impacts.

A sense of control

All the respondents emphasized that gamification would provide them a sense of control over the tasks they are accomplishing. Most of them thought it would provide them a real time check list, which would be easy to follow and make sure that all the tasks are done. The respondents stressed that this would help them to keep track of their uncompleted responsibilities. This would improve the work effectiveness and work motivation. Respondent 3 discussed about the feeling of control and work efficiency: *“ Yeah, it would give me the sense of control. I think this way, it would be clear to see what I have done and plan what to do next and when to do it”*. All respondents shared the same view and stated, that because gamification would provide them a sense of control, it would impact positively on their work motivation. Respondent 2 stated: *“Sure, it would give me a sense of control and impact positively on my motivation that way, if it would be possible to follow what I have been doing in real time”* and two more respondents added more insights:

“I see that gamification could provide me a check-list. I feel like I can proceed in my work when I get them off the list. This will give me a better sense of control and acknowledgement over my existing tasks. Therefore, I will say yes, definitely, it would give me feeling of control and improve my work motivation this way” (respondent 7).

“ I think it would work very well as a to do -list. I have a problem that many times my work is in chaos. I do not have a clear thought in my head what I should do next, so this way gamification could help me organize my work tasks and improve my motivation” (Respondent 6).

Two respondents emphasized that even if they believe gamification to provide the sense of control, it might be slightly possible that working with phone could lead to some level of distraction, mostly because of temptation to check their social media accounts every time when they open their phones. Some respondent argued that they did not see this as a problem, since people could use social media anyway at work if they feel like it, no matter if work is done with phone or not.

One respondent felt that even if gamification would provide her the sense of control over her tasks, it would be so time consuming, that the feeling of control would not impact positively on her work motivation. Despite of one person’s opinion, overall results indicates that gamification would provide a sense of control and impact on work motivation on a positive way. Some of respondent determined gamification to be time consuming as well, but this was not related to sense of control. It was discussed in the other content and more results of this problem is provided in sub-chapter Negative impacts.

Clear goals

The respondents discussed and shared similar views on the importance of the clear goals. They are seen to be an important factor on how gamification could impact work motivation positively. Respondents stated that positive effect can be reached by setting clear goals and this way making sure that it is understandable what needs to be done and when. As respondent 1 stated in her interview: *“ It is highly important to me to know what I need to achieve when I am conducting my work tasks”* and respondent 2 continued with same theme: *“Knowing what is the reason and goal for my action creates much more motivation to perform my work tasks than*

if they are unclear. I see that gamification could provide a solution to ensure this to me.”

Respondents stated that to improve the motivation, it is highly important to assure that goals are clarified, and rules are the same to everyone inside the work community. Goal setting through gamification could provide a good solution to ensure that no-one would get any special treatment, when it comes to following the rules and achieving the goals. The clear goals can also have positive impact on motivation, because they are time and effort savers, as emphasized in one interview:

“Personally, I see clear goals as an important factor. I pay a lot of attention into details. I want rules, conditions, and goals to be absolutely clear to me before I start doing anything. It is important to me to do things right, not just do them. I do not want to waste my assets on doing wrong things or things wrong, so I want to know exactly what to do, to do it right on the first attempt” (respondent 7).

Immediate feedback

All respondents agreed that getting feedback is important to them. They stated that providing immediate feedback by using gamification would have a positive impact on their work motivation. Respondent 3 said: *“It is important. It does not even matter if it is positive or negative, because it will help you to develop in your job anyway”.*

Respondent 6 also stressed the importance of immediate feedback: *Immediate “good job” or “thank you” is really important for the motivation, even if more deeper feedback would follow later”.*

Many respondents stressed that without feedback it is easy to get a feeling, that they might be doing something that would not be essential or that they are doing things in the wrong way. Slight differences of importance of timing was presented. Only a minority of the respondent did not feel like immediate feedback provided by gamification would be important factor to improve their work motivation. Few respondents stressed that it is not necessary to get the feedback immediately after completing every single task. They explained that it would depend on the how many tasks there would be each day, and what is the nature of the tasks. Importance of

immediate feedback was rising, if tasks are less frequent than daily and demanding by their nature, as stated in one interview:

“Well, it depends on the tasks, how much time they will take or how challenging or urgent they are. I mean like are you completing them every hour or every day or every week. It depends. but I would say getting feedback weekly would be the best, not every day or after each task” (respondent 2).

Over all the results indicate that gamification could supply a good solution to provide immediate feedback from individual work tasks. This was stressed to be an important factor for majority of respondents. Based on the interviews, gamification would have a positive impact on peoples work motivation at VAMOK when looking at importance of immediate feedback from work.

Distortion of sense of time

As discussed in interviews, sometimes people can feel their work to be boring and workdays to pass by extremely slow. Feeling of the distortion of sense of time was familiar to some respondents, mostly from the video games they play in their free time. When talking about the idea of gamification having the similar impact on their work, it sounded imaginable to majority of respondents. Most of them stated that they believed that it could be possible to experience similar distortion of sense of time while conducting work tasks in gamified environment. They stressed that this could positively increase their work motivation by reducing the feeling of being bored. They stated that this would possible because gamification would make them concentrate on their tasks in more intensive way.

However, some differences were also found. One respondent was sceptic against the idea that gamification would provide him this feeling. He was familiar with the feeling of distortion of sense of time to exist, but had difficulties to see the difference between gamified solutions and manual work lists and not gamified work environment: *“I guess it could happen, but I think that if you are highly focused on the tasks you are doing, it does not matter are they in a game app or just listed on paper”*. Completely opposite statement was made as well. One respondent claimed that gamification would provide him a completely diverse feeling:

“I want to state that gamification would not give me the feeling of distortion of sense of time. Actually I think it would work in the opposite way, making me

concentrate more on what am I doing. But it is not a bad thing, since when I get this feeling of distortion of sense of time my brain multi-tasking and I feel it to be rather a negative than a positive thing” (respondent 7).

Positive competition

Some respondents thought that gamification would improve their motivation by making their work as a positive competition against each other. They stated that it would be fun to compete to achieve the highest points and get a chance to pride oneself on other, in the friendly way. It was important not to take it too seriously. Friendly, positive competition was a good way to engage people into their work tasks. It was stressed that friendly competition could encourage them to try to win every time, even if some periods would not be so profitable for them. The positive competition was seen to be possible only, if playing the game would be volunteer, and if everyone would have equal possibility to participate on tasks available in the game. Respondents agreed that it would be highly important that all participants would share similar attitude against the game and that positive outcome is highly dependent on people’s nature and group dynamic. They stated that they were sure that it would be possible with the group that they are working in at the moment, but they saw a risk in high yearly personnel turnover rate at VAMOK. Respondent expressed their worry that his could provide a danger that new actors would not share similar group dynamic and that positive and friendly competition would not exist in the new group.

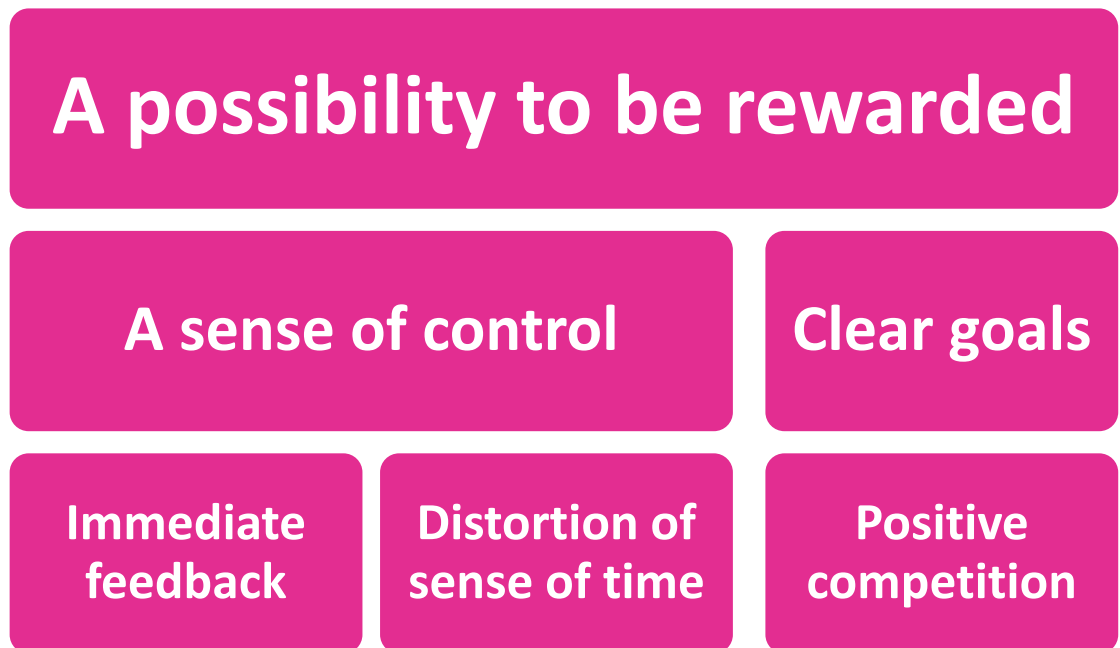


Figure 4. Positive impacts of gamification on work motivation

4.2 Negative impacts

According to interviews, all respondents saw threats in adding the game elements into their work and most of them stressed that it might decrease their work motivation. With slight disagreements, a clear picture of negative impacts can be found from all the answers. All respondents expressed their worry that gamification could have major negative impact on their work community. Some negative themes emerged stronger than others, and the most negative impacts were easy to discover from the interviews.

Unfairness

The questions of how to execute a game that it would be fair to all actors in the organization was considered problematic in interviews. All respondents stressed that possibility of unfairness would emerge from gamification in this organization. Most of them explained that was a risk, since VAMOK is a very small work community, with only 3 full time employees and 10 board members. As respondent 1 stated: *"I see gamification as a negative idea. This is a very small work community and I think it might cause lots of problems, envy and troubles to share tasks for people"*.

Respondents agreed, that in this type of small organization competing against each other could become a highly personal matter. Most of the respondents argued that size of the company matters. If comparing VAMOK to a bigger company which has for example 50 employees who are competing against each other, impacts are most likely very different. In larger organizations, it is highly possible that people do not care as much who wins, and more importantly, who becomes last in the competition, when there are many others who do not achieve the best positions.

According to respondents in case of a very small organization, winning and losing is much more intimate than in the bigger companies. They stressed, that it would be extremely important to plan very well how many people would be rewarded and consider the time as well. Many variations were expressed in interviews, but most of respondents stated that rewarding three people monthly would be the best solution. This arrangement would provide all an opportunity to achieve the good places in the game throughout the year, as discussed further later in this sub-chapter.

Respondents explained that in case of VAMOK, the biggest cause of unfairness would be the fact, that all actors have their own responsibility areas and peoples work tasks vary significantly inside the organization. It would be major challenge to find a way how people could earn points in the game, when work tasks are not comparable to each other. The situation is the same when comparing employees' work tasks between each other and when comparing board members duties between each other. One employee stressed that:

"There is only few of us, and we have so different responsibilities in this work community that I would see this game really unfair and I cannot see it to increase my work motivation anyhow. Maybe it could work for board members, when there is more of them in our group?" (Respondent 1).

Unlike respondent 1 stressed, most of the interviewed board members saw, that the situation would be unfair for them as well, because of the variation of nature of their tasks. Respondent 6 discussed this further in his interview: *"We have so different responsibility areas inside the board, that it would be impossible to compare them to each other and make rules how to achieve points in the game"*. According to most respondents, gamification would get even more complicated, if employees and

board members would compete in the same game, since it would be hard to examine and compare full time employees and volunteer board members work performance against each other. Some respondents emphasized, that the only way that gamification would work in this work community, would be to sharing people in different categories in the game. This could be done by sharing them into the groups, based on the facts who's work accomplishments can be evaluated to be equal. Hypothetically this could work, but practically the obstacle for this is, as discussed above, the size of the organization. There are not enough people in this work community to be shared into different categories.

Most respondents saw the nature of the work as an important factor when estimating the impacts of gamification on people's work motivation. Many argued that gamification would work the best in sales organizations or companies with similar performance centric work tasks. It was considered as a major challenge to create a game for an organization which employs only few knowledge workers and rest of the actors are volunteer board members. Especially volunteer participation was seen as a problematic factor when considering gamifying work at VAMOK. As discussed in the interview:

"If we think about work life, gamification is a great way to improve the motivation and make people work harder than usual to achieve rewards in the game. But this work what we (board members) do here, is based on volunteer participation. People are spending their free time to improve students study conditions in this university, achieving barely anything from this work to ourselves. I see gamification as a measuring tool how well you accomplish your tasks, and in this case it would be measuring the level of " how volunteer you really are in your volunteer work". We are doing this from our good will and I don't think measuring and making people compete against each other who "volunteer the most" would increase anyone's motivation to participate on this work". (Respondent 7).

Still talking about the aspect of unfairness, few respondents argued, that if it would be possible to everyone to see each other scores in the game, it could lead to the situation where those who work harder and achieve more points than others, could start accusing others, that they don't work hard enough. As one respondent stressed, comments like *"you don't do as much as I, because you don't have as much points as I do"* would become familiar in conversations, and in the situations when sharing tasks to people. This could be a start for fights and cause bad relationships between people. Some respondents stressed, that they would have a feeling like

they are observed all the time by others. For some people, this could lead to a lower level of interest and motivation, especially for those who are not the most active ones in the first place.

According to respondents, there are always people who will achieve the highest scores each time, either because they work harder and spend more time on completing the tasks than others, or they just simply are more skilled in their work than others. Some board members might have to work and cannot dedicate as much free time for this work and they could see this as an unfair situation, when they do not have equal opportunity to achieve and complete as much tasks as the ones who do not have to work. To work well, gamification should be used in work communities where everyone has at least equal opportunity to participate and then employees can decide themselves if they want to do it or not. At VAMOK people have very different personal life– and work situations. This is why all of them would not have equal chance to play the game and that might cause problems, mostly people would feel like it is unfair for those who cannot participate as much as they would like to.

“I think if there is always someone in the group who achieve the best positions, because he or she has more time in hands, and then others would stop trying because they know it does not matter if they do. I am sure they would see the situation to be unfair and it will cause them to lose their interest for the game. Like; what is the point, I will not achieve anything anyway..” (Respondent 2).

To avoid the problem that someone is always superior comparing to others, respondents discussed that it would be highly important to reward more people to make sure that more than just one “completer” has an opportunity to achieve the best positions and rewards in the game. Some differences were found, but most respondents said that they would reward three people at the time. This would give more people an opportunity to achieve rewards, but it is still less than half of the group, which is an important factor to prevent the feelings of unfairness for those who do not perform as good as the leading individuals. Respondent put emphasis on timing as well. It would be important to reward people frequently to keep up the interest on the game. Respondents stressed that once a month could be good timing for rewarding, especially for the board members, who usually participate on this volunteer work only for one year.

When discussed about potential minimum score to achieve to get rewarded, a variety of perspectives were expressed. Some stated that it would be irrational not to set any minimum level to achieve, because then people would get rewarded doing almost nothing at all, if it would be certain that someone will win anyway. On the other hand, it was discussed that doing only little something, is always better than doing nothing at all, and people should not feel this to be an unfair situation. One respondent stated that he did not see any difference between these two options and gamification would always lead into the situation that someone could feel to be unfair to them. He also stressed that this might have something to do with Finnish mentality: *“Finnish people are jealous people, and they feel like everything is always unfair. It does not matter how much you will rationalize the situation and explain them that someone has achieved those rewards by working harder than others”*.

Negative competition

All the seven respondents mentioned a risk of negative competition in their answers and saw it to be one of the biggest negative impacts of the gamification for the work community. All of respondents agreed, that there would be a risk, that people will turn against each other instead of working as a team. Respondents stressed that this would be most likely if monetary rewards would be provided, since money would create the most envy. One respondent emphasized, that even if people are not competitive in their basic nature, opportunity to achieve more income would make them greedy and to do anything to be the one who will get the most of it, no matter what it takes.

In the negative competition there is a possibility and a risk, that people will start keeping secrets from each other, because it would be beneficial for them to achieve the first place in the game. A situation where information is not shared freely between everyone could be harmful for the whole working community. People could even start to hope others to fail in their tasks if it would benefit themselves. As one respondent stressed:

“ I don't think that people should be competing against others at work place, because in work communities work mates should work together, helping each other.. In the competition situation people start to withhold the information from others, to make the situation more favourable for themselves” (respondent 6).

The same themes were discussed in other interviews as well. One respondent said that she would lose her trust on others, and other one stressed, that people would start to hope to others fail, so that they can fix the situation and get rewarded themselves. He said that he had experienced this kind of situations in his earlier work community and he shared a major concern of this possibility. Most of the respondents stressed, that negative competition related to gamification could impact on people's relationships and even break friendships between them. The respondents discuss and shared similar views, that there is a considerable risk that help and advises would not be provided to others anymore. Less help provided could leave some people to fail in completing their tasks and miss important deadlines. A situation like this would be harmful for the whole organization. Negative competition could also create a situation, that nobody cares of the quality of their work anymore, if the only goal is the achieve as much points as possible and be the one who will win.

Most of the respondents see that there is also a possibility, that people could start intrigue behind others back, to make sure that they will achieve the best places in the competition themselves. One respondent was discussing the problem further:

" I know that the idea of this is it to be a friendly competition, which should not create fights or plotting, but I think it could easily lead into the situations, were some people could start competing and plotting against the other group members. It could be easy for them to agree together behind others backs to take and conduct all the easy tasks. This way they could make sure that they will always achieve most of the points and others will not have equal opportunity to achieve the leading positions. This could create the feeling of bullying for some and this way lead to much bigger problems, especially if this would continue for a long period of time (respondent 4).

Still talking about the aspect of negative competition, one respondent shared the idea that gamification could work its best, if instead of competing against others in the same work community, VAMOK could compete against another student union or - unions. This could be an opportunity to prevent the negative competition and work as a team against others. Competition would have a completely different nature and most likely it would strengthen relationships and social cohesiveness in the work community. This was a good idea in other respondent's opinions as well.

Anxiety

Some respondents emphasised, that they would feel mentally bad in the situation, where they could not keep up to others phase to make scores. Competing against co-workers was seen as a highly unwanted situation. It was emphasized that this could lead to people feeling high levels of anxiety, because they would feel uncomfortable to lose and they would not want to participate on the game at all. The anxiety was discussed further in interviews, as respondent 6 stated: *“Gamification would make me really anxious. I want to work, not to compete at my workplace. I would have chosen completely different career if I would want to participate on competitions”*. Many respondents agreed, that even if gamification could increase work motivation for some, it might not be worth of it, because of the possible level of anxiety for others. Respondents stated that in the worst-case scenario, this could leave to sick leaves. They stressed that people could start feeling bad mentally at their work, because of all the stress and anxiety created by constant competition against the others. Results of the interviews indicate that respondents are worried about other people’s feelings to get hurt and the possible, much deeper damage that gamification could create in work community and impact on work motivation negatively.

Cheating

Cheating was mentioned as one of the potential negative impacts of gamification. Respondents emphasized that this could be a real threat, especially if there would be monetary rewards. For some, gamification could leave in situation that the only reason to conduct tasks would be collecting as much points as possible to achieve rewards. This could lead to a situation, where things are done only halfway in a hurry, or people could even lie about finishing their tasks, if there was an opportunity to do so. As one respondent stated: *“ Unfortunately, the opportunity makes the thief”* and other continued:

“Even if there is a slight chance that this could motivate people, I am one of those people” who’s glass is always halfway empty” and I see the negative side of everything. So, yes, cheating is something that might occur. The board meetings and things like that are easy to follow who’s there and who’s not, but what about tasks that are conducted alone? For example, sauna watch turns. People could just go

there, not do anything and then mark the tasks as completed. No-one will go there to check if they actually did something or not.” (Respondent 6).

Time consumption

Respondents stressed that gamification might give them a sense of control over their tasks, but they saw, that at the same time it could be really time consuming. Time consumption was a big problem by some respondents. It would take time out of other work tasks. This was a highly possible problem to occur, especially if gamification would be compulsory. Answers similar to *“I think that this would be really time consuming. Time that I would have to spend putting things in the app, I could use it to conduct my “real work” tasks”* emerged from many interviews. Time consumption was big problem for some people, and it was one of the reasons why respondents were sceptic against the idea of gamification to increase their work motivation. Some respondents emphasized, that only thing that would impact positively and make them forget the time consumption of game would be good rewards, as one respondent stressed in the interview:

“Without really good rewards available, that I would absolutely want to achieve, I would never have strength or interest to do something like this. I know, I would feel like that it is only time consuming, irritating, and stressful for me. This is the reason why I would never want to participate on it voluntarily” (Respondent 1).

Results demonstrate that time consumption and reduced work effectiveness caused by it, is one of the possible negative outcomes of gamification. This was not agreed in every interview and it might not have similar influence on every participant. Still it is an important factor to take into the consideration, when estimating the benefits and disadvantages of gamification for work motivation at VAMOK.

Honeymoon phase

The respondents discussed and shared similar views on the phenomena that can be call as “honeymoon phase”. They emphasized that gamification could be exciting and highly motivating when they participate in game for the first time. Most of respondents stressed that new technologies are always appealing to them, but when they get used to them as part of their everyday life, they seem to lose their attraction

quickly. To prevent this to happen, gamified work system should upgrade and develop further all the time, and that would be highly expensive to accomplish.

Some different perspectives about the honeymoon phase were expressed. Few respondents stressed that good rewards would keep their interest high, no matter how long they would play the game, while others admit that they would lose their excitement at some point, no matter what would be the rewards that would be waiting for them. A couple of people expressed these points as follows: *“If there would be good rewards, I would not lose my interest on this game, as long as those rewards are suitable for me”* *“Knowing myself it would be excited at first, but then with time my interest would get lower and lower to that point where I could not care less.”* One respondent taught that maybe this first excitement and honeymoon phase would be related to the rewards, and after a while they would not matter so much anymore, and she could start to enjoy the game itself and play it just for fun.

Some respondents discussed about volunteer participation on the game versus compulsory. They stated that honeymoon phase could last much longer if participation in game would be volunteer but might not exist at all in the case of compulsory participation. Honeymoon phase is not wanted outcome, and it would be highly important to find the ways to keep up the interest in the game in long term, but compulsory to play the game could have even more negative outcomes. Respondents stressed, that if people are forced to do something against their will, they usually start to develop even more negative attitudes against their work. This could destroy their motivation completely and create such behavioural and mental problems like cheating and anxiety, as discussed earlier in this chapter.

Based on interviews, the risk of decrease interest on game after a honeymoon phase is highly possible. Respondents agreed that game that no one wants to play will not increase anyone's work motivation. Lack of user's interest might lead in situation where game app should be updated frequently to keep up people's interest in game. This is highly time consuming and expensive to execute and respondents stressed that it might not be possible to implement with student unions yearly budget.

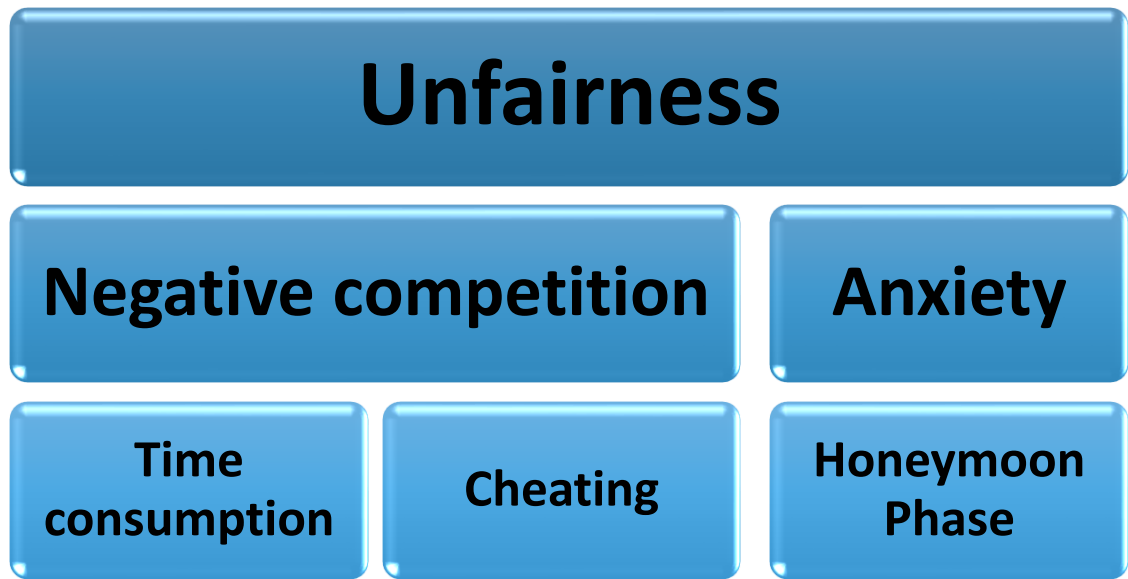


Figure 5. Negative impacts of gamification on work motivation

5 Discussion

The aim of this study was to explore possible impacts of gamification for employee and board member work motivation in case company VAMOK. The research problem of the study was the issue of work motivation in the case company. Work motivation varies between people and some individuals have low motivation against their tasks. The goal of this study was to determine if gamification would be a good motivational tool to improve work motivation. There was only one research question “How would gamification impact on work motivation? “.

5.1 Answer to the research question

The research aimed to find the answer to the question “How would gamification impact on work motivation?”. The research explored possible impacts of the gamification on work motivation and aimed to determine if gamification would be a solution for case company’s needs to improve work motivation. Both positive and negative impacts were found in this study.

All informants mentioned positive impacts of gamification in their interviews. A possibility to be rewarded was stressed to be the most important factor why gamification would have a highly positive impact on peoples work motivation. Clear goals provided by gamification were stressed to be highly motivating. A sense of control was named as an important impact as well by most of informants. Some of them argued, that immediate feedback provided by gamification, would improve their motivation, but some saw it as a less motivating factor. Distortion of time was mentioned as a positive influence in some interviews, but not by all respondents. Many respondents saw positive competition to be a motivating factor and a good way to engage people into work.

Negative impacts of gamification were found in every interview as well. Two most concerning negative factors were threat of unfairness and negative competition. According to informants these two factors could lead into much deeper problems in work environment, than lack of motivation is. According to respondents, unfairness is a remarkable threat to demotivating people in small work community. In VAMOK everyone does have their own individual work areas and tasks, that cannot be easily compared to each other and this could create the feeling of unfairness while scoring tasks in the game. Respondents argued that negative competition could turn people against each other and lead them to keep secrets if it would be beneficial for them. In this type of scenario, information would not be shared freely, and this would be harmful for whole work community.

Respondents mentioned possibilities of anxiety and cheating to emerge from gamification, factors that would impact negatively on motivation. Time consumption was also considered as a negative factor, since time used to gamification is out of the main work tasks. One suggested impact was so called honeymoon phase, which could lead to increase of motivation at first, but decrease it shortly after, when people get used to game elements and loose interest in them because they are not new and exciting anymore. At this point gamification could become a task among other tasks.

Both positive and negative impacts on work motivation are presented in this study. The nature of positive leads to impression, that gamification could increase work motivation for some participants in case company. If looking only at positive impacts, it could be advisable to add game elements into this work community's daily work to improve work motivation. Yet, negative impacts must be taken into consideration as well. The nature of negative impacts mentioned in interviews are dangerous and they seem to be a serious threat for work motivation in whole work community. This must be taken into deliberation, while making a conclusion on how gamification would impact on work motivation in case company.

After careful consideration of both, positive and negative impacts of gamification on work motivation, a clear answer arise. It is noticeable, that in work communities such as the case company of this study, it might be impossible to successfully introduce game elements for workers with very different roles and responsibilities. Therefore, the conclusion of this study is that gamification would have negative impact on work motivation in case company.

5.2 Managerial implications

This study points out, that gamification can have many positive impacts on work motivation and companies could highly benefit from application of game elements into everyday work. The study also elaborated another point of view: gamification can decrease work motivation. Many negative impacts on work motivation and on work community were found in interviews.

This indicates that it is highly important for managers to understand that gamified solution needs to be carefully planned and designed for every company's specific needs. When companies are planning to invest in the game elements to improve work motivation, decision makers need to take into consideration all factors, that will impact on employee motivation. This study emphasizes the importance of work roles in work community. If work roles and responsibilities cannot be compared to each other, this will create feeling of unfairness between employees and it will lead to negative outcomes. Negative impacts of gamification seem to be significantly

dangerous, not only for individuals, but the whole work community. It is highly recommended to conduct deep analysis of the work community and its members before introducing game elements to them.

The size of the company is important aspect. Are there enough employees, so that winning and losing will not become intimate and personal elements? Determining the optimal size in this matter is difficult, if not impossible since there is not only one right answer. Manager should decide how many people they want to reward and then compare this amount to total amount of employees. It is highly likely, that employees do not care as much who wins or who becomes last in the competition if there are enough others who do not achieve rewards.

It is important to determine, who are the right people to play against each other. Managers should consider whether there are enough similar roles and responsibilities in work community or not. Participants work accomplishments must be able to be evaluated equal. Therefore, it is essential to share participants in different categories in the game, based on their roles and work tasks. This is an important factor, to consider and to be able to create a game with clear tasks and simple scoring. It is crucial for managers to understand, that if work tasks vary significantly, it can create feelings of unfairness in scoring and lead into decreased motivation.

Managers must comprehend the importance of participants work status, especially if there are full time, part time and volunteer workers working side by side at same company. This study was conducted in work community with employees and volunteer board members working together. Strongly varying roles was stressed to be a complicating factor, while scoring peoples work tasks. To avoid decrease of work motivation, it is important to administer players in diverse categories based on their status. Also, it is crucial to understand, that employees work input will be easier to measure, than volunteer participants work. Measuring volunteer work reveals a problem, that can lead to declining work motivation: when someone volunteers to do something, and we are measuring their work input, are we ending up to measure purely their completed tasks or are we really measuring how volunteer they really

are? It is important for decision makers to consider that measuring volunteer work can be more demotivating, than measuring employee performance. Furthermore, it can even lead into situation, where people do not want to volunteer anymore.

While making a conclusion if investing in gamification, it is highly advised to consider, what a company wants and could achieve with it. Managers should ask, does it bring real value for the company. What are the monetary results for company if gamification works as intended and increases work motivation? Are there real financial benefits achieved or not? Or is there something else than profit to achieve? A good question to ask is that is gamification worth investing in non-profit community or in work communities, which are composed mostly of volunteer participants? And most importantly, managers must consider, what are the risks of gamification, if it does not work as wanted.

5.3 Assessments of the results in the light of the earlier literature

Earlier research results indicate that gamification have both positive and negative impacts on work motivation, which is the conclusion of this study as well. Hyrynsalmi Smeds & Kimppa (2017) emphasize, that even if gamification is mainly impacting positively on motivation, and it is used for increasing motivation, there are always risk for issues, wherever it is applied. Schöbel, Janson, Jahn, Kordyaka, Turetken Djafarova, Saqr, Söllner, Adam, Heiberg Gad, Wesseloh & Leimeister (2020) state, that despite of positive impact, gamification also have negative effects. According to Wunderlich, Gustafsson, Hamari, Parviainen & Haff (2020), impacts of gamifications vary from excessively positive outcomes to much less hoped ones, which leads most of gamified solutions to fail. According to Schöbel et al. (2020) Hamari states, that gamified solutions will not automatically provide behaviour changes or positive outcomes. According to Shpakova et al. (2017), Cohen (2016) stress, that gamification can provide immediate feedback, which can be a positive factor, but some can see this as a control mechanism. This can create negative impacts, as pointed out in this study as well.

In this study, a possibility to be rewarded, was stated to be the most important positive factor on increasing peoples work motivation. This finding is supported by earlier research results. Sailer et al. (2013) argue, that game participants are more likely to be motivated, if gamification provides rewards. In this research, it was stated in interviews, that monetary reward or reward comparable to monetary rewards such as gift card, would work as best motivators. This result is not supported by most of earlier research results. Many earlier studies indicate that achievements in gamified environment itself establish value for players. Intrinsic motivators are stressed to be greater motivator, than a real-world reward, for example, because of the envy over what others have achieved in game. (Burke & Hiltbrand, 2011). According to Eveleigh, Jennett, Lynn & Cox (2013), past research results points out, that intrinsic factors are important motivators for participants and being part of project is rewarding itself. However, according to Hyrynsalmi et al. (2017), Nicholson (2012) highlights a problem, that external motivation can replace internal motivation in gamified systems, when there are extrinsic rewards available to pursue. Research results of this study are most likely due this appearance. Extrinsic rewards were presented to be a possible to achieve, if work would be gamified and while informants had this image in their mind, they were not able to see any other motivational factor to be as strong, as real life rewards. This is proven to be a side-effect of gamification. According to Wunderlich et al. (2020), Thom, Millen, & DiMicco (2012) states, that rewards decreased workers intrinsic motivation. I believe that findings in this study, that extrinsic rewards would be the best motivator, can be explained by low income factor of the informants in this research. Most of them are students, living with student benefits and student loan. They cannot afford to buy any extra things for themselves and a possibility to achieve something they cannot buy, is highly motivating them.

This study presents, that immediate feedback provided by gamification, would improve work motivation for some workers, but for others it can be it a less motivating factor. Previous research results indicate that participants are probably to be motivated, if gamification administers immediate feedback (Sailer et al. 2013). Research results of this study points out, that clear goals provided by gamification are important motivators. This argument is aligned with earlier studies, stating that

participants are more motivated, if gamification provides clear goals (ibid.). Feedback and goals are important motivators for employees regardless of their position in the company or field they are working in. Similar findings in case company are due to the factor that these are over all important motivators for people.

Positive competition was seen as a motivating factor in this study and a good way to motivate people in their work. Earlier research indicates similar results. According to Sailer et al. (2017), Burguillo (2010) states, that gamification can create social pressure, which impacts positively on engagement and participation. Social pressure can also lead to unwanted results, such as anxiety and cheating as pointed out in this research. Mixed results are provided in this study. Some informants believed in positive competition and some in negative competition to occur. Their point of views is most likely due their earlier experiences in work communities and in life in general. If people have positive experiences, they most likely expect them to continue and vice versa.

According to Hyrynsalmi et al. (2017), Marlow, Salas, Landon, & Presnell (2016) states, that use of single person games can lead to competing against work mates, thus preventing the best work performance of the team. This was mentioned as a worrying aspect against work motivation in this study. It could create anxiety for some people. Informants stressed similar negative scenarios related to decrease teamwork, as pointed out in earlier research results. According to Spencer (2013), possible pursuit of individual achievements is one of the risk factors for teamwork in gamification. According to Eveleigh et al. (2013) research results, players can have suspicions that others will cheat to achieve the top results. This was stressed in this study as well. It is a very common concern. Hyrynsalmi et al. (2017) states, that possibility of cheating is present in all gamified solutions. According to Wunderlich et al. (2020) potential of cheating is mentioned in many research results by Carignan & Lawler Kennedy (2013) as well as Makanawara, Godara, Goldwasser, & Le (2013).

One negative factor pointed out in this study is called honeymoon phase. It is a state, where new applications increase motivation at first, but decrease it shortly after. This finding is similar with earlier research results. According to Wunderlich et al. (2020),

Farzan et al. (2008) emphasize, that gamification tends to have short-term engagement. This finding can be explained with fact, that technology is developing in fast speed these days and young people are used to rapid changes in computers and apps they are using. People will get bored and lose their interest in them easily if apps cannot keep up the speed and renew all the time. This is most likely to happen, if case company would invest in a game app, since it would not be monetary possible to update it rapidly.

Time consumption was mentioned as a possible negative motivational factor of gamification and similar effects are mentioned in earlier studies. According to Broer (2014), Downes-Le Guin et al. (2012) report momentous decrease in task completion rates and in speed in gamified setups. According to Hyrynsalmi et al. (2017), Thiebes; Lins; & Basten (2014) points out, that decrease productivity can be faced, because game distracts players from main aim of the system.

Unfairness related to gamification through very different roles and responsibilities in work community is the most important finding of this study. This type of research results is hard to in earlier studies and I did not find a single study looking into this type of work community. Though, according to Kamel et al. (2017), Raftopoulos (2014) points out, that homogenization of the workforce is negative aspect of gamification. Raftopoulos's argument and results of this study indicates a configuration, that gamified systems will work only in teams, where work roles can easily be compared to each other. It would be extremely hard to decide, how participants could receive points in the game app, and this could lead into problems. In case company of this study, this cannot be done, and it is understandable that interviewees identify this as a threat for work motivation. This is also supported by earlier research results. According to Augustin et al. (2016), permitting too many or too less points for accomplishment of tasks can lead to participants feeling unfairness.

Gamification research has been done in traditional working environments and on volunteers, but I could not find an earlier research conducted in a work community with similar mixed work roles as in my case company. Addition to mixed roles (full-

time employees and volunteers), all member of the case company's working environment is having completely or slightly different responsibilities and work tasks. Therefore, there seems to be a research gap in this area of gamification research, and I will give more recommendations in sub chapter 5.5 affiliated to this.

Several motivational factors can link the Flow theory to gamification and Flow Theory was used as a theoretical framework of this study. According do Bittner and Schipper (2014), the founder of Flow Theory, Csikszentmihalyi (1991) states, that wherever flow occur, people are in a state of intense focus, absorption and they lose their self-monitoring. According to Shernoff, Csikszentmihalyi, Schneider and Steele (2003), Nakamura and Csikszentmihalyi (2002) stress, that in Flow, activities will be worth of doing for their own sake. According to Beard (2014), Csikszentmihalyi has stated, that Flow can improve life, wherever it is needed. Flow can also improve motivation and according to Sailer et al. (2013), participants are expected to be motivated if gamification enhances and enables the feeling of flow by providing elements such as clear goals and immediate feedback.

Flow theory includes 9 elements, which all measure the level of the flow feeling in a person. All these elements are positive and motivating factors. All 9 elements of flow were measured in interviews with case company's employee and volunteer board members and goal of this study was to find out how gamification would impact on their work motivation. This research answer to the question "how would gamification impact on work motivation". This study is about to find gamifications possible negative impacts on work motivation as well. Flow theory as a theoretical framework does not provide answers to negative effects. Thus, it is not possible to find the clear answer to research question of this study, by using this framework. However, Flow Theory is useful framework in research on gamification and it may be used as a theoretical framework when a study focusses on measuring positive impacts on gamification on work motivation.

5.4 Limitations

Research literature stress that finding the interviewees to conduct interviews can be a limitation for a study. In case of this study I did not face this type of problem. This is most likely due to the factor that I am working in my case company and results of this study will benefit my employer. Volunteer informants enrolled themselves for me right away when I told them about my research.

However, there are some limitations for this research. First, the use of qualitative research method can be a limitation. According to Silverman (2006), when the researcher is interested in concrete facts, as people's opinion of work motivation, like in this research, a large quantitative survey could be more appropriate to conduct than qualitative research. Therefore, qualitative research method can be considered as a possible limitation of this study. Addition, there are limitations when using a case study method. According to Kothari (2004) case study method is always based on several assumptions which may not be very accurate at times, and as such the practicality of case data is always subject to questioning. Nevertheless, qualitative research approach has its limitations, it was appropriate research method since the research question of this was after to discover answers to people's experiences in their work.

The size of the sample, the number of the respondents could be a limitation of this study as well. Case company employees 13 people and 7 of them was interviewed. Number of the interviewees is based on the fact, that after conducting these seven interviews, similar type of answers and themes started to occur in every one of them, and it seemed like no new information could be received by conducting more interviews. Yet, this can be considered as a limitation and more accurate research results could have been received with larger samples.

Another limitation of this study is that this research provides insights into potential use of gamification in case company. Potential use of something leaves plenty of room for respondent's imagination of what would happen and how this imaginary gamified solution could look and work. Images and impacts of potential game app,

can be very different in people's minds thus not having an actual model of the potential app to show to interviewees as definitely one limitation of this research.

Reliability of research is one of the final concerns of all studies (Fielding & Warnes 2013). According to Adams et al. (2014) the reliability of research estimates the consistency of the measurement. According to Holloway (1997) the reliability of qualitative research is often questioned. To simplify the meaning of the reliability of research, it is the degree to which an instrument measures the same way each time it is used under the same conditions with the same subjects (Adams et al. 2014). According to Fielding & Warnes (2013) it must be possible to follow the same steps and replicate measure what they are meant to measure. This highlights the importance of all research steps to be recorded, and that data will be saved into safe place. To ensure the reliability of this study I conducted my research by using semi structured interviews with well-planned, consistent, and simple interview questions. It is highly likely, that similar answers would have received from same respondents, if interviews would have been repeated in two weeks of time, I spent interviewing respondents. In addition to this, all interviews were recorded, and data was saved as well as transcribed into paper format. To make sure that research results are reliable, interviewees should be knowledgeable and experienced in the area that research is about. This is critical to make sure that research results are convincing. (Rubin & Rubin 2005). Therefore, interviewees were selected carefully, based on their roles and varying responsibilities in case company.

According to Fielding & Warnes (2013) Yin (2003) emphasizes that internal validity of the research is dependent of researcher's capability to make right interpretation from data collected and it can be jeopardized by making wrong interpretation. Qualitative research method always leaves room for interpretation of the research data. Thus, research results can vary between people who are conducting the interpretations from the same data. This option is always present while conducting a qualitative research and it could be possible that someone else would come to different kind of conclusions from my data as well. According to Johnson (1997) it is feasible that researcher's personal views can impact on how data is interpreted. I kept this in my mind and tried my best to not let my own opinion to effect my data

analysis. However, I am working in the case company, it must be noted that my own points of views might have impact on interpretation and the study results on some level.

External validity is concerned about if the results of the study can be applied beyond this exact case study (Fielding & Warnes 2013). According to Adams et al. (2014) generalisation is hard while using qualitative study. This is the case with this research as well. The case company has its own specific working environment which is very different from many “traditional” workplaces that employs only full-time employees. Some generalisations could apply into other unions with similar varying work roles in there, but mostly the results of this study cannot be generalised. However, generalisation was not an aim of this thesis, since this study is a holistic case study, conducted with only one case company.

5.5 Recommendations for future research

Gamification is relatively new motivational tool and there are still gaps in this research fields how it impacts work motivation. Studies provides mixed results rather than a clear picture of its impacts on employee motivation. The results described above, and the low number of relevant results indicates the need for more studies. This is crucial to understand the impacts of gamification on employee’s motivation and I suggest that further studies should be undertaken as follows.

This study addressed a research gap in the meaning of work roles and responsibilities as well as work status (employee or volunteer worker) while applying game elements into a work community. More studies should be conducted in this type of work environments to understand is it possible to use gamification as a motivational tool in this type of relatively rare work communities. There are two factors that should be investigated more, either separately or together. Firstly, more research should be done in work community where people have varying tasks and responsibilities that are not easily compared to each other. Secondly, more research should be conducted in work community where there are employees and volunteer workers working side by side. Student union is a good example of this type of work

community and I highly recommend to conduct more research in this type of a setting to really understand if it is possible to use gamification as a motivational tool in a relatively rare work community. I suggest conducting future research with a larger sample size. This could be executed for example by investigating more than just one student union. I tremendously encourage future researchers to consider to conduct a similar study with all 24 student unions in universities of applied sciences in Finland.

This study was conducted by using qualitative research method and this method always limits the number of the respondents lower than quantitative research. Therefore, I recommend, that quantitative research with a large survey should be done in same or similar case company to receive bigger sample. This recommendation is supported in research method literature. According to Silverman (2006), when the researcher is interested in concrete facts, as people's opinion of work motivation, a quantitative survey would be more appropriate to conduct than qualitative research. By using quantitative research method, the research results could be very different in same case company, providing more insights into the research question of this study. I highly recommend future researchers to contact the case company of this study if there is interest to conduct this same study with quantitative research method.

This study was an explorative study in setting which investigated potential use of gamification. Regarding to this I have two suggestions for future research. Firstly, imaginary, potential use of gamification leaves much room for people's imagination of how a game app would work and impact on them. Therefore, exploratory research in case company which uses game-elements is recommended to conduct. Secondly, an observational study in similar setting could be an interesting to conduct as well and I highly recommend future researchers to consider using this type of data collection either together with interviewing employees or just observing them in their daily work in gamified work community. Addition to suggestions above, if secondary data is available, informs of employee motivation surveys conducted by employer, I highly suggest using it as additional data to provide more insights for a research.

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Appendices

Appendix 1.

Interview questions

Background information

Name (not published)

Your role at VAMOK? Employee or board member?

How long have you been working here?

FLOW

Questions related to Flow and its 9 dimensions:

1. When you compare your own skills to a task you are conducting what is the level of the challenge that motivates you the most to do it? Hard, easy, or maybe something in between?

- Do you face this kind of challenges in your work here?

2. Is it important for you to have a clear goal while you are conducting a task to keep you motivated?

- Do your tasks here provide clear goals?

3. To keep you motivated, is it important for you to get immediate feedback from the task after you accomplish it?

- Do you get immediate feedback from your tasks here?

4. When you are motivated, do you get a feeling that your actions and awareness are merging?

- Have you noticed this kind of feelings while working here?

5. Does motivation give you a sense of control over the task which you are conducting?

- Have you noticed this kind of feelings while working here?

6. While you are motivated to conduct a task, do you get a feeling that you are so focused that all distraction is excluded from your consciousness?

- Have you noticed this kind of feelings while working here?

7. When you are motivated have you ever felt like you are losing your self-consciousness while you are conducting a task?

- Have you noticed this kind of feelings while working here?

8. Have you noticed that while you are conducting a task time seems to past much faster than normal when you are motivated to do what you do?

-Have you noticed this kind of feelings while working here?

9. Have you ever noticed that the activity you are conducting gives you so much enjoyment and satisfaction it becomes worth of doing because of that feeling and not so much because of the actual goal anymore?

-Have you noticed this kind of feelings while working here?

GAMES

Do you like / play video games?

If yes, what kind of games? If not, why?

Describe the feeling they give to you? Do you get similar feelings related to motivation that we talked about earlier?

Are you familiar with the idea of gamification? (If not, I'll explain it)

Imagine the situation that VAMOK would have an app where everyone would achieve points from conducting certain tasks e.g. participating on meetings and those points would be listed in the leader board which everyone could see. Every month certain amount of people from the leader board e.g. 3 highest scoring persons would be rewarded somehow.

What kind of situations you think this would lead?

How do you feel like about the idea of adding this type of game elements into your daily work here?

Would it increase or decrease your motivation? Explain?