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Gamification of training experience

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2021 is the second year of COVID-19. The pandemic changed dramatically many aspects of people's life including learning. The students' motivation has been challenged greatly by remote studies. Distractions, missed classes, lack of social interaction are some of the effects of studying from home. The magic of games is needed more than ever.

The aim of this thesis project is to increase student's engagement who study experience economy related courses, and in particular, those who learn the Experience Pyramid. This is done by designing the "Experience Collage Challenge" workshop. The deliverables of the project are two presentations created for both teachers running the workshop and students participating in the experience. The design of a gamified experience is based on the knowledge and insight of theoretical frameworks and the analysis of the data gathered via qualitative research, observations, or other design methods including play-testing.

The gamification experience is viewed through the lenses of the user-centered Experience Design approach, namely, the Double Diamond design process (Design Council, 2005). The theoretical foundation was created by reviewing existing literature relevant to the topic. The theoretical framework derived from integration of the gamification framework elements into Design Thinking model. To gain insights and create more empathy with the target group, qualitative research, in the form of semi-structured interviews, was carried out. Regarding product development methodology, the above-mentioned design process was used.

The interview with the target group, observations, and their analysis based on the Octalysis gamification framework (Chou, 2019) showed the lack or of several types of motivational drives both intrinsic and extrinsic among the students which could be improved during an online class about Experience Pyramid Matrix. The special attention was paid to the social aspect of the experience since one of the strongest effects of pandemic is lack of social interaction. Also, the author considered the importance of reflection for Experiential Learning pedagogy.

This thesis was written during 2020 and 2021, and the learning experience was created and play-tested in May of 2021. The first "Experience Collage Challenge" presentation includes the following: set-up information for teachers or workshop facilitators; the introduction to the challenge consisting of rules, point system; and the play which includes the steps for running the session. The second presentation includes an example of the individual task and instruction related to the Experience Pyramid elements created for the workshop participants.

Keywords
Gamification, Design Thinking, Player Motivation and Engagement, Experiential Learning

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1 Introduction

In the Experience Design field, the user-centered approach has become the main principle for addressing user's needs and creating successful products, services, or experiences. Following this philosophy, designers are in constant search of new ways to enhance user experience. The functionality and usability of the products are no longer enough to win customers. The user enjoyment has emerged to be the new competitive landscape. This led to the increasing popularity of gamification since it offers techniques to engage the users on the emotional level. Nearly two-thirds of the studies on gamification have been done in creating the educational experiences (Hamari et al., 2014; Seaborn and Fels, 2015). Gamification is also part of the Experiential Learning approach where such terminology as game-based learning or serious games used more frequently. The history of learning using game elements dates back thousands of years where games were used in teaching strategy, tactics, languages, arithmetic, and so on (Hellerstedt and Mozelius, 2019). Gamification, by contrast, is a relatively new field where the term originally came from the information technology field and was first coined by a British programmer, Nick Pelling, who defined gamification in 2002 as "applying game-like accelerated user interface design to make electronic transactions both enjoyable and fast" (Pelling, 2012). However, this moment it often used in referring to any type experience where game elements apply to.

Both educators and industry professionals have been interested in the idea of extracting the magic of games and use it for non-game purposes. Games are capable to make people feel as they do less work although, it remains so. According to the research of Jane McGonigal (2011), a well-known designer and author in the game industry, the average amount of time spent by a World of Warcraft player is 22 hours a week. Considering the fact that these people do not get paid for so many hours spent on solving challenges, it is hard not to call it work. Their level of commitment is incredible since psychological factors played a part here. Together with the play, they have the power to evoke the following psychological state: they make people believe in their own abilities and make them feel as they can overcome any obstacles; they reach complete absorption and high concentration of activity. This is what is happening when the person experiences a feeling of "fun". The opposite to this wonderful feeling is not what many conservative individuals suspect it to be, for example, work, but it is a depression. What is known about a depressive state is that people are overwhelmed by their problems, they do not have the energy to tackle them, and they lose hope in overcoming those challenges. If we read any explanation of the depression, it will sound as a reversed definition of play. Therefore, "The opposite of play isn't work. It's depression" (Sutton-Smith, 2001; 2009, p.198).

At the time of COVID-19, the magic of games is needed more than ever. The pandemic changed dramatically many aspects of people's life including learning. The students' motivation is challenged greatly by remote studies. Distractions, missed classes, lack of social interaction are some of the effects of studying from home. The author was inspired to add more "fun" to the online course experience, especially in case of the course teaches Experience design. The present thesis was done for LAB8 Service Experience Laboratory (LAB8) of Haaga-Helia University of Applied Sciences (UAS). LAB8 acted as a commissioning organization and was the one that predefined the project's aims and objectives. The aim of this thesis is to increase engagement of the students who study experience economy related courses, and in particular, those who learn the Experience Pyramid. This is done by designing the "Experience Collage Challenge" workshop. The deliverables of the project are two presentations created for both teachers running the workshop and students participating in the experience.

The design of a gamified experience connects knowledge and insight of theoretical frameworks and the analysis of the data gathered via qualitative research, observations, or other design methods including play-testing. The theoretical foundation was created through reviewing existing literature relevant to the topic. To gain insights about the target group, the qualitative research, in the form of semi-structured interviews, was carried out. The methodology regarding product development is based on the Experience Design approach, namely, Double Diamond design process (Design Council, 2005). Gamification is also studied and reviewed through the lenses of the design process. Therefore, the key concept of this thesis is Gamification. Design Thinking approach acts as a secondary concept while being defined and described in a subchapter of Gamification.

The thesis has the following structure. The thesis topic, aim and objective, methods, and the product are covered in the thirst chapter. Chapter two is dedicated to Gamification which includes key definitions, concepts, and frameworks related to the topic as well as the elements chosen for this particular thesis project. Chapter three covers the planning and execution of the experience (product) as well as the methodologies and the background of the project. It follows the Double Diamond design process (Design Council, 2005) and each step of the process is described consistently in this chapter. It ends with playtesting evaluation of the experience (product) and the thesis's limitations and risks. The final part of the thesis discusses the product results including the process and the educational outcomes. The experience or product is presented at the end of the thesis in Appendix 4.
The present thesis uses The Harvard referencing style.

2 Gamification

The theoretical foundation will be revealed in this chapter and its subchapters. The author starts with explaining gamification as a term and concept. She continues then with motivation and engagement which are the major topics in understanding gamification. They are reviewed based on the Octalysis gamification framework model (Chou, 2019) which provides a basis for both gamification analysis and ideation. It also serves as a guidance in discovering and understanding complex motivational theories within gamification context. The next subchapters are focused on the design process of gamification. Firstly, the Design Thinking approach is covered with the Double Diamond design process model (Design Council, 2005). Secondly, the gamification process is reviewed though the lenses of design. Finally, the author found it necessary to provide brief discussion on the Experiential Learning since the gamification apply to learning experience. It is done though the Kolb's Experiential Learning Cycle model (1984) which represents a fundamental theory in the area of Active Learning approaches. The chapter is ended with the presentation of a theoretical framework for this thesis and project development which is constructed on the most critical and relevant parts of the literature review.

2.1 Gamification as term and concept

The present chapter gives an overview on gamification as a term and concept. It discusses shortly psychological aspects of gamification which lead to engagement. This is covered by such fundamental theories as the Self-Determination Theory (Deci and Ryan, 1985), and the Flow theory (Csíkszentmihályi, 1970). The central framework discussed in this chapter is the Octalysis framework which brings together the motivational theories and gamification practices.

To start with, what is not defined as gamification. Gamification is not equal to game design or game theory (Kumar and Herger, 2013; Marczewski, 2013). Gamification does not intend to turn experience into games for entertainment purposes. It rather borrows gameful elements to achieve goals in a non-game environment. Seaborn and Fels (2015) conceptualized gamification with the following definition. They defined it as a planned application of game elements to non-game context or tasks in order to create a gameful experience. According to Merriam-Webster Dictionary, gamification is "the process of adding games or game like elements to something (such as a task) so as to encourage participation" (gamification, 2021). Gamification is often defined as a digital realm (Burke, 2014). Although, there is no consensus as to whether the term "gamification" should be used for online or offline products, services, and experiences. A significant number of

studies are related to the online type of gamification considering its popularity among digital marketers, and web and application designers. However, Karl Kapp, an expert on the intersection between games, learning, and technology, states that gamification should not be limited by technology or does not need to be online. It should rather focus on design (Kapp, 2014). His definition of gamification derives from an instructional design perspective. He describes it as the usage of “game-based mechanics, aesthetics, and game-thinking to engage people, motivate action, promote learning and solve problems.” (Kapp, 2012, p.10).

In the education domain gamification shares similarities with at least three more concepts such as Game-Based Learning (GBL), Serious Games and Simulations. These are considered to be more explicit types of gamified experience (Chou, 2019; Kapp, 2014). However, all four concepts are overlapping since they employ the same principles from the field of game design and game psychology. See (2020) suggests considering a broad concept of gamification for implementation in learning while gamification experts Yu-kai Chou (2019) and Denny (2019) support Kapp's statement on focusing more on the application rather than defining the term. In this thesis, the gamification refers to an experience involving game elements.

The gamification experience provides great opportunities for increasing learners engagement and motivation. The successful gamification and games have showed the ability to increase player's intrinsic motivation and facilitate the flow which made educators interested in using this power towards non-game environment. Gamification offers the safe environment for failures which is an important experience for the learning process (Kapur, 2008; Kapur and Bielaczyc, 2012; Kapur and Kinzer, 2009; Plass, Perlin, et al., 2010), especially in experiential learning and problem-based learning. It provides immediate feedback, promotes collaboration, risk taking, discovery and application of gained knowledge in a new context (Hoffman and Nadelson, 2010; See, 2020). Integration of game elements has an overall positive effect on the learning results according to the number of studies (Amory, 2007; De Freitas, 2006; Kiili, 2005; Quinn, 2005). In addition, the new generation of digital natives has been already exposed greatly to gamified experience which pushed the development of gamified learning solutions (Prensky, 2006).

However, gamification was also a topic of criticisms and controversy not only from learning perspective but game design. For example, Schell (2013) argues that it is almost impossible to create fun in the context of a “not fun” environment. Bogost (2014) considers gamification as a marketing nonsense which serves wrong purposes and ignores the complexity of the game design. McGonigal and Sheldon tend to avoid using the term

gamification. The reason for such criticism or ignorance is often based on taxonomy (Chou, 2019; Kapp, 2012). Finally, gamification is still considered by some educators as a less serious and irrelevant solution which distract the students from learning (Markopoulos, 2015).

2.1.1 Player motivation and engagement

There are many approaches in understanding and explaining how gamification engage and motivate depending on a discipline. The author approaches it from a motivation point of view through the Octalysis framework. The psychology is the foundation of any gamification design (Linehan et al, 2015; Zichermann and Cunningham, 2011). It means without understanding motivational factors involved, it would be hard to design any type of gamified experience. Along with motivational theories, the Flow theory on engagement is covered later in this subchapter.

Chou (2019) suggests a framework for analyzing and creating strategies around the elements which bring fun into activity. It is called "Octalysis" and is represented in a form of an octagon shaped model (Figure 1). Each realm of the octagon matches one of the eight core motivational drives. Chou claims that behind every activity people do is one, two, or more of these core drives illustrated in the model. If none of them are present, it means there is no motivation in the activity or task. According to his research, the most successful games apply all of these eight core drives to their systems. Also, there are dimensions of the models that differentiate the drives between “White” or “Black Hat” gamification and the “Left Brain” or the “Right Brain” drives. The first dimension opposes the feeling of power, fulfillment, and satisfaction towards obsession, anxiety, and addiction. “White” or “Black Hat” gamification depends on the level and nature of control the person possesses during the play. Another dimension divides the drives into the “Left Brain” or the “Right Brain” categories. In the terminology of Self-Determination Theory of Deci and Ryan (1985), “Left Brain” and the “Right Brain” correspond respectively to Extrinsic and Intrinsic motivations. The extrinsic motivation explains the drive to act based on the external factors including the reward (1985). In the context of education, it can be grades, credits, and admiration. The intrinsic motivation is considered to be more sustainable and is not affected by external factors. There is no reward in reading books, dancing, playing sudoku, singing a song, or playing basketball with friends. All these activities do not need an external influence to perform them or continue doing them. People chose to do them because of freedom in making decisions and the meaningfulness of these activities to them (Deci and Ryan, 2012). They make them feel efficient and successful when they experience control or get better at them. Finally, people develop feelings of belonging and care by connecting and interacting with others. The

intrinsic activities are enjoyable and interesting to do or play because they satisfy three important psychological needs: autonomy, competence, and relatedness (Deci and Ryan, 2012) which are similar to Chou's motivational drives “Empowerment of Creativity and Feedback”, "Social Influence and Relatedness" and “Development and Accomplishment”. They will be mentioned further in this subchapter.

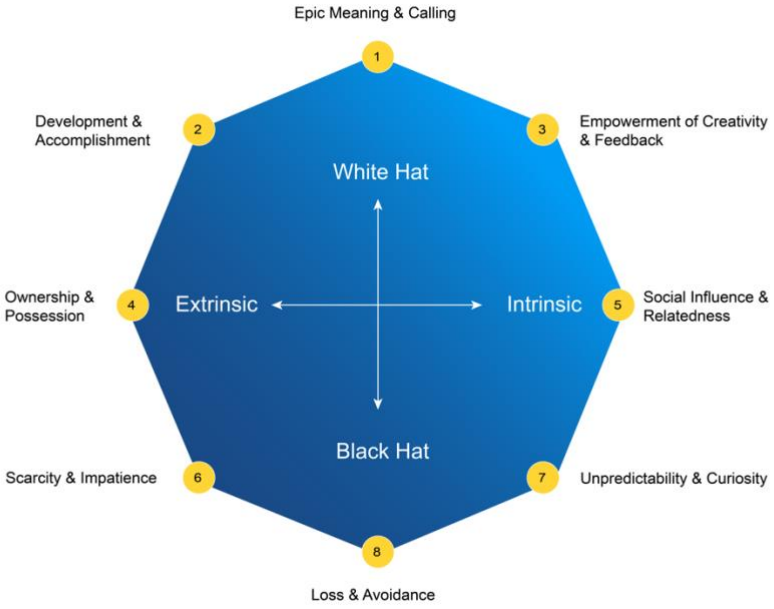

Figure 1. The Octalysis Framework (adapted from Chou, 2019, p. 24)

The first one of the eight motivational drives called "Epic Meaning and Calling" (EMC), when the player's motivation is based on the feeling of being involved in something larger than him- or herself or being "chosen" to accomplish something (Chou, 2019). This is also mentioned by Pink (2011) as the "purpose". He claims that in addition to the three psychological needs stated by Deci and Ryan in Self-Determination Theory (1985), people are intrinsically motivated by the idea of contributing to the greater good. This drive does not only have the power to turn the passive individual into an active and committed player but to change the social dynamic to more collaborative and supportive in the organization (Czarniawska,1998; 2000) or in the classroom (Mello, 2001). Epic Meaning or Calling can be promoted through narrative. For example, there is a typical story method called Hero’s Journey which was introduced by Joseph Campbell and developed further by Christopher Vogler in 1992. The obvious story which follows a Hero’s Journey would be "The Hobbit, or There and Back Again" where the hero is taken from his daily routine and comfortable home to a transformational journey full of mental and physical challenges. Also, the seven basic plots are suggested by Christopher Booker (2004) which features the following:

Overcoming the monster, Rags to riches, Quest, Voyage and return, Comedy, Tragedy and the Rebirth.

The Evoke, an award-winning educational game developed by a game designer Jane McGonigal, uses narrative as the main game technique to create a sense of higher meaning which is focused on solving possible global crises. There is the element of mystery, "humanity hero" and elitism. The players receive weekly missions which are followed by a narrative in the form of a graphic novel. It tells a story of a secret network of international agents who have a superpower to find innovative solutions to wicked problems. The player is "chosen" to join their secret mission in real life. The novel serves as a textbook. (Freeman and Hawkings, 2017).

Figure 2. This photo contains a screenshot of graphic novel from educational game EVOKE (the World Bank, 2021).

Evoke demonstrates the effectiveness of the EMC core drive specifically during the Discovery and Onboarding Phrases of gamification experience. However, to use it successfully, the designer should consider authenticity. The role of context is crucial in this case (Chou, 2019).

To conclude, a well-defined theme is a crucial part of any type of staged experience (Pine and Gilmore, 1998). There is a whole science behind creating a building a compelling narrative or applying storytelling technique that originates from the theatre. In the context of the gamification thesis, it is just one of the game techniques.

The prior mentioned Evoke game would not be able to maintain player motivation if it was based solely on the first drive. Evoke applies what Chou (2019) calls the second drive, “Development and Accomplishment” (DA) in addition to “purpose”. This core drive is based on the need for competence which is also one of three basic human needs within Self-Determination theory (Deci and Ryan, 1985; 2000). This core drive describes the need for progress, development, and accomplishment resulted from overcoming challenges. Chou (2019) considers this drive as extrinsic type while Pink (2011) claims that people’s tendency towards mastery is intrinsic motivation. According to Wu (2014) intrinsic motivation should not be confused with intrinsic reward. He points out that the extrinsic activity can have both intrinsic or extrinsic rewards, while intrinsic one is based on autonomy, mastery, relatedness, and purpose.

The most popular game mechanics used to foster a sense of development, mastery or accomplishment are known as the Points, Badges, and Leaderboard (PBL). The Interaction Design Foundation (IDF) is a great example. They successfully implement the PBL system to motivate the users. The learners can monitor their development on the platform with a progress bar element (Figure 3). IDF also reward communication in the discussion forum with points. Besides, each subchapter of the course offers frequent feedback via short quizzes regarding the understanding of the material. In the case of a negative feedback, there is always positive reinforcement (Figure 4).

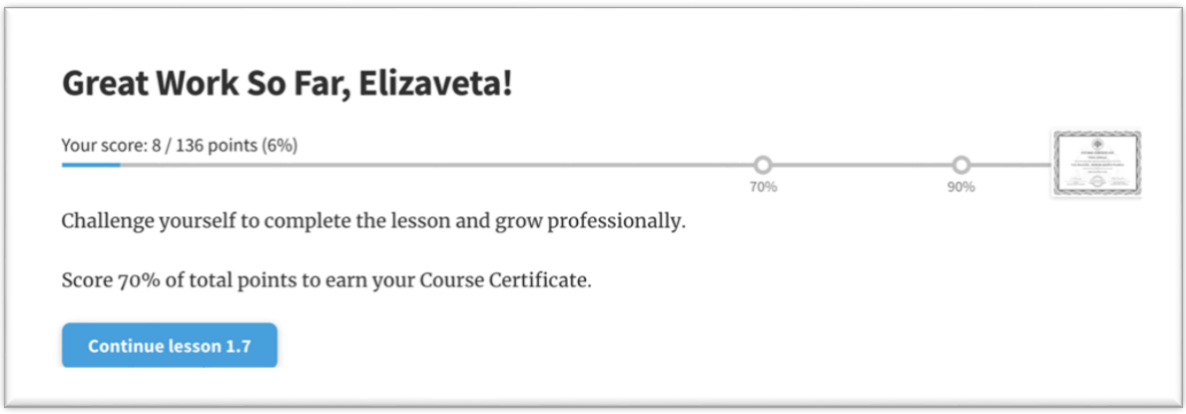

Figure 3. This photo contains progress bar element from the Interaction Design Foundation online course (2021).

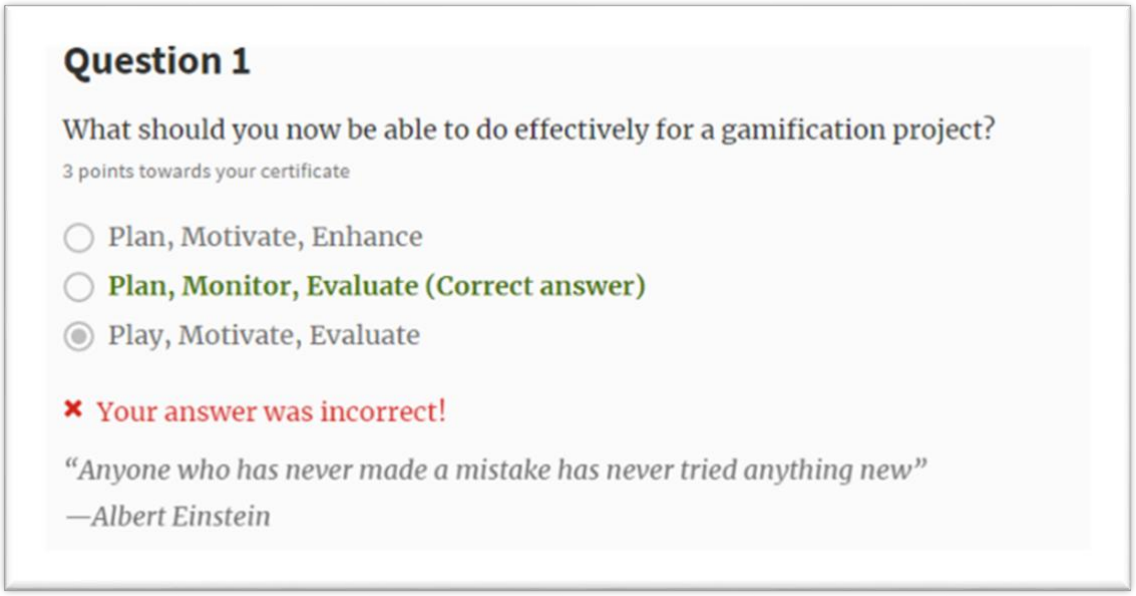

Figure 4. This photo contains feedback element from the Interaction Design Foundation online course (2021).

The Google certified English teacher, Megan Ellis, in her speech on gamification at the Fall 2014 CUE conference claims that points should be given for "necessities" at the start of the gameful experience. At the later stage, she proposes to reward the students with "extras". Both "necessities" and “extras” should match the needs of the target group. In her case, the eighth-grade students were given a choice in picking the seat in the classroom or free homework pass as “extras”. Also, she suggests to increase the number of efforts required to receive points with each level of the gamification system.

Apart from the points, the designer can show the progress by displaying the leaderboards which have their own pitfalls though. The studies of Landers and Landers (2014) and Slavin (1980) show that having the leaderboards which reveal all the players ranging from the beginner to the top-ranking ones can create too much frustration for the ones who start the experience. Instead, the user can be exposed to the mini version of the leaderboard which would show his or her points next to people with similar results or experience level. Another way is to create a group leaderboard or compare the players achievements to their pervious results (Hodent, 2020).

To use such game dynamics as competition, the designer should state the aim clearly. It is recommended to shift the focus from winning or losing towards improving performance, meaning increasing knowledge and learning new skills (Cantador and Conde, 2010; Kapp, 2016). According to Kapp (2016), students tend to act in accordance with the fact that they are going to be assessed by others which is a performance-based orientation. It is

often inspired by poor gamification design. He states that gamification should set mastery-based goals and feedback. It motivates learners to look for challenging errands while facilitating the "trial and error" process, which is vital for developing problem-solving skills (Blair, 2012; Kapp, 2016).

If the PBL system works well for promoting feelings of development and accomplishment. However, it would have the opposite effect if the aim was to encourage creativity. Creativity lays at the heart of the third motivational drive of Octalysis model (Chou, 2019) which is called “Empowerment of Creativity and Feedback” (ECF). The research at the Massachusetts Institute of Technology showed that extrinsic rewards had a positive effect on the performance when it comes to mechanical activity. However, the same rewards had an opposite, negative effect on the participants' performance if activities needed elementary cognitive skills (Ariely, 2008). The conclusions made by Ariely were similar to the earlier studies done by psychologists at Stanford University. Cordova and Lepper (1996) observed children’s motivation while they were painting. They recorded a considerable decline in interest to paint among children who were previously given a reward. In addition, the quality of their performance declined when they were expecting to receive the prize.

One line of research on creativity suggests that the important condition in fostering creativity is setting a clear goal (Aleksić et al., 2016). Besides, choice making plays an crucial role in creativity (Sheldon, 1995). Several studies on autonomy including the one done by Zuckerman, Porac, Lathin and Deci (1978) shows that people prefer to have more than one single option to choose from. Schell (2008) claims that the key to the choice perception is not to give a pure freedom to the users, but to make them feel as they have it (Schell, 2008). It means we cannot give a freedom to students or course participants to choose if they want to study or not, but we can provide the options how they want to do it. According to Chou (2019), chess has a long-lasting popularity thanks to the numerous possibilities of attacks or movements. This what makes it a creative game because there is no single way of playing it. Schell (2008) also suggests creating meaningful choices by providing the players with two types of options: the secure one with less rewards and a risky one with more rewards. For example, in the social tabletop role-playing game "Two Rooms and a Boom" players have hidden roles which they can either reveal entirely or partly to other players in order to get information from them. The first one can be riskier since the other player might be actually a spy of another team and refuse to show his card in return. The best way to build gamification around this drive is via Scaffolding or Endgame. Chou (2019) places "Empowerment of Creativity and Feedback" drive at the right upper corner of the framework which means that this is a pure intrinsic-

based and "White Hat" type of gamification. The games which manage to motivate players through empowerment of creativity and feedback have a long-lasting life and less of the player's fatigue.

The fourth drive of the Octalysis framework is "Ownership and Possession" (OP). It is based on a human strong desire to own something. According to Kumar and Herger (2013, p. 63), "we enjoy collecting — trading cards, coins, stamps, antique wristwatches, cars or friends on Facebook". For instance, Interaction Design Foundation successfully uses badges to motivate the users to take more courses in order to increase their collection.

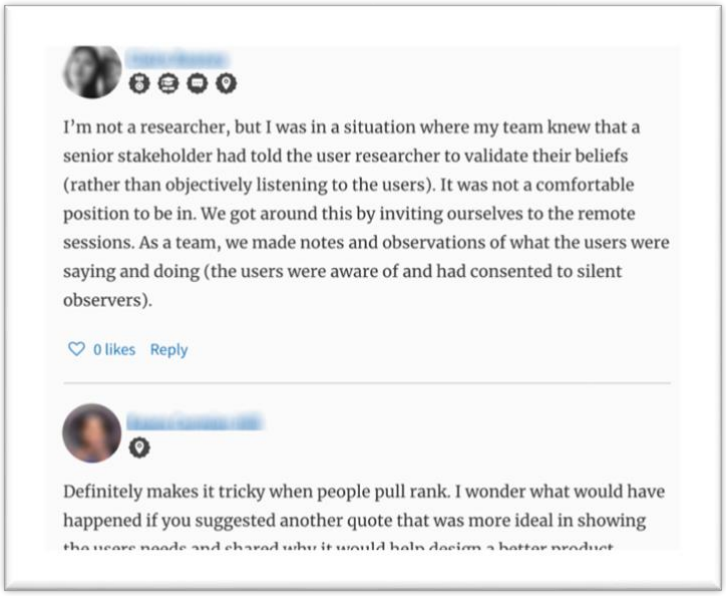

Figure 5. This photo contains badges as game elements from the Interaction Design Foundation online course (2021).

If the person considers any asset as "mine", there is a natural tendency to upgrade, defend or collect more of similar types of assets. This drive is placed on the left extreme of the model showing that it activates a calculating type of mind. The studies on the social behavior (Carmon and Ariely, 2000; Kahneman, 2013; Knox and Inkster, 1968) show that from the moment we own something or even have a feeling that we do due to Endowment Effect (Heyman et al., 2004), the value of this particular item rises greatly. The experiment of Carmon and Dan Ariely (2000) demonstrated that this value can be increase even by fourteen times. However, if the item is for exchange or selling (not for personal use), the Endowment Effect is not or less present (Kahneman, 2013; List, 2003).

According to Pierce et al. (2001), the prerequisites for a sense of ownership is the

interaction with objects in the form of control, intimate knowledge, and investment. The given control, for instance, in customizing the avatar is one of the ways to foster a sense of ownership. It is also closely related to self-identity of the person which is another attribute leading to ownership (Hodhod et al., 2011). Another way is to grant special access to information (Mayhew et al., 2007). Furthermore, the investment of different types such as time, physical or mental energy, ideas or skills investment can increase that feeling. The IKEA effect, for example, demonstrates that customers value unreasonably higher the furniture which was assembled with their participation (Norton et al., 2012). Similarly, the game industry tries to make the players invest their energy in setting up a profile, building villages, and other activities before the main gameplay begins.

"Social Influence and Relatedness" (SIR) drive is in connection with the social aspects of the experience including "mentorship, acceptance, social responses, companionship, as well as competition and envy" (Chou, 2021, para. 9). This type of motivation is frequently utilized by businesses at the discovery and onboarding stages of the customer journey. The "Relatedness" part extends not only to people but to locations, events as well. Numerous studies in psychology (Dittman, 2003; Nouri, 2018; Salzman et al., 2003; Zimbardo et al., 1971) show how strongly people can influence others and how "everybody does that" can impact the behavior of masses. The Relatedness is one of the three psychological needs within Self-determination theory which leads to higher motivation and wellbeing (Deci and Ryan, 2000). According to Lazzaro (2009), the social aspect of games creates the most fun comparing to other game mechanisms. Especially when it comes to the feeling of friendship in the context of a disconnected world (which is now even more disconnected in the context of the Corona pandemic), the mechanisms sparking a feeling of relatedness are very powerful (TWiT Tech Podcast Network, 2018.)

According to Kapp (2012), gamification should consider cooperation or competitiveness while providing ways for individual achievements and self-expression. The idea of competition within the area of relatedness and influence may sound also exciting in terms of gamification. However, it has a high potential to cause moral damage to the organization in the long term while decreasing the well-being of its employees (Hammedi et al, 2021). In the educational context, where creative thinking, teamwork, and collaboration are required, competition is not recommended (Chou, 2019; Kumar and Herger, 2013). Although, the short competitions still might be effective for developing particular mastery skills in gain-oriented scenarios (Herger, 2014).

In the role-playing game developed by the Third World development charity called the International Trade, the team competition applies to demonstrate the competitive aspects

of the global economic relationships (Sutcliffe, 2002). The game lasts 45-90 minutes. It still promotes group work and other social skills such as negotiation, for example, which is one of the learning objectives of such economic classes. Nevertheless, there is another way to activate the power of "healthy" envy. The game technique "Trophy Shelves" (Chou, 2019) let the user to demonstrate their achievements without using words. The prior mentioned example with badges (Figure 5) is a perfect illustration of this game technique. It illustrates the course participants writing comments in a forum chat while unintentionally revealing their badges.

The sixth drive of the Octalysis model is "Scarcity and Impatience"(SI). It is based on the desire to obtain something which is not currently available. It can be scarcity in time as well. Chou (2019) states that the designer needs to communicate before to the user how challenging is to obtain this particular item and to track later the flow of scarcity. The user should never feel abundance of something but at the same time, he should believe in his ability to obtain this desired item. This echoes partly the Flow theory of Csikszentmihalyi (1990) which is about managing the balance between challenge and skill levels. When there is abundance of everything, this leads to low engagement, namely, boredom according to this theory which will be covered later in this chapter. There are different methods to foster scarcity and impatience. For example, making something available only at certain moment which is called Appointment dynamics. We can also use fixed intervals, or making something available after fulfilling certain conditions, or exposing the countdown timer. While manipulating with the time, the game designers often make people wait longer for the reward to provoke them to use multiple ways of reaching the desired goal (Swacha, 2016). The fastest option is usually monetized in the commercial sector while the longer one requires additional steps before completing the task, for instance, inviting a friend (Chou, 2019).

Drive number seven from the Octalysis model is "Unpredictability and Curiosity" (UC). It is based on the desire to know what to expect next. This is the drive to blame for gambling and lottery addictions according to Chou (2019). Returning to the example of a gamified English course, Megan Ellis realizes soon that the points and the level system are not enough to motivate the students to check their homework posted on the portal. Therefore, she set sudden rewards. She starts occasionally posting some messages on the portal which give extra points to the students who were at that very moment checking the portal. Another type of surprising reward is "Mystery Boxe" where the trigger is expected in contrast to sudden rewards. One unique case related to this technique in education was demonstrated by the Science Museum Group Learning (2013). In their training, they offer STEM students the mystery boxes with unknown objects inside. They try to guess based

on their sound, weight, behavior, and other parameters what is inside the box. The process simulates a real challenge of facing the unknown in science while teaching collaboration and scientific argumentation. “Curiosity" paired with the "Development and Accomplishment" drive are the ones that usually motivate people to play escape room games. In escape room, participants solve a mystery consisting of puzzles. Christopher See, a lecturer at the Chinese University of Hong Kong, used this type of gamification to teach students anatomy. According to See, (2020, p. 68) gamification in learning should focus on the narrative, in the case of the Escape Room game the narrative turns students "in the role of an academically orientated detective" which can better justify the use of codes, crossword puzzles, and anagrams.

Figure 6. This photo contains an escape room puzzle based on pattern recognition developed by See and presented at TEDx Talks (2016).

The eight-core drive and the last one on the Octalysis model is "Loss and Avoidance" (LA). It is at the center of “Black Hat” realm of the model meaning that this drive can be used in taking control or manipulating the players which can cause addiction and a negative post experience in the long term. LA means the person is motivated because he or she does not want to lose something or want to prevent something of a negative nature, for example losing virtual lives, money, points and so on. This seems to be similar to what Schlechty (2002) calls a passive compliance in learning which is described as one of the five categories of engagement instead of motivational drive. The students can be

motivated by avoiding the bad marks or loosing credits which is a different type of motivation comparing to the students who want to succeed in learning.

The Octalysis framework serves as a good starting point for experience designer to discover and understand complex motivational theories within gamification context. Although engagement is a desired and potential outcome of motivation, which makes two concepts closely interconnected and overlapping on some levels, they are still not the same. Therefore, the following paragraphs are dedicated to understanding engagement and its theories relevant for educational gamification.

There are various ways of explaining the differences between motivation and engagement. Within self-determination, motivation is seen as a prerequisite of engagement (Ryan and Deci, 2000). It means the force behind the action. It explains why a certain behavior is initiated, continued, or ended (Kazdin, 2000). Kuh (2009) connects engagement with the quality of the participation and the participants' energy towards the authentic educational activity. In order, the evaluate motivation in learning, the engagement should be measured since the motivation itself is not enough for ensuring progress (Blumenfeld et al., 2006; Saeed and Zyngier, 2012). If students are engaged, they do not only manage the given challenge, but they do it with conscientiousness and enthusiasm (Schlechty, 2002).

The challenge plays a significant role in engagement regarding both learning and gamification. The theory which connects particularly enjoyment and challenge is The Flow Theory (1990). In 1975 Csikszentmihalyi introduces the term "flow" to describe a state of complete immersion in an activity that can reach a critical level of engagement along with the feeling of timelessness. He describes it as an “optimal experience”. The activity becomes so enjoyable and engaging that the person cannot easily stop performing it even at a high price. The “flow” happens when the person’s skills and the challenge are matched. In addition, there are the following preconditions: clear goals, clear immediate feedback, action-awareness merging, lack of distractions or outer threats, loss of self-reflection, autonomy, distorted perception of time, and intrinsically rewarding activity (Csikszentmihalyi, 1990).

To manage the "flow" means also monitoring and managing the emotions of the people participating in the experience. If the person struggles too much to solve the challenge which is far above his level of competence and skills, he experiences much more negative emotions such as worry and anxiety. Such conditions will not result in an enjoyable experience and the person will not be able to reach his or her sense of “flow”. However, if

the challenge is too easy, the level of anxiety would be too low reaching a feeling of boredom or apathy. Those are not enough to motivate. According to Mullins and Sabherwal (2018, p.1237), "the most engaging games, like great works of fiction, evoke emotions in the player that vary in their nature, valence, and intensity". When we think of gamification, we intend the player to experience positive emotions which are supposed to create “fun”. However, from a cognitive-emotional perspective, the successfully gamified system employs both negative and positive emotions (Mullins and Sabherwal, 2018). While watching a movie or reading a book, we go through a wide variety of feelings including anticipation at the beginning of the story, fear for the protagonist in the moment of danger, anger at antagonists, joy from a victory of good over evil, for example, and so on. However, the right dose of the “bad” emotions does not decrease the amount of “fun” or enjoyment from the movie but by contrast, leads to engagement. Steven Kotler (2014) even offered his way of measurement regarding the challenge difficulty level which, according to him, should be four percent greater than the skills’ level. For example, the chess players will enjoy more playing with the opponents slightly better than them. Thus, matching the right players would be a way to adjust and predict the necessary dose of negative emotions. In the next chapter, the engagement metrics in measuring gamification are be covered in more detail.

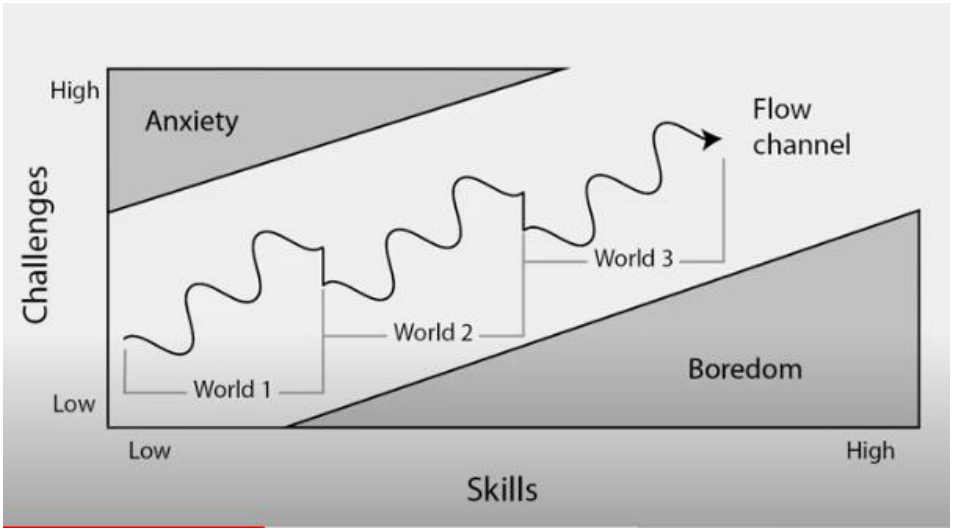

Figure 7. Fractal Flow Channel (Sokoban, n.d)

In the figure above the flow framework model is adapted to game design which is also called as Progression Through Flow (Berube, n.d.). The games are the best in teaching the “flow” design. Therefore, the author felt it would be useful to give an overview of a game-related flow which could add deeper understanding of the engagement for gamification topic. The model presented is one of the variations of the Flow in game design. This one is called Fractal Flow Channel. It is a three-stage process which is equal

to the duration of the whole game. First stage presents the basic mechanics to the player. For example, in the game called Ninja Arashi, a beginner learns the basic skills as jumping and using weapons. The obstacles are placed in that way which make a player to practice one of those elements. For instance, while the player is moving in the game a wall or an enemy appears on the way. When the state of “flow” is achieved, the stage of “maintaining the flow” enters into force. As the player get better, the walls are getting higher, and the opponents are more skillful in their attacks. The new levels are getting so challenging that the player is ready to drop off the game. At this point, the game designer tries to reduce the tension and return the player from the anxiety state to the Flow channel by giving opportunity to buy more lives with the points collected and rewarding the player with slightly easier challenges. There are two types of flow: Macro and Micro-flow. The first one is related to the players’ long-term mission and is used to keep the players for years in the game. It matches the game duration. Nonetheless, it is not enough for maintaining engagement. That is why the game loop should have a second type of Flow, the Microflow, which are small “wins” in the game. They recommended to be fifteen minutes for computer video games and four minutes in a mobile game to support the flow (Berube, n.d.).

The main advantage of the online games over other types of game-related activities is the ability to collect a vast amount of behavioral data and monitor the player performance in real time via the Dynamic Difficulty Adjustments (DDA) system. For example, if the game system understands that player died too many times in trying to run from a stone ball, it can reduce the speed of the ball or provide more opportunities to gain virtual lives. That is one of the reasons why gamification, even the most successful one, cannot reach the same level of immersion or “flow” as in games since it does not usually have the same amount of data and DDA systems.

To conclude, the author gave an overview on the player motivation and engagement mechanisms based on the Octalysis gamification framework as well as two fundamental theories such as Flow Theory and the Self-Determination Theory. Nevertheless, the understanding of motivation and engagement is not enough in order to create a successful gamification. That is why the next chapter covers the design process.

2.2 Gamification in design

Although, the majority of the design frameworks features the user-centered or similar approaches (de Paz, 2013; Villegas, 2019), the dominant literature on gamification design including educational ones focuses rather on game elements instead of providing evidence on the process. For example, one of the most mentioned frameworks is The

Mechanics, Dynamics, Aesthetics (MDA) (Hunicke et al., 2004) which can be used as a tool to analyze games or gamification experience, but it does not provide any steps for design. Gamification design methodologies within the educational domain are still evolving (Carreño, 2018). There is no unified process. This is also one of the reasons why many gamification projects fail in general (Gartner, 2012). The ones in education which do focus on the design aim towards the creation of complex explicit, online experiences or e-learning platforms which require a lot of resources outside of classroom (Becker, 2013; Deterding, 2015; Mora et al., 2015; Morschheuser et al., 2017; Olszewski et al., 2017; Salen & Zimmerman 2004). In addition, some frameworks aim at very specific type of experiences (Mora et al., 2015, Martina and Göksen, 2020). The significant part of gamification literature comes within the business field where the “player-centered” or similar frameworks are adopted (Kumar and Herger, 2013; Klevers et al., 2015; Marczewski, 2015; Villegas, 2019; Werbach and Hunter, 2012). The attempt to approach gamification from an experiential learning perspective was demonstrated by Kiili (2005) who pays attention to the importance and conditions of reaching the state of "flow". However, he does not make it clear how gamification is actually developed according to Mora et al. (2015).

In the following subchapters, the author attempts to review the common gamification practices through the lenses of design process. Since this thesis aims at creating an experience at the first place, the experience design approach, namely, the Design Thinking approach is reviewed first, and later gamification design methods follows. The overview prioritizes technical generic frameworks and industry design methods over academic frameworks while paying special attention to educational ones. Since the planned experience is limited in resources, simplicity plays an important role and act as a criterion in choosing design methods and elements. The author does not intend to provide an overview of the game design process but rather gamification practices that is different from game design (Marczewski, 2014). Gamification rather features game elements without necessarily targeting the game experiences.

2.2.1 Design Thinking

Creation of experience as any products or services requires design methods. In order to ensure that the experience is designed based on user needs (or motivation in case of gamification), the design thinking approach applies. It represents a human-centered design process to solves problems and bring innovations.

Design thinking as a method was identified in the second half of the twentieth century. First, Herbert Simon formulated the idea itself, and then Hasso-Plattner-Institute and

David Kelley shaped it into a universal concept that served as the basis for their design school. It is not a strict linear process but rather provide landmarks which are based on the interplay between three spaces of inspiration, ideation, and implementation (Brown and Katz, 2009). It is based on the following principles developed by Meinel and Leifer (2011): the human rule, the ambiguity rule, all design is redesign and the tangibility rule. The fist highlights the human nature of any design activity. The second pays attention to the importance of experimentation to be open to more than one interpretation. The third describes the constant change in design opposed to people's needs which remain same. The last one highlights the importance of turning abstract ideas into tangible prototypes to be effective in communication (Meinel and Leifer, 2011).

One of the design process models within Design Thinking approach is the Double Diamond framework (Design Council, 2005) which has four iterative steps: Discover, Define, Develop and Deliver. The shape of the model visually highlights the importance and equality of two ways of thinking: divergent and convergent. These two apply in both problem and solution parts of the model. Divergent implies keeping mind open and thinking broadly to create choices while Convergent thinking implies the opposite which means thinking narrowly to make decision (Design Council, 2005; Brown and Katz, 2019). The author describes each of the stages including the methods and tools applied. Since there are 164 within Design Thinking domain (Alves and Nunes, 2013) only some will be mentioned.

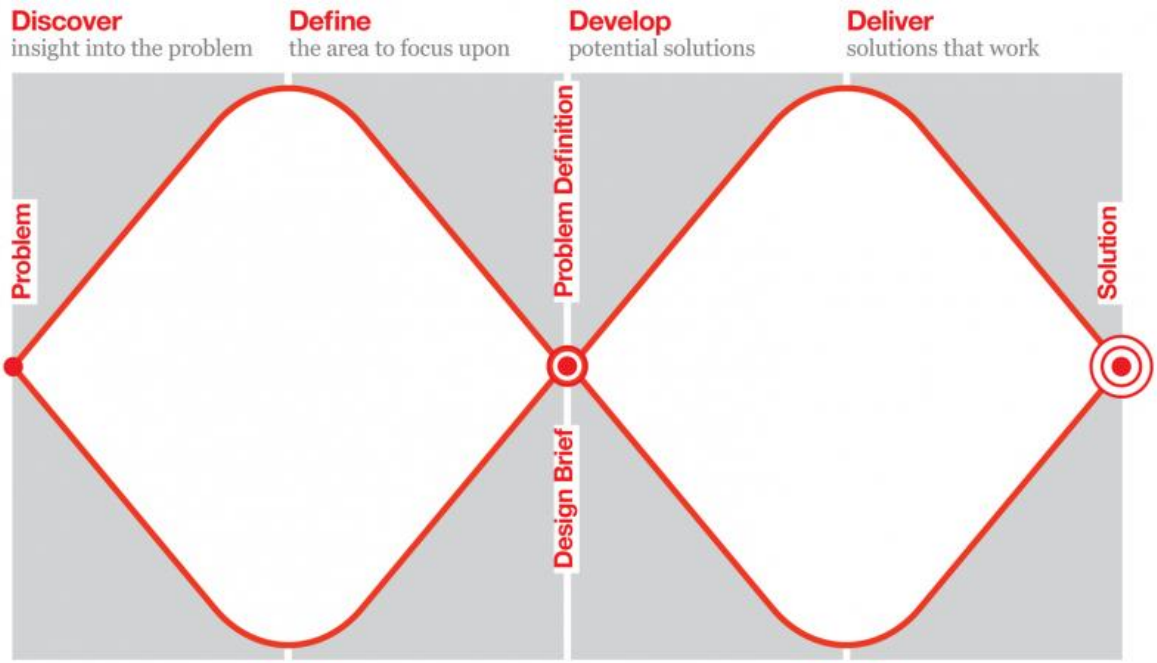

Figure 8. The Double Diamond model (Design Council, 2005)

Although the aim of the first stage, Discover**,** is primary about creating empathy with user, the designer often starts the process with gathering information on the context of the project such as organization, its goals and its culture, industry, competitors and trends (Stickdorn et al., 2011). It can be done thought context analysis, interviews, benchmarking, trend scouting, surveys and other tools (Moritz, 2005). One of the best ways to understand the users "the hopes, desires and aspirations" is through an interview (Ideo, 2015, p.39) since it directly addresses the nature of human-centered design. It can lead to creating personas, journey map or other design tools (Pernice, 2018). The Five Why's technique, developed by Toyota's industrial engineer Taiichi Ohno in 1950, can contribute to understanding of the reasons behind low or absent motivation which is the core of the gamification design (Mora et al., 2015). It can be performed during the interview process by asking five "why" questions which should lead to the emotional roots of the problems if applied correctly (IDEO, 2020). Among other tools are the following: participant observation, ethnography, Empathy Maps and so on.

During Define stage, the findings from the previous stage are analyzed, and filtration of ideas happens (Design Council, 2005). The focus should be still on identifying the problem not finding solution (Stickdorn et al., 2011). Visualization and prototyping tools take place. The aim is to synthesize the data and turn it into concrete steps related to improvement or creation of the new product or service (Design Council, 2005). One of the most common tools to show findings from user research is though creating Persona, which serves as a representation of the number of users with similar needs and traits (Pruitt and Adlin, 2006; Turner and Turner, 2011). Experience mapping is used to project and visualize the future journey of the persona which allows to understand general patterns in human activities from start to end of the experience (Kalbach, 2016; Sarah Gibbons, 2017). Defining the problem can be followed by How might we (HMW) statement that helps in the search of the potential solution ideas (Interaction Design Foundation, 2020).

The first half of Develop stage starts with ideation process which means creating ideas as many as possible. It is important to remember that making mistakes is part of the process (Stickdorn et al., 2011). The judgement should be postponed until the next step. There are many idea generating techniques which can be used individually or as a group including brainstorming, brainwriting, mind mapping, SCAMPER and other techniques (Interaction Design Foundation, 2020). The second part of the Develop stage is evaluation of the ideas and selection of the best one. It can be done thought voting or the Impact-Feasibility Matrix, for example (Nessler, 2016).

The last stage is Deliver. It consists of building on the ideas or concepts, prototyping, testing and analyzing. The process does not end here but should be iterated based on the feedback (Nessler, 2016). The prototyping is valuable for communicating the ideas and concepts with the team and for testing the assumption (Buchenau and Suri, 2000). Depending on the concrete situation as well as the concept, the low or high-fidelity prototypes are built. The main challenge for prototyping experience (similarly to service) is its intangible nature. It is important in this case to consider emotional aspect of the experience according to Marc Stickdorn (2011). He states that designer should be able to tell a story which can be carried out though a comic trip, storyboards, photo or video sequence. However, to make interaction not only engaging but more meaningful, it is recommended to prototype the ideas in the environment close to reality. The staging and role-playing methods can apply here (Stickdorn et al., 2011). The result of this stage is the final concept proposal.

2.2.2 Gamification design process

The Gamification design process is similar in many ways to design thinking, especially regarding Discovery and Define stages. The main difference between gamification design and user-centered design is that gamification focuses on the motivation behind the activity, rather than the user needs. Gamification questions the following: why the user doing or not doing certain activity (Chou, 2019).

In the Discover or the Preparatory phase, the gathering and collection of data on the context and the players, organization, and success metrics (Kumar, 2013) happen similarly as in the previously mentioned process. It features such methods as quantitative, qualitative research and other methods (Mohamed and Jaafar, 2010). The learning goals and needs, motivations should be identified during this stage (Jesse Schell, 2008). According to Plass et al. (2015) the instructional needs should be analyzed at the first place. It can include task analysis (Becker, 2013), the learning space, the leaner specifications, ways of representations and instructional considerations (De Freitas and Oliver, 2006).

The research on the Player can be documented as Player Persona type (Marczewski, 2013). The individual differences based on the particularly playing behavior can help to tailor gamification activities to the dominant player types. Bartle's Player type (1996) is a traditional classification of the players in game design industry. It is worth mentioning that this type of classification is very basic and mostly used in video games while gamification designer needs to address people who are not always interested in games. One of such

models is developed by Marczewski (2012). He divides the players into three categories. First group represents people who are “willing to play”. They are naturally enthusiastic about games and are not that picky if something does not work in the game system comparing to the other types. The second group consists of people who are “less willing to play” and includes the following types: Achiever, Socializer, Philanthropist and Free Spirit. Each of them prioritizes one of the four psychological needs of the SDT. The last type falls into “not willing to play” category or Disruptor. Such players may act as the Griefers and try to destroy the experience of others because either they really do not like this gamification system, or because they just do this for fun. They want to challenge the system or hack it which can be beneficial for testing and improvement purposes if they are ready to cooperate. However, if they cannot be converted to “improver” type, they should be simply eliminated from the game since they can negatively affect other players’ experience. While Marczewski’s framework matches one particular need to the Player type, it is important to remember that all the players have needs in reward, relatedness and other elements mentioned by Deci, Ryan, Pink and Chou. The question is to discover the dominant type in the group and prioritize the needs of the majority of the players while covering all the rest.

Figure 9. Marczewski’s framework on Player Type (2012)

Define stage features learner experience mapping via storyboarding (Olszewski et al., 2017) An interesting method is used by Deterding (2015) who analyses the research on context and user through the lenses of challenge and motives. Kumar (2013) proposed to identify first the current scenario and objectives, set the SMART mission (specific, measurable, achievable, realistic, and time-bound) and later identify potential solution (Ideation stage). For creating a completely new gamification experience instead of gamifying existing one Chou (2014) proposes the following three steps: defining the

desired actions for each stage of the player journey, defining Feedback Mechanics, Incentives and Rewards.

The Develop stage in gamification is the one that differs most from other processes. The Ideation stage plays a central role in gamification projects since it is considered by many as a creative process which is often the reason for such a mystery surrounding gamification (Adams, 2014; Hirumi et al, 2010). For example, Jesse Schell (2008) in his approach starts the "informal" design process directly from the ideation stage and later applies the filters such as Artistic impulse, Experience design, Demographics, Innovation, Engineering, Social/Community, Business/Marketing, Playtesting. Hirumi et al. (2010, p. 27) claims that "educational game design as largely a creative act that cannot be broken down into analytic steps. I believe the artistic approach to design prevails here." This is might be also an explanation for the diversity of gamification ideation frameworks while the majority do not provide a unified and detailed process but rather limit it to recommendations such as tailoring suitable game mechanics to the player journey, the use of PBL elements, reward systems, or designing engaging challenges (Deterding, 2015; Morschheuser et al., 2017; Radoff, 2011). Gamification which aims at creating the explicit type of experience often employs a game design process that is more suitable for complex projects. As well as in Design Thinking approach, the prototyping of the experience is an important step in development which features same methods such as wireframing, storyboarding and others depending on the design challenge.

According to gamification expert interview done by Morschheuser, Karl Werder, Hamari, Abe (2017) the majority of gamification designers follow well-known generic gamification frameworks along with user-centered design process in ideation stage such as the Octalysis Framework, the Playful Experience framework (PLEX), Lazarroo's Four keys of fun or the Person Artifact-Task (PAT) model. Also, among them, many apply brainstorming techniques similar to the How Might We (HMW) statement used in the Design Thinking approach (Morschheuser et al., 2017). Morschheuser, Karl Werder, Hamari, Abe (2017, p. 1302) propose an Ideation toolbox that features the most common tools used by gamification designers. Jesse Schell (2008) offers 16 brainstorming techniques.

According to Mora et al. (2017), the majority of gamification frameworks includes Engagement cycle or the Game Loop which often defines the quality of a gamification design (Chou, 2019). The loops are vital parts of the gameplay (Kelly, 2010). Even simple gamification should have an engagement loop (Zicherman and Cunningham, 2011). It can consist of a sequence of actions united under the mission or challenges that the player

should overcome to achieve something, for example, the Next Level. The constant feedback should support the learning process maintaining the engagement of the player (Burke, 2016). According to Kumar and Herger (2013) the loop may consist of four steps. First aims to motivate emotion, for example, making the player curious. Second provides a call to action, for instance, inviting to participate through a challenge. The third step is re-engagement of the player by reminding him or her to return and explore more. The final step is about providing feedback and reward. To make engagement repetitive and create a loop, the last step should modify the initial mental model of the players and make them start the loop again (Sicart, 2015). The typical loop of weak gamification design does not inspire users for making intended repeated actions because there are no intrinsic rewards or "boosters" (Chou, 2019). Those reward the players with something essential for the game system which allows performing the next step in overcoming the challenges and making progress, for example, a power-up. In games, there are various types of such rewards (Plass and Kinzer, 2015). According to Chou (2019), it is important to understand the user journey, when it starts and end, in order to place the "boosters" correctly. However, he also states that not every gamification needs a loop.

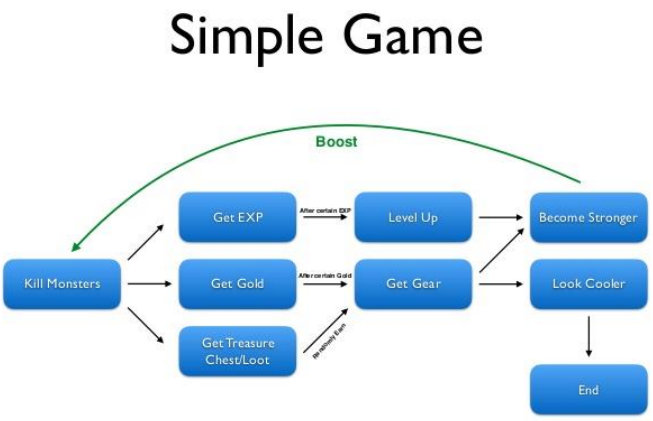

Figure 10. Example of a Simple Game Loop (Chou, 2019).

While planning gamification, the designers often skip the part of building the mastery paths for the players which is important for engagement and flow according to game and gamification expert Amy Jo Kim (2011). It consists of onboarding, habit-building and master stages (Kim, 2011). The balance between challenge and skills should be maintained throughout the journey (Burke, 2016). Onboarding supports the player with understanding of the most basic game features. The load of information should be limited so that the players are not overwhelmed (Kumar and Herger, 2020). Scaffolding is the stage where the players' progression is monitored while guidance and support in learning

process is gradually removed (Pea, 2004). When the player reaches a mastery level, he or she can be motivated by participating in the coaching of beginner players or leading them which will support the long-term engagement of overall gamification (Kim, 2011). Burke (2016) though states that if the gamification outcome is not known, the focus should be paid to the play space instead of the player journey.

These were the most common gamification design methods. Apart from the ideation tools and design methods, it is important to recognize the basic ingredients of the game which create “fun”. Table 1 below presents the list of most essential game elements. The author was interested in identifying the most basic ones without which even a very simple game cannot exist. Some were found in the definition of the games and others as elements of fun, structural factors, or game traits.

Table 1. The Essential game elements

Author/s	Elements	Name
McGonigal, 2011	goal, rules, voluntary play, feedback system, unnessasary obstacles	The game traits
Marc Prensky, 2001	rules, goal, conflict/competition/challenge/opposition, interaction, representation or story, outcomes/feedback	What Makes a Game a Game? Six Structural Factors
Kumar, and Herger, 2013	goal, challenge/unnessasary obstacles, rules, feedback, voluntary play	5 Elements of Fun
Salen, Tekinbas and Zimmerman, 2006; Suits, 1967	goal, means of achieving the goal, rules, lusory attiture	The elements of the Game
Kapp, K.M., 2013.	Feedback, Constructs, Game Mechanics, Allegory, Laws and Rules, Challenge, Story	The Foundational Elements (Gamification of learning and instruction)

De Freitas and Liarokapis, 2011	reward structure, theme or storyline, competition, interactivity between the participants and the game, progression	The Key Game Elements

The usual practice of gamification delivery is done through a pilot. Pilot testing allows the designer to monitor participants' engagement and the balance between learning and entertainment as well as recognize all uncertainties related to rule, the possibilities to cheat, and possibilities for further development (See, 2020). Gamification can be evaluated with the following metrics: engagement, time, return on investment, and quality metrics. They can be gathered via observations or other data collection methods. The engagement metrics can include, for example, the average number of actions the player does, the number of players doing the actions, the number of returning players, the customer satisfaction of both teachers and learners (Kumar and Herger, 2020).

Christofer See in his TEDx Talk (2016) states that it is important to engage students in a discussion of the topics while they have opportunity to make mistakes which is a vital part of the “trial and error” learning. In his approach he does not only use Self and Peer Assessment to measure the learning and engagement after the gamified experience but also analyzes their actions through a video recording of the gamified experience and later Nvivo qualitative software which, according to him, reveals better the progress and decision-making process. Regarding educational experience of the present thesis, the following metrics could be included in measuring engagement and participation: a number of students discussing the topic in percent or the number of messages communicated by one learner or the group (Henri, 1992).

Apart from engagement, the time metrics can be measured, for example, retention of players, frequency of play, the decrease in response time in relation to expected time or timeliness (Kumar and Herger, 2020). According to See (2016) time metrics can be important to assessing skills and challenge balance. If the setup time is too short or too long to complete a challenge, it can negatively affect the flow of the players. The data can be collected not only directly from the participants but the people who closely observe the process during the play. Martina and Göksen (2020) conducted a focus group with the supervisory coaches which worked closely with students and could observe their team dynamics, the time and hints needed for completing the challenges as well as overall

motivation of the participants (Martina and Göksen, 2020). To conclude, it is worth mentioning that the design of effective gamification happens through constant iteration while focusing on the "playfulness" of the experience (Schell, 2008).

2.2.3 Experiential Learning

The topic of this thesis is a gamification of training experience. Thus, the learning aspect of the planned experience should be considered. It is important to understand the pedagogical approach which determines the objectives, tasks, or activities to be gamified. In the end, the ultimate goal of educational gamification is learning. Therefore, understanding how the learning takes place, according to the learning theory practiced in the organization, is essential (Pivec et al., 2004). In this subchapter the author gives a short overview on the Experiential Learning (EL) approach while focusing on the Kolb's Experiential Learning Cycle model (1984). It is worth remembering though that the author does not intend to address a full pedagogical perspective of the experience but rather considers it from a perspective of an experience designer.

According to the Experiential Learning (EL) approach, learning happens through "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (Kolb 1984, p. 41). Another definition describes it as a process of learning through experience and self-reflection (Felicia, 2011). It includes a hands-on approach which means students take an active part in their learning experiences while the role of the teacher is to guide them through this process.

The Experiential learning (EL) reflects the "active learning" philosophy which emphasizes the importance of students' active participation in the learning process. As it is seen on the model below (Figure 11), gamification in the form of games, simulation, or role-playing is practiced in the Active Learning approach as more complex strategies on the spectrum of active learning activities.

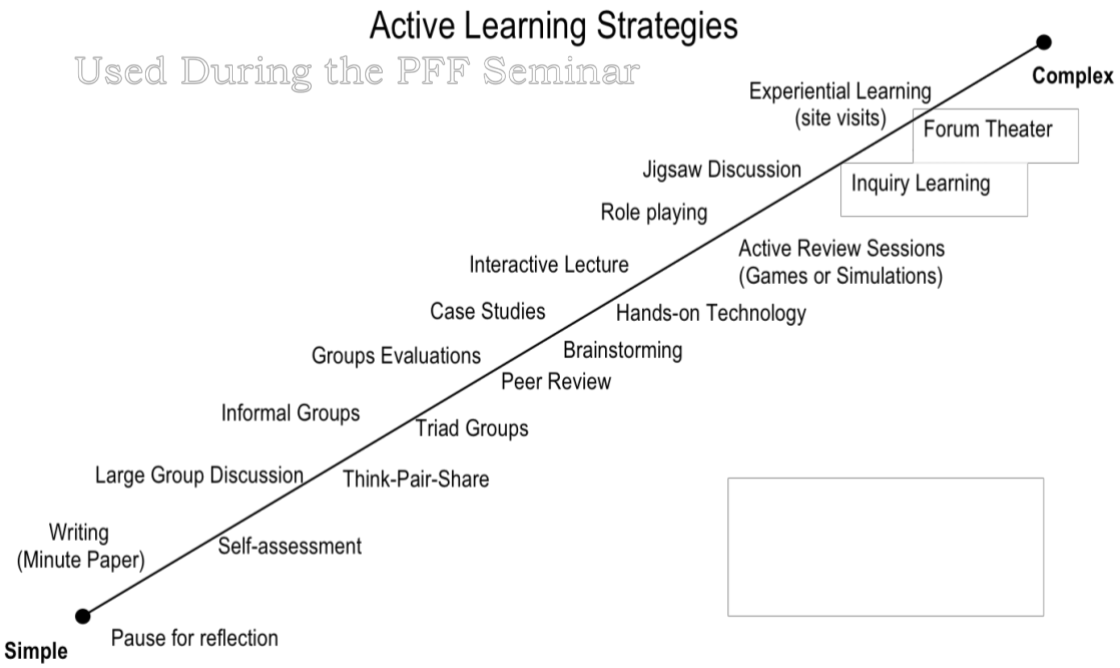

Figure 11. Active Learning Strategies (Centre for Research on Learning and Teaching, University of Michigan, n.d.)

Several studies linked the long-term retention with the engagement of the students in the active process of sense-making and knowledge creation (Bertsch et al., 2007; Blerkom et al., 2006; Callender and McDaniel, 2009; Dee-Lucas and Vesta, 1980; Halpern and Hakel, 2003; Johnson and Johnson, 2018). While traditional teaching techniques exercise passive learning and emphasize often on the act of memorizing the information or acquisition of the facts (Stavenga de Jong, et al., 2006; Vermunt, 1996), the Experiential Learning is a learner-centered approach whereby students develop new knowledge, abilities or skills as a result of the deliberate application of classroom training in the workplace or simulated workplace environment (Miller and Maellaro, 2016). EL is also defined as “learning by doing” connecting theory with practice which are often perceived as different and disconnected areas by students (Valentine and Speece, 2002). The EL activities have the following characteristics such as participative, collaborative and self-reflective (Mizokami, 2018). They are based on an intentional learning cycle and well-defined learning result. The participants are actively involved in knowledge building process. They critically reflect on their experiences which helps them to understand how to transfer their knowledge and skills to prospective career activities, for example (Lachapelle and Whiteside, 2017). As a result, the leaners are in charge of their own educative path, rather than letting the teacher decides what they should do (Schwartz, 2012).

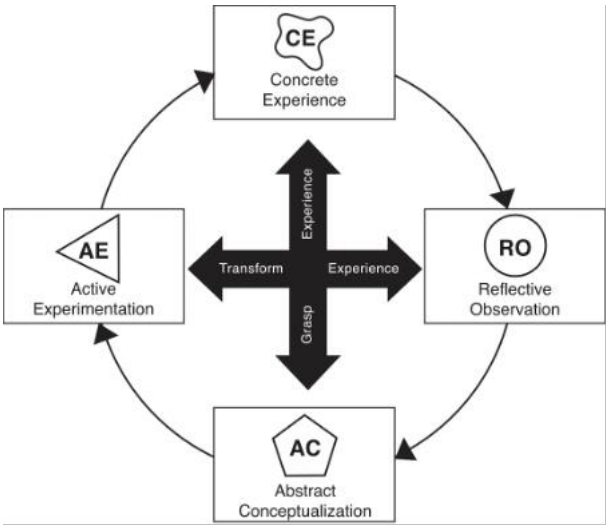

Figure 12. The Experiential Learning Cycle (Kolb and Kolb 2017, 11)

The Kolb's model is based on four elements such as Concrete Experience, Reflective Observation, Abstract Conceptualization and Active Experimentation (see Figure 12). It is presented in a form of a cycle which shows that the learning process does not have a definite outcome, but it is a constant and continuous process. It is also a holistic process meaning that it addresses various factors of the learning process such as experience, perception, cognition and behavior. The knowledge is not perceived as ”fixed”. The learner is always in the process of improvement, deepening the acquired knowledge and forming a new one. Kolb recognizes the importance of different ways of learning and their conflict nature between each other, for example, "acting" against "watching", or ”feeling" against "thinking". Therefore, these modes are places to opposite extremes of the model forming the dialectic modes of learning. As a result, Concrete Experience and Abstract Conceptualization imply Grasping Learning mode. Reflective Observation together with Active Experimentation form an opposite mode of learning - Transforming. Depending on the situation, the learner can acquire new information through a concrete experience, either, through an abstract conceptualization (Kolb, 1984). William James (n.d.), one of the most influential philosophers in North America, called these different ways of learning experiences as "percepts" and "concepts" which correspond to ideas of "here and now" and "past and future". Besides, he highlights the need to use both modes in a learning process.

The following are the the elements of the Kolb's model which are explained in more detail:
1. Concrete experience - when the person is involved into a new experience, or reinterpretation of the experience that already happened. During Concrete experience cycle stage, the first attempts to do a certain activity happens. That serves as a basis for further observations and reflections. Dewey argues that in order to start the process of

reflection and learning, the learner has to be stuck by a problem or something new, outside of the usual experience.
2. Reflective stage - when the person analyses his or someone else's experience. Communication is important during this stage. It is a learning mode through a transformation
3. Abstract Conceptualization - when the person forms a new understanding. It is another mode of learning through grasping. She makes a conclusion about the experience based on her previous and new knowledge.
4. Active Experimentation - when the person starts testing and experimenting with her or his conclusions made. It is another learning mode through a transformation.

In addition to the Learning Cycle, the four learning styles fall between different EL stages which demonstrate a person's tendency towards one or another learning mode. For example, one can start the learning process by thinking and analyzing theoretical knowledge and its symbolic representation (the Assimilating style) since he or she has an" ability to analyze an extensive amount of data, transforming it into simple to understand format" (Kolb, 2001, p.5). Such a person usually gives more meaning to the theory itself than its practical value, focusing more on abstract ideas than people. Their preferences in learning are the following: lecture reading, having enough time for thinking, analyzing concepts, ideas. Person with the dominant Diverging learning style prefers acting through a concrete situation, relying on his feelings rather than using a systematic approach. The name stands for his or her strengths in brainstorming, looking at the concrete case from different points of view. They are more emotional, people-oriented types who tend to work in groups, give attention to what their peers are telling, their feedback. (Kolb, 2001, p. 5).

To conclude, gamification in a broad sense is interconnected with experiential learning. It shares the same theory (Wang and Chen, 2010) and is a natural choice for promoting engagement in-classroom training and experiential learning (Kolb et al., 2000). However, the following should be considered in gamification design; gamification activities should be seen as a part of the Kolb's Learning Cycle. The experience cannot be effective or can maintain the wrong practices if it is not followed by proper reflection and observation processes (Ruohomäki, 1994). Gamification can apply to different stages of the cycle. For example, in one class teaching Data Flow Diagrams, it was used for reflection. The students could review, and critic each others' works by using role-playing which also trained their analytical and communication skills (Erturk, 2015). In the prior mentioned International Trade Game, the students start the game with the differences in recourses. Some students receive more materials, some less. The number of recourses directly affects the success in the game. Therefore, this creates frustration and conflict based on

inequality and scarcity of resources (the game mechanics of this gamification). It provokes an emotional response that naturally pushes participants to reflection of their experiences (Sutcliffe, 2002). Finally, a gamified experience can be perceived differently by the participants depending on their learning style. Some with a tendency towards the Assimilating style might prefer learning via more traditional approaches such as lectures or reading.

2.3 Theoretical Framework

The game elements, Octalysis framework, and Design Thinking approach were the main topics and concepts in the prior subchapters. In addition, Experiential Learning theory was mentioned. However, the two theories of Experiential learning and Gamification are not only overlapping but parallel. Since the thesis does not take an instructional design perspective, Experiential learning is seen here as the context of gamification and strategy of Active Learning. All the concepts represent complex processes and elements which interconnected with each other on different levels. The table 2 represents the elements chosen from each theory for this thesis.

Table 2. The Essential elements of the frameworks chosen for this thesis

Author/s & Source	Framework	Focus
Design Council, 2005	The Double Diamond	Discover Define Develop Deliver
Yu-kai Chou, 2019	Octalysis	Core Drive 1: Epic Meaning and Calling Core Drive 2: Development and Accomplishment Core Drive 3: Empowerment of Creativity and Feedback Core Drive 4: Ownership and Possession Core Drive 5: Social Influence and Relatedness Core Drive 6: Scarcity and Impatience Core Drive 7: Unpredictability and Curiosity

		Core Drive 8: Loss and Avoidance
McGonigal, 2011 Marc Prensky, 2001 Kumar, and Herger, 2013 Salen, Tekinbas and Zimmerman, 2006; Suits, 1967 Kapp, K.M., 2013. De Freitas and Liarokapis, 2011	Game elements	Rules Feedback Goal Story (lusory attiture) (Allegory) (Laws -rules) (progression) (Game Mechanics) (means of achieving the goal) (interactivity between the participants) (voluntary play) (interaction)

The Double Diamond design process model has become the main framework for directing the creation process of the experience gamification and takes a central position in Figure 13.

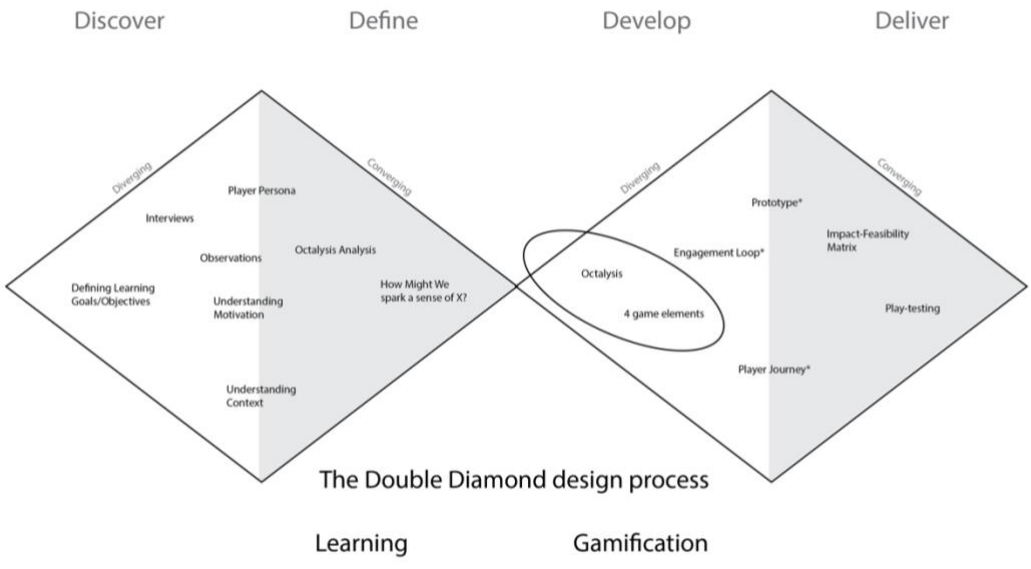

Figure 13. The proposed framework

Unlike the original model, this one shows the Double Diamond on a different level by revealing concrete tools and methods. This should help the educators and the design practitioners including the author in taking concrete actionable steps in the design process. The Design Thinking and Gamification tools are mixed on the model with the consideration of the basic steps needed to be taken to create a simple gamified experience.

The learning goal and objectives serve as a starting point in the process. They are followed by the step of understanding the context as well as participants' initial motivation. This can be carried out through the interview and observation, but it is not limited to these methods. The result of the data gathered can be represented through Player Persona and analyzed based on the eight drives of Octalysis. At the Define stage, the designer states a How Might We statement. For example, How Might We park a sense of "Unpredictability and Curiosity"? The Octalysis framework has been added to the process to both Define and Develop phases since it serves two purposes: the basis for user research on motivation as well as the ideation tool. The four game elements are also placed in the Develop phase. Since the Octalysis focuses on motivation and the psychological side of gamification rather than on design components, the author offers to follow a very simple and basic principle of including the most essential game elements into the experience. This might not be suitable for large-scale or complex projects but for very simple and short experiences. The idea-generating is the key phase in gamification design. That is why both Octalysis and Four Game Elements are visually highlighted in the model. The filtration of ideas can be done through the Impact/Feasibility Matrix. The player testing or the pilot should be carried out during Deliver stage of the design process. It is an essential step in measuring engagement, and “playability” of the final product.

Since the design is not a strict linear process, the selection of tools and methods offered on the model represents only one of the possible combinations that should help in the gamification design process. Therefore, not every tool is expected to be used. For example, the small-scale experience in the form of an exercise does not necessarily need the Engagement Loop and the Player Journey. That is also the reason why both are marked with the asterisk and are not mentioned in the thesis planning and execution. At this stage the author did not perform the Discovery stage of the Double Diamond design process where the thesis gamification and learning objectives were stated.

The following chapter covers the empirical part of creating a gamified experience product. It includes such subchapters as Background, Methodologies, The result, Limitations and risks. The final part includes the Discussion regarding the project results.

3 Planning and execution of the experience

In the following chapter and its subchapters the gamification experience development process will be discussed. The aim of this thesis is to design a gamified learning experience for students studying “Experience Management” course in Haaga-Helia University of Applied Science. This was done by creating and playtesting a “Experience Collage Challenge” workshop based one the knowledge and insights derived from theoretical frameworks, mixed research methods featuring qualitative and quantitative elements to collect, analyze and interpret data and contextual findings.

The chapter starts with the background and inspirations behind the thesis projects. It gives an overview on the current learning experience of the students studying in today’s world and specifically in Haaga-Helia UAS during COVID-19. The effects of pandemic on student engagement are mentioned. After that the methodology and their results follows: firstly, the Double Diamond design process (Design Council, 2005) applied in creation of experience, secondly, the qualitative interviews, and thirdly, a feedback survey used in evaluating of the play-testing experience. The last chapter present the discussion on the final result of the project development.

3.1 Background

As it was mentioned before, the gamification of learning is not a foreign concept in context of Finnish education system or the Haaga-Helia University of Applied Sciences since the current pedagogical practice naturally includes game-based learning as one of the ways to foster engagement and active learning. The teachers have been always in search for new ways to increase engagement of the students.

However, with the restrictions brought by COVID-19 pandemic gamification became even more relevant than before. The classes shifted to online learning which created challenges for both educators and students. Maintaining self-discipline and motivation during remote classes became a struggle for many learners. The analysis of the effects on high education caused by the pandemic (Aristovnik, 2020) reports a continual feeling of boredom, anxiety, and frustration among the students. Especially regarding international students. For example, the research on the psychology and learning behaviors of Vietnamese students in Finland (Tran, 2020) showed a considerable level of anxiety ranging from minimal to high levels. Also, distractions and procrastination are mentioned among the changes in student behavior. Apart from that, the negative impact on students' "attendance" was observed not only in the prior mentioned study but also by several teachers in Haaga-Helia UAS.

The gamification project became both inspired and restricted by the pandemic. The author, being student herself, was inspired to bring gamefulness into the learner's experience. The intrinsic motivators, especially regarding social aspects are particularly important in the context of online education and satisfaction (Richardson et al., 2017).

The use of online classroom meant also limitations for the projects. The experience had to happen online during Microsoft Teams or Zoom meetings and, at the same time it had to be suitable for the physical classroom environment. Therefore, the author considered this important criterion in ideation process.

3.2 Methodology

As it was mentioned earlier, one of the main methods used in this thesis project is the Double Diamond design process (Design Council, 2005) which features four design stages: discover, define, develop and deliver. During the first, Discover stage, the author collected data on the users and gamification context via observations and interviews. While being a student herself, the author had a chance to observe the behavior and engagement of the target group during remote and physical classroom exercises. The semi-structured interviews increased the author's understanding of various students' motivations behind learning, avoiding potential biases, and obtaining insights for building Personas. The interviews were carried out remotely. The thematic analysis was conducted by using for Dovetail application. The participants were five students or recent graduates from Haaga campus who participated in the courses related to experience economy.

Based on the data gathered, the students' experience of studying experience economy-related courses in Haaga Campus was analyzed based Octalysis gamification framework (Chou, 2019) which gave a motivational perspective needed for empathy and ideation. During the interview the experiences related to Experience Pyramid class was emphasized. The small-scale feedback survey with closed and open-ended questions was completed by students after play-testing. The results of the testing session were analyzed with a use of Webropol tool and based on the same Octalysis framework. As a result, few iterations were made to the original design of experience.

3.3 The result

In this subchapter, the author discusses every step of the process taken during the implementation of the gamification experience. The execution of the project demonstrates the practical application of the knowledge and theoretical studies including the integration of the gamification methods and tools in the Design Thinking model, the Double Diamond.

3.3.1 Discover

During discovery stage the learning goals, objectives and learning context were identified by gathering requirements from the teacher (commissioner) running the courses in the experience economy. As a result, the following was formulated:

Table 3. The project goals, learning context and objectives

The project goal	Increase engagement rate and motivation of the students The learning subject is experience economy. The theory on Experience Pyramid Matrix needed to be gamified.
Learning context	The learning space is Zoom/Microsoft Teams online meetings. Experiential learning as pedagogical practice. The time limit is three hours.
Objective	An active motivated discussion on the learning topics related to Experience Pyramid Matrix between groups or by group members (in experience or reflection session)

It is vital to have a clear understanding about the content of the course where gamification applies to. The figure 14 below represents Experience Pyramid Matrix (EPM) which served as the basis for gamification. It was created by Lapland Centre of Expertise for the Experience Industry as a product development tool. This theory is frequently used throughout the studies in experience economy related courses. In this project, the author focuses on the first encounter of the students with this theory. The usual teaching practice is to give a short introduction to the theory on EPM. After that, the students are given a group task to analyze a chosen experience based on this matrix. Finally, they present their analysis in front of the class and receive feedback from their teacher. This may be

followed by comments from their peers which might facilitate a conversational learning space.

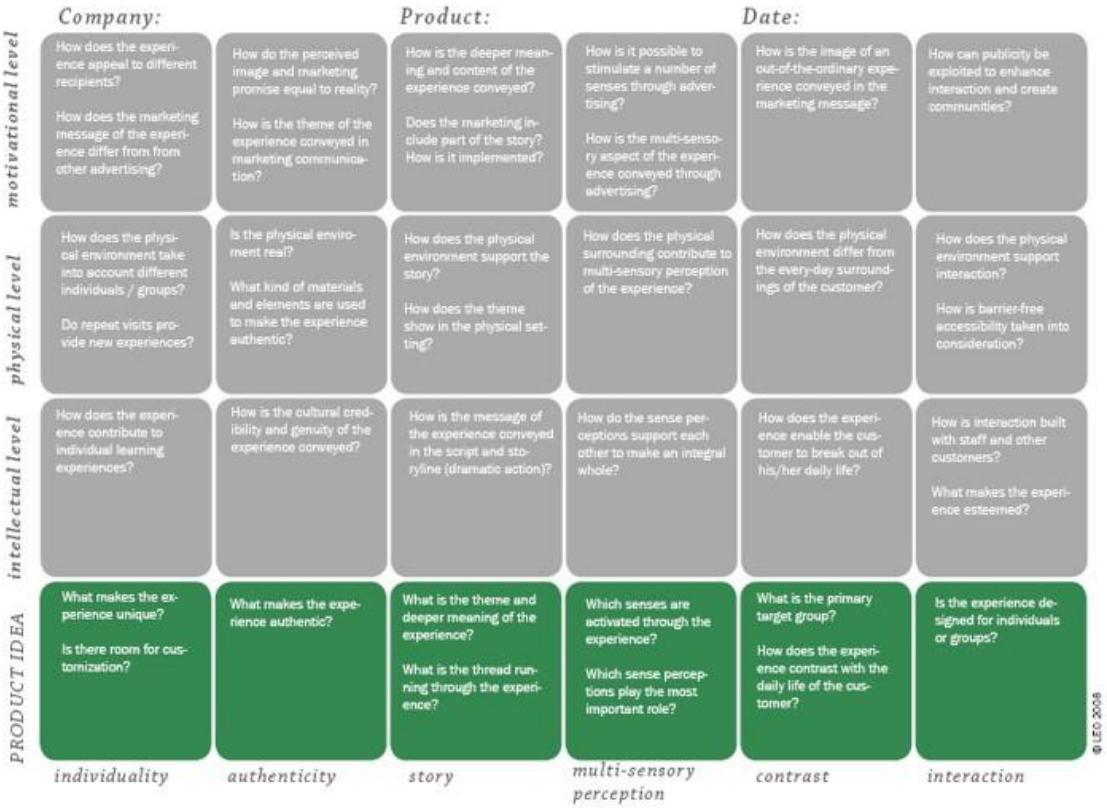

Figure 14. The Experience Pyramid Matrix (Tarssanen and Kylänen, 2009, p.11).

Using the data collected via the interviews, and observations, the analysis of the student motivation during experience economy-related classes including the Experience Pyramid Matrix class was carried out based on the Octalysis gamification framework (Chou, 2019). Since the Experience Pyramid was only a small part of the classroom experience, which was not recalled completely by the participants, the decision was made to conduct the Octalysis - related (interview) questions about common classroom experiences. It provided a bigger picture on the overall students 'motivation and expectations related to experience economy classes and, therefore, an opportunity to identify the missing drive or minimum motivation, which could be added to the planned Experience Pyramid class. The challenge was that the students' experiences varied greatly depending on the particular class or the teachers. In addition, some recalled online experiences while others offline which author tried to reflect in the Octalysis model. Nevertheless, the author's prior observations contributed greatly to understanding the learner's engagement and the common patterns.

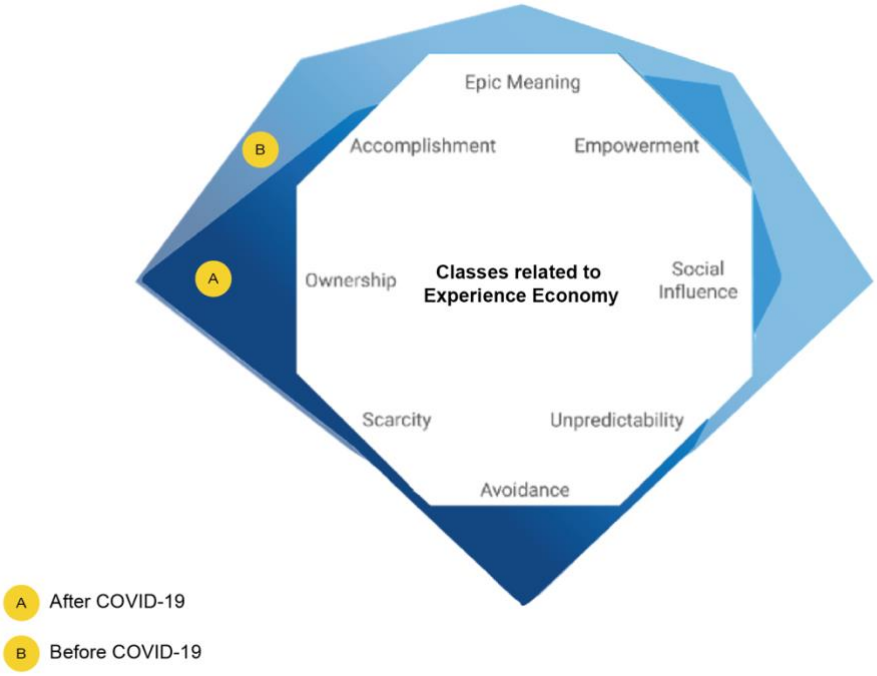

Figure 15. The gamification analysis based on Octalysis framework (Chou, 2019).

Before COVID-19, the overall classroom experience in experience economy course is balanced between “White Hat” and “Black Hat” drives (upper and down realms of the model), which tells that participants feel great and empowered. This is not surprising since the class follows the Experiential Learning approach which aims at more engagement than traditional pedagogy. Learning, comparing to other types of experiences, has normally something to do with the “Epic Meaning” drive at least in terms of the educational value. According to the interview with participant 3 (P3), she felt that she is not only contributing to her future career but learning how to improve services and create experiences for people. However, this might be less communicated in terms of the story or “Calling” which means the teachers do not necessarily emphasis the role of the students in making people’s life easier or memorable (Pine and Gilmore, 1998). Nevertheless, regarding contribution to the companies, students do experience on a small scale the “Epic Meaning and Calling” through the projects done for “the real companies” (P1, P3, P4 and P5). The impact of COVID-19 reduced this type of motivation, especially at the beginning:

> “I had to go through the idea of like, okay, now we are designing something that is well on the paper only, and that caused me a bit of a trouble, but, well, I managed, I guess, and so far” (P4).

Certainly, education is about making progress, acquiring new knowledge, developing new skills by overcoming challenges in the form of assignments. This means that the second drive, “Development and Accomplishment”, has certainly some presence in the learning experience. There are many aspects or mechanisms that make students feel accomplished: finishing a course, assignment or a project (P2) and receiving the desired mark (P1) and getting more confident at giving presentation (P1), or “…watching the credits appear …” and “…the little [progress] bar in the Mynet period…” moving (P5) or recalling better the design process during the group project (P3). Also, receiving higher position or a special role in the projects was a strong motivation for participants 3, 4 and 5. However, regarding given feedback on the progress of the students, the frequency could be higher and the progress path could be clearer. In addition, due to the dominance of the group work, individual feedback can be missed. Due to the impact of the COVID-19 this type of motivation was considerably reduced which is so important for learning experience: “I realized that my motivation went, and productivity also went really down. I started procrastinating extremely” (P4).

The “Empowerment of Creativity and Feedback” drive is also present in experience economy courses. The students have freedom in choosing approaches in doing their assignments. For example, the format of the deliverables: “…I always wanted to put some creativity into my presentations” (P1). The creativity is always encouraged and sometimes might be evaluated as well as a “WOW” factor in completed project assignment. According to the author, this drive is closely related to the sense of ownership which was identified to be the highest among other drives according to the participants 1,2,3,4 and 5. Since one of the competences which participants should develop is entrepreneurship, the learners are encouraged to take the ownership of their learning process while teachers performing the role of facilitators. Therefore, the sense of ownership in Experiential Learning is strongly present. This empowered the participants to apply creative thinking. Although, the literature suggests that too many choices cause also frustration, and the proper feedback should not be forgotten and be well-communicated (P3, P5).

Most of the courses in Haaga-Helia UAS have a high number of group exercises which was emphasized by all the interviewees. Therefore, the drive “Social Influence and Relatedness” has usually a strong presence. Although, it is hard to describe the exact nature of the relationship inside the group since it depends on particular students and the project type, stage of the project or the teacher. The atmosphere in the class can have a strong effect on some student’s motivation. The experience economy related courses had overall cooperative atmosphere rather than competitive and were inspiring for students. "That's why I loved the experiences [classes] because everybody was excited” (P3). What

seems to be also effective in raising motivation is giving students a role of a mentor or more responsibilities in the project which was mentioned by several participants including the following one:

> "…this year I was asked to mentor a marketing team and to be project leader as well for the whole Kekri. So, I guess that really showed that I've done a lot of progress in a way that I am asked to mentor others, which is like, okay, so I have to have some knowledge, right. And I have to have some experience and skills that are needed" (P4).

In a current time of COVID-19, this drive can have lower presence than before. The lack of personal communication or face-to-face physical communication between classes or during the lectures increase the need in creation of sense of belonging and relatedness. "…of course, it's much better to be in contact, at least for me to have contact lessons is much better, especially doing group works on presentations, but we have to adapt" (P2). The participant 4 mentioned that after one year of COVID-19, the teachers trying to make online classes more interactive, and she/he feels a positive change.

Regarding the "Black Hat" motivational drives, which included "Scarcity and Impatience", "Unpredictability and Curiosity" and "Loss and Avoidance", they had weaker presence in experience economy related courses. It is not a bad sign since focusing on those drives in a long-term cause people feel uncomfortable. The time is the only element used to create a sense of scarcity or impatience. The participants did not recall anything unpredictable except for the LEGO Serious Play or brainstorming tools which made some feel as they were children again in a positive sense (P3). Also, the unknown course names such as "Experience Management" or "Experience economy" sparked curiosity in some and motivated them to take a class (P3, P4). Considering the last drive, "Loss and Avoidance", it is clearly present in any learning experience. There are always courses especially compulsory ones which cannot cover the interests of every student. Although when it comes to the class experience itself, there are not many techniques used to create a sense of a missed or disappearing opportunity which could add more thrill to the experience.

This was the analysis of the overall experience of the participants taking experience-economy classes. The following paragraph is dedicated specifically to Experience Pyramid class. There was a considerable difference between students who used this theory in the projects and the ones learning it during online classes. In addition, the teaching style played a role here. The Experience Pyramid class offline was considered

interactive enough and more memorable by the participants while the one taking it as online class shared the following:

> ”…could be more interaction… how boring was the class, well, I didn't finish it …and honestly, this was quite a hard figure for me to understand, and I still don't understand it well enough, I would say so” (P1).

The participant 3 had also troubles in understanding the Experience Pyramid and have “vague” memories about it: “we were just like, wait, wait, wait, what, what?” (P3).
Both students and the educator realized the need in making learning of this theoretical concept more interactive and memorable for remote classes.

The conclude, the analysis suggests the following. There is certainly a room for improvement for all eight core drives, both intrinsic and extrinsic, “White Hat” or “Black Hat”. The especial attention should be paid to "Scarcity and Impatience" and "Unpredictability and Curiosity" to add a bit more thrill to both offline and online experience. The students often do not have a sense of urgency to perform the desired actions. They do not usually experience unpredictability or surprise, and there is abundance of almost everything except for the time.

Regarding effects of pandemic, the experience has become much more extrinsic in nature where students are motivated more by avoiding the negative outcomes if there are such. Therefore, the prior balance between extrinsic and intrinsic motivation is lost. The “Epic Meaning or Calling” is absent. Finally, the obvious effect of pandemic restrictions is lack of social connection. The motivation based on relatedness is considered one of the strongest and can have a dramatic impact on the experience (Lazzaro, 2009). Students miss the interactions with their classmates during breaks (P5) and need more interactivity when it comes to studying the theoretical part (P4).

The author created two types of Personas based on the interview data. It is visually presented below (Figure 16) with direct or indirect quotations of the students (the full-size version can be found in the Appendix 3). The following characteristics were used to identify the main differences between the learners: personality traits, effects of COVID-19, motivation towards learning, preferences in learning. Also, it helped to determine the possible match in terms of the Player Persona type according to Marczewski classification (2013) such as Socializers and Achievers.

Both Personas were missing social interaction, especially the Socializers which is the most common type in organizations (Kumar and Herger, 2013). The Achievers are

motivated more by the challenge itself. They appreciate points, leaderboards, progress bards, marks, credits, and other indicators of their accomplishment. Among Achievers, might be the ones for whom recognition of their achievements and being better than others is even more important. That type would be called the “Killers” according to Bartle classification (1996) of the players. Although, this type is considered to be very rare in organizations according to Kumar and Herger (2013), one of the participants was clearly showing the sign of the “Killer” Player Persona. However, due to the low number of participants, it was not reasonable to create a Persona based just on one person. Therefore, this one went into the category of “ordinary” Achievers.

There are always students who are less active or “stay at the back” (P1) and it would be good to involve those more introverted participants in the gamified experience.
All the participants mentioned at some point creativity in their positive learning experiences as well as interactivity and real projects.

Figure 16. The Personas

3.3.2 Define

In defining the problem, the author used How Might We (HMW) statement which is a common way of narrowing the problem for a further ideation stage in Design Thinking approach. The formulated question was the following:

- How might we inspire active communication (Social Influence and Relatedness) related to Experience Pyramid Matrix theory between all the participants?
- How might we evoke a sense of Development and Accomplishment in the participants learning Experience Pyramid Matrix theory?

The author chose to focus on the Personas by improving both intrinsic and extrinsic motivation for online Experience Pyramid class. However, other drives were considered as well. It is worth mentioning that the above-mentioned questions do not mean a planned gamification will be limited to just two motivational drives, but it rather means that the focus will be paid to the improvement of the ones with the biggest impact for the students and the ones aligned with the set learning objective.

3.3.3 Develop

The development stage started with the ideation session based on the previous Octalysis analysis result. The Experience Pyramid Matrix was seen as a part of the overall course experience. The online sticky notes using Miro tool were used in idea generation. As it was mentioned before, it was important to avoid judgement of the ideas at this stage and the author tried to follow this rule keeping the criticism of ideas for filtering session.

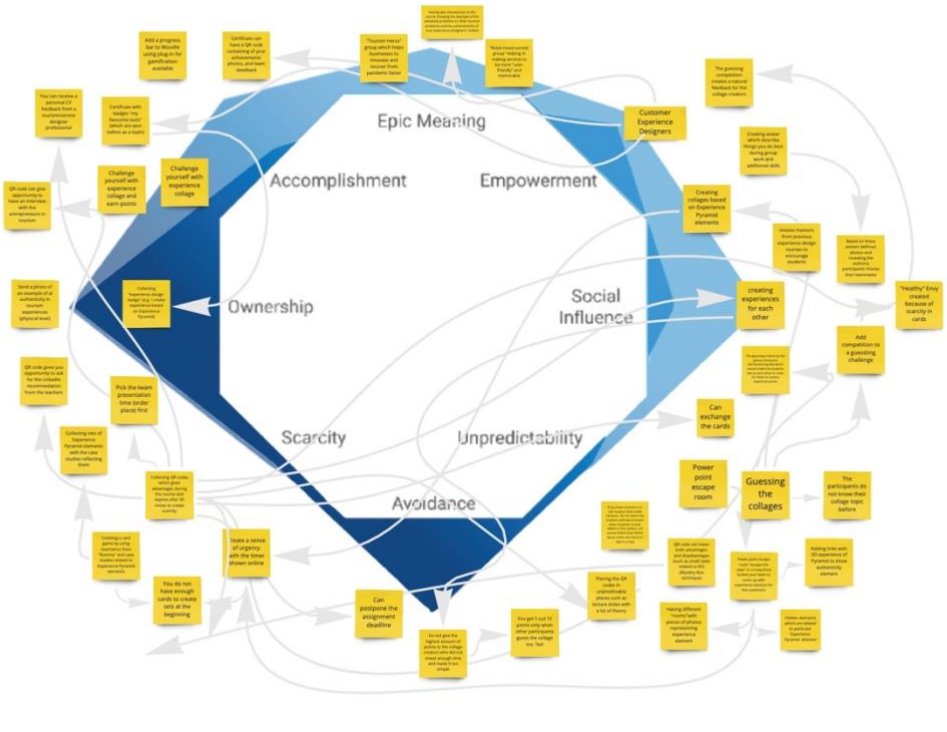

Figure 17. The Ideation results based on prior Octalysis analysis

Next step was a filtration of ideas which was done based on the Impact-Feasibility Matrix, also called as Impact-Effort Matrix. The major ideas were chosen for this filtration process.

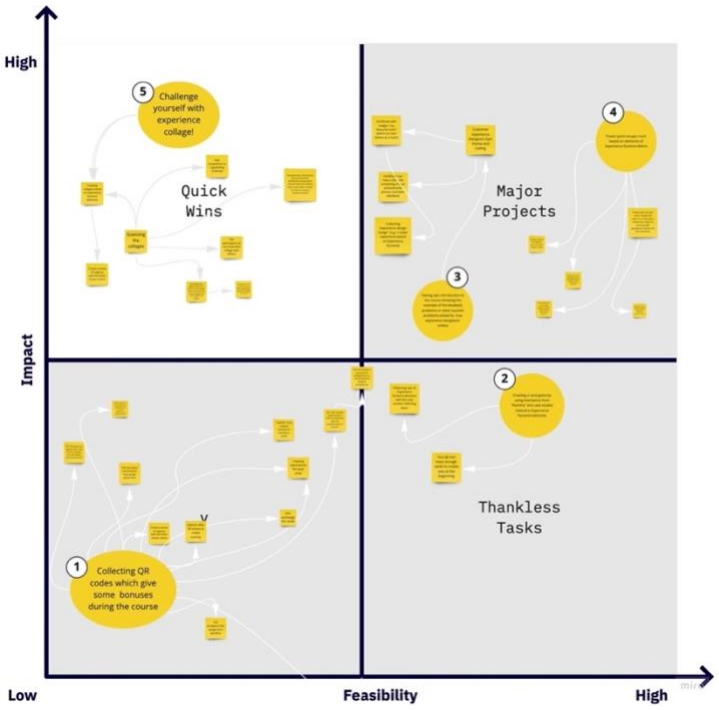

Figure 18. The filtration of ideas via Impact-Feasibility Matrix technique

1. One of the first ideas was to let students collect QR codes hidden in presentation files, Moodle sections or on the background of the Zoom/ Microsoft Teams video call. QR code would contain a message which would give some bonuses or challenges to the students during the course. The idea of bonuses was partly inspired by the card game developed by Juan Pablo Ordoñez (Gamification World, 2016) which included the following bonuses for his university students: postponing assignment and having an opportunity to receive CV feedback from industry professionals. The challenges would include simple tasks related to Experience Pyramid Matrix elements, for instance, posting an example of the experience personalization in forum. The QR seeking challenge would be based on the following motivational drives: “Ownership and Possession”(QR code collection), “Social Influence and Relatedness” combined with “Development and Accomplishment” (envy and competition as a result of someone having a “better” QR-code bonus), “Scarcity and Impatience” (QR code is not valid after 5-30 minutes) , “Unpredictability and Curiosity” (students never know when and where the next QR code will appear. Also, they do know know in advance if this QR code shows a challenge or bonus) and” Loss and Avoidance” (the game is fully voluntary, and the aim is to make others feel as they are missing out something cool). Although the idea targeted the weakest motivational drives, the learning objectives of creating active discussion related to course content was hard to achieve with this idea. In addition, it targeted the overall experience which could leave the lecture experience about Experience Pyramid Matrix the same as it was before. Therefore, although this idea was easy to implement, the predicted impact was rather low.

2. The second idea could better address the lecture needs. It was inspired by the Rummy card game mechanics which was based on collecting different sets of cards. In the original game, a set consists of three cards of the same rank or a run of at least three consecutive cards of the same suit (How to Play Rummy Card Game, 2021). Each round the players would take one card and give one away until they gathered and matched full three sets. The author wanted to use the same game logic but for gathering a set of pictures representing case studies related to tourism or hospitality industry. The participants would need to collect either a set of six cards with case studies matching every experience element of the Pyramid Matrix or two sets of three cards with case studies matching two experience elements. The main challenge for implementation of this idea would be technical problems related to running a card game online and design skills related to

specifically card game design. Although the author discovered online platforms which could make it possible to turn the offline card game to online. However, they did not have templates specifically for this type of game. In addition, the advanced knowledge of card game design principles was needed since such idea was related more to a game design than gamification design which was not covered in the thesis frameworks.

3. The third major idea was targeting mostly “Epic Meaning and Calling” motivational drive. The idea was to create an onboarding experience with an epic introduction to the course video. It would show stories related to solving problems by “true” or “hero” experience or service designers. It could also include the success stories from previous course participants who are working in the experience design industry or started their own business. The main purpose would be showing the potential impact of the experience economy course not only on the participants’ careers but on the world. The video would be followed by the presentation on the final certificate which would include badges of the mastered design tools including “Experience Pyramid Matrix” badge (“Development and Accomplishment”, “Ownership and Possession” and “Social Influence and Relatedness”). The certificate would have a QR code showing the achievements of the participants with photos and the meaning of the earned badges in a form of a story. The idea along did not target the Experience Pyramid Matrix exercise but could potentially increase motivation to do the exercise since it could be seen as the future badge earned for the certificate. Therefore, this idea about theme and badges could be combined with another gamified experiences related more directly to the lecture topic. In addition, creating an introductory “epic” video and designing visually pleasant and unique badges, and certificates would require a lot of time and people recourses which is the reason why the idea was moved to the section “Major Project” with high impact and high feasibility.

4. The creation of a digital Escape Room experience with hidden elements of Experience Pyramid was the fourth idea. The author discovered the examples of the educational escape rooms designs which did not need advance platforms and digital skills but simply Power Point presentation tool. Although the idea was very attractive in terms of engagement, however, in this thesis project the author did not focus much on studying the escape room mechanics but rather implementing implicit type of gamification techniques. In addition, the game design strategies would be more suitable for this idea than the use of Octalysis gamification framework (Chou, 2019).

5. The idea which was placed in the high impact and high feasibility section was the one which was chosen to be implemented and later tested with the target group. The experience included two steps: individual and group work. At the first step each participant would need to create a collage ("Empowerment of Creativity and Feedback" drives) on a given topic which would match one of the elements of the Experience Pyramid Matrix. The initial time limit given for collage creation was 45 minutes ("Scarcity" drive). After that, other players try to guess the topic of the collage ("Unpredictability and Curiosity" drive). Students earn points both as collage creators and topic guessers ("Development and Accomplishment"). The collage had to reflect the given topic within context of tourism and hospitality (preferably) or other industries. The points for guessing would be given equally to each participant and the final guesses were supposed to be taken together with the group and presented to the creator. The idea was to make the communication necessary for students since their points would depend on the group success ("Social Influence and Relatedness" drive). At the end, the points would be calculated and the person with the highest number of points would be a winner. The competition would support the needs for development and accomplishment (drive 2) of Persona 2 and a group guessing would support the need in social connection (drive5) during COVID-19 of Persona 2 and, especially, Persona 1. The game could be run by the teacher, facilitator or staged by the students (mentors) who knows already the Experience Pyramid Matrix. It would also benefit to other students who value social recognition. The idea could have a direct impact on the lecture experience and learning of the content. The feasibility was assessed to be low since the implementation of a planned experience would only require a Power Point presentation.

To conclude, the filtering and ideation session resulted in the idea number 5 which was later called the "Experience Collage Challenge". It was the most feasible idea with highest impact on the learning. It is believed to address important drives for both Personas. Moreover, the other motivational drives such as "Unpredictability and Curiosity" and "Empowerment of Creativity and Feedback" could return balance between extrinsic and intrinsic motivation.

The next important step according to the theoretical framework was identification of the Four Game Elements which served as a simple structure to the planned gamified experience. Therefore, the explanation of the game elements of the "Experience Collage Challenge" follows below.

The first game element is “Rules” which consists of the following parts: collage rules, point system (table 4), set up, the play, end of the game. The following is described with the use of “you” form which is more relevant for describing the game rules. The presentation and adaptation of the rules to the lecture is presented at the end of the thesis (Appendix 1).

Collage rules includes the following:

- The collage can contain pictures, signs, drawing, personal pictures etc.
- The collage should not contain words (“do not make it obvious otherwise you can lose points”).

The point system is the presented in the table below. Maximum number of points is 90 per person/session with 6 participants (1 creator and 5 guessers). The points for guessing are given equally to each participant. During a group activity, guesses will be selected and presented by the group to the creator.

Table 4. The point system of the “Experience Collage Challenge”

The points each person receives as a creator	The points each person receives as a guesser
5 points - If others guess your topic on the 1st try	15 points - If the group guess the topic on the 1st try
10 points - If others guess your topic on the 2nd try	10 points - If the group guess the topic on the 2nd try
15 points - If others guess your topic on the 3rd try	5 points - If the group guess the topic on the 3rd try
0 points - If others guess your topic on the 4th try	0 points - If the group guess the topic on the 4th try

The set up includes the following:
The computer and Power Point ready to use. Also, the countdown timer should be visible for participants. Some cutting picture apps might be useful but not necessary for creation of the collage. The workshop includes presentation with introduction and instructions. There are also six individual presentation ready for each player (or the team, depending on the number of the players) which are shared later.

The play includes the following:
Step 1:

- Please pick a number from 1-6 in your group and then open this link.

In the link, click on the file with a matching number that you selected.

- Gather information related to the topic in the file and create a collage (Please do not spend more than 45 minutes for this step).

Step 2:

- In each round, one person shows his/her collage to other participants.
- Participants (except for creator) try to share their thoughts on the possible topics. Together, they come up with 3 guesses which they will present to the creator.
- The creator shares the right answer and explains the ideas behind the collage.
- Participants need to write their points!
- Please spend not more than 7 minutes per each round.

At the end of the game, the points are calculated and the person with the highest number of points is the winner.

The second game element is “Feedback”. In “Experience Collage Challenge” the students receive feedback from their peers. For example, if the players can guess the collage, it means the person, who created it, illustrated well the element of the Experience Pyramid Matrix. Also, the teacher or a workshop facilitator is supposed to monitor the guessing process and distribution of the points.

The third game element is “Goal”. In “Experience Collage Challenge” the participants have a goal to earn the highest number of points.

The fourth game element is “Story”. The author used a collage theme for visual design of the presentation. The story did not play a big role in this workshop exercise. However, as it was prior mentioned, at the beginning of the course the story of experience designers presented as the “heroes” solving world problems can be developed and maintained in this workshop as well. For example, by showing which skills the person is going to learn from this challenge and how they are useful to change the world. Also, the badge reflecting the challenge could be design and illustrated in the presentation. Nevertheless, this idea is left as the concept proposal for further development. The story element included in the play-testing is reflected only by a visual collage theme.

The prototyping was done with the use of Power Point presentation considering in mind that it is the easiest tool to use for the teachers. The storyboarding or paper prototype mentioned in the framework were not relevant for this type of workshop since everything is supposed to happen online and process can be simply explained via presentation. After creating presentation, the author gathered feedback from the teacher running the course and few students to ensure the game instructions are simple and clear enough. After that, some changes in formulation of the tasks were made.

3.3.4 Deliver

To ensure the process is player-centered and iterative, the author carried out the play testing session with seven students participating in experience economy lecture.
6 out 7 participants have already studied the Experience Pyramid Matrix which created both challenges and opportunities for the author. The workshop was more suitable for the students new to the content. However, it was also interesting to see if the students recall the theory, they studied before. According to the respondents’ answers the experience challenged the abilities of 83.3 per cent to recall theory. Also, by observing the participants it became clear after the second or third term some of the participants start recalling the Experience Pyramid Matrix theory and did not need to guess the other three

elements. However, the author did not restrict the use of phones during guessing process. Therefore, it is not clear if the rest of the elements would be guessed so easily. As the result, the possibilities for cheating had to be addressed. Also, to create scaffolding, the facilitator can ask the player with the easiest term to start the guessing session, for example, with “Contrast” element and later reach such as “authenticity” or “individuality” which were considered more harder to guess by participants.

Regarding the skill versus challenge balance, the time needed for collage creation could be shortened. In the oral feedback given by the students, some mentioned that most of them used only 25 minutes instead of 45 for collage creation. It was also pointed out by one of the students that realizing the shortage in time, he chose more intuitive strategy in creating the collage. It was not based so much on the meaning for tourism industry behind the experience element but just the general associations. In order to avoid this later and inspire deeper learning, the author propose to give additional 5 points for each example illustrated in the collage related to tourism industry. One of the participants commented that it was hard finding pictures. This gave another idea for the later offline version of the experience where the participants would use tourism magazines for collage creation. It would reduce the number of choices for the participants and could provide more time for understanding the concepts instead of searching pictures.

Apart from that, the countdown timer was not displayed during guessing session since the was not opportunity to share two screens at the same time. As a result, the experience lacked the sense of urgency, and the participants were slow in providing the answers. Therefore, the author suggests that participants should send the collages to the teacher instead of sharing by themselves. Then, the facilitator can share the screen with two windows. To avoid any technical problems, the author provided simple explanations for facilitators in the first two slides to ensure user-friendly experience not only for students but for the educators. In addition, the author suggests displaying an online leadership board during the guessing process to increase the motivation based on “Development and Accomplishment”. The guessing time was reduced from 7 to 3 minutes to increase a sense of urgency and facilitate more active discussion among the participants. Besides, one participant found it difficult to understand instructions and the author made relevant changes to the slides.

Table 5. The averages for the collected data on motivational drives

The motivational drive	Average	Max value
Social Influence & Relatedness	9.1	10
Empowerment of Creativity & Feedback	7.7	10
Ownership & Possession	7.4	10
Avoidance & Loss	7.0	10
Unpredictability & Curiosity	6.0	10
Accomplishment & Development	5.0	10
Scarcity & Impatience	4.3	10
Epic Meaning & Calling	2.2	10

The feedback survey showed that the participants were most motivated by social aspect of the game which was one of the goals set by the author. Also, the “Empowerment of Creativity and Feedback” and “Ownership and Possession” drives had high presence in the experience. Also, the “Unpredictability and Curiosity” drive scored above average. “Accomplishment and Development” drives scored average. As it was discussed before, the use of live leaderboard could benefit this drive. Unfortunately, the “Scarcity and Impatience” drive did not score high because of technical problems. The ”Avoidance and Loss” drive scored very high which could potentially mean that the students were motivated to participate because they did not want to miss the opportunity. The class was free elective, and the participants would not lose anything by skipping one lecture. Therefore, “the avoidance” is assumed to be positive here. Below, the visual representation of the Octalysis framework is showed (Figure 19).

Figure 19. The gamification analysis based on Octalysis framework (Chou, 2019).

It can be seen that the experience is fairly balanced in both “White Hat” and “Black Hat” Core Drives and the balance between intrinsic and extrinsic motivation is achieved with slight tendency towards more intrinsic motivation, which is always a positive sign, especially, for educational experience. The overall engagement was evaluated as 9.1 out of 10 maximum value by the participants. Regarding engagement metrics measured during observations, they showed that the average amount of messages communicated by each participant on the topic was 10. In addition, none of the participants stayed silent during the group work. Also, none of the them dropped from during this online gamified experience. Regarding learning value, the motivation to learn was evaluated by the respondents as 100 percent. Considering the quality metrics, it showed that 100 percent of the respondents would recommend this activity to other students. The additional qualitative information was received from the open-ended question of the feedback survey (Table 6).

Table 6. The responses from open-ended question of the feedback survey.

Responses
Interesting idea, since we haven’t done anything like that before. But instructions were not so clear. Otherwise, 8/10 class experience for me.
Really enjoyed the game and it helped reenforce the theory.
Very good idea to involve all the students, it's a good exercise and it was fun!
Maybe a bit less time to complete the task also the answering from groups has to be more clear :D but it was fun and interactive
Using the Experience pyramid elements became pretty obvious after the first two, especially since we use the pyramid quite a lot. Not necessarily a bad idea though, but maybe switch up the order a bit. And especially for people who haven’t studied the pyramid or haven’t got it so fresh in their minds thisd work well.
no

To conclude, the play-testing was a valuable step in the development of the gamification experience. It showed many areas for improvements regarding both content and management of the “Experience Collage Challenge”. Although the observed engagement differed at certain moments of the experience, being high at the beginning and decreasing fast after the Experience Pyramid elements were revealed by one of the participants. The author was pleased to observe the overall positive reaction and comments during the play-testing workshop including the following ones: “I am so competitive!”, “I was fun, and

it started conversation", "Very interactive". The final result in the form of presentation is displayed at the end of the thesis (Appendix 1).

3.4 Limitations and risks

The author identified a number of limitations and risks. Firstly, one of the disadvantages of Octalysis framework (Chou, 2019) as the analytical tool is the fact that it is heavily based on assumptions. It contains a subjective process that reflects the bias of the person who collects the data and performs the ideation process. Chou (2019) accept himself that this tool can have quite subjective outcome and compares it to the SWOT analysis tool which has similar weaknesses. In order to minimize the assumptions, the author tried to perform the analysis of the motivational drive based on data collected from the interviews, observations or the feedback survey.

The survey used in receiving feedback from the students participating in the play-testing has its own limitations. The survey closed-ended questions about motivation might not convey the full meaning of motivational drives and may be interpreted differently by the respondents. That is why the author included also a short oral feedback and observations in final evaluation of the play-testing experience. Besides, the author conducting the testing play testing session belongs to the same target group, that she assumes could potentially motivate the participants to give a slightly more positive feedback after play-testing. Also, it is worth mentioning that the number of the participants taking part in both the interviews and play-testing was the minimum due to the effects of COVID-19.

Discussion

The discussion chapter will cover the results of the study, the conclusions made and ideas for further development. Also, the author's thesis processes and learnings are discussed.

The present thesis is a product-based project. That means the author produced a concrete result that should bring value to the project's commissioner, namely, Service Experience Laboratory LAB8 of the Haaga-Helia UAS. The objective set by the commissioner representative was gamification of the Experience Pyramid Matrix. The author has successfully done the project by developing and implementing the one-hour workshop named "Experience Collage Challenge". She conducted a small-scale play testing session to ensure that the gamified experience is "playable" and engaging for the participants. Although the author aimed at improving both intrinsic and extrinsic motivations which are all essential in creating a successful gamified experience, the feeling of relatedness was the most affected motivational drive during the gamification exercise. This is a valuable outcome since it plays a central role in fighting isolation in today's student experience. Apart from that, the author suggested ideas for improving the overall course experience which could be developed as a separate project. As it was stated before, the feeling of purpose or epic meaning could be developed more in the onboarding experience stage of the course. It is especially relevant in the context of the courses which are related to design of "user-centered" experiences or services.

In this thesis, the author proposed the actionable framework for integrating gamification into Design Thinking. The Double Diamond was used as the design process during this study. The author believes she provided a useful and easy-to-use tool for both educators and experience or service design professionals who wants to add game elements to their design process. The author does not claim that the gamification methods and tools placed in the theoretical framework are complete. The gamification scape is vast and provides numerous opportunities to approach educational projects. In addition, the role of explicit or implicit gamification plays a crucial role in defining the right approach. The gamification can be compared to the top of the iceberg. The upper part would be presented by such common elements as Points, Badges or Leaderboards (PBL) while the down part would consist of psychological factors related to motivation and engagement. Therefore, the author suggests further development of this framework by including player-centered tools and game mechanics to the framework. In addition, the author felt that the Player Persona and the Octalysis framework had overlapping since they are both based on the Self-Determination theory. As the result, she suggests choosing one of mentioned frameworks

in the design process. For example, one approach could be, combining the Octalysis framework with the “ordinary” Persona type instead of Player Persona.

The author discussed the possible limitations and risks in the previous subchapter. Therefore, the trustworthiness of the results is already covered. It is worth mentioning, that the scale of the project was rather small and so was the target group. It was represented by the students who study experience economy-related courses with particular teaching staff members in Haaga Campus of Haaga-Helia UAS. Indeed it is quite a narrow group. Therefore, this should be considered in evaluation of the final results. In addition, the number of participants who could test the experience was small due to class attendance during COVID-19. The continuous isolation and overuse of the digital tools caused many challenges for the learners’ motivation including the author’s as well.

The overall thesis process is hard to name a smooth one. The author did not choose an easy road due to her opportunism and curiosity. She can state now that her motivation towards the thesis topic was based on “Unpredictability and Curiosity” drive in the terminology of the Octalysis framework. The topic choice was a risky decision since the author had poor knowledge of gamification. This made it hard to navigate the literature, filter the valuable information and ask questions. In addition, the topic is at the intersection of other major subjects such as game design and psychology which cannot be fully ignored.

To conclude, this thesis contributed greatly to the author’s knowledge of experience design and gamification techniques which are both heavily based on understanding of human behavior and psychology. Moreover, the design process based on Double Diamond model and the management skills were exercised during the execution and planning stages of this thesis project. The author believes the topic of gamification can give a lot of learning opportunities for students if it is included in experience management curriculum.

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Appendices

Appendix 1. Qualitative interview

Student experience of participation in experience economy related courses with a focus on Experience Pyramid class.

Questions related to Octalysis motivational drive were based on the overall experience of of the course in case the participants do not remember an Experience Pyramid Matrix class.

1. Could you describe your experience of studying a course related to experience economy?

2. Could you share your experience of studying Experience Pyramid Matrix? How did you feel about it?

3. Can you think of something that made you feel that you are contributing to something greater than you are or that you are “chosen” to do something? (How much of that did you experience?)

4. Can you think of something that you did because you felt curious during the class? (How much of that did you experience?)

5. Can you think of something you did during the class where you could express your creativity? (How much of that did you experience?)

6. How much ownership or control did you have over your own learning process? (How much of that did you experience?)

7. How would you describe classes in terms of connecting with people or social activities? (How much of that did you experience?)

8. Can you think of something that made you motivated to do something because of the shortage/scarcity? It could be a shortage in time or something that you wanted but could not have it yet? (How much of that did you experience?)

9. Can you think of something that you did because you avoided some negative consequences? (How much of that did you experience?)

10. Can you think of something that made you feel you were making progress? (How much of that did you experience?)

11. What was your experience of studying during COVID-19? How did it effect you?

12. During your studies in Haaga campus, what was the most engaging class for you?

13. During your studies in Haaga campus, what was the most boring class for you?

14. How would you describe yourself as a student?

15. How other classmates would describe you?

16. What do you like to do in your free time?

17. Do you play games?

18. Which games do you like most and why?

Appendix 2. Feedback survey

Feedback

1. I had a class about "Experience Pyramid" before

- ◯ Yes
- ◯ No

2. The experience was engaging

3. The experience motivated me to learn

- ◯ Yes
- ◯ No

4. The experience challenged my abilities to recall theory

- ◯ Yes
- ◯ No

5. In the game, I was motivated by doing creative things

6. In the game, I was motivated by having control over the process or by accumulating items?

7. In the game, I was motivated by playing with other students

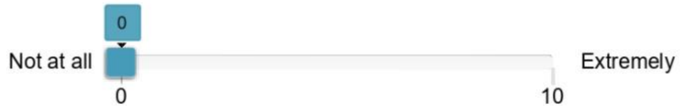
8. In the game, I was motivated because I was curious or because of unpredictable results

9. In the game, I was motivated by the challenge or attainment of new skills/ knowledge

10. In a game, I am motivated to feel chosen to save the world?

11. In the game, I was motivated by desire to obtain something which is not available

12. In the game, I was motivated because I did not want to lose something or miss opportunities

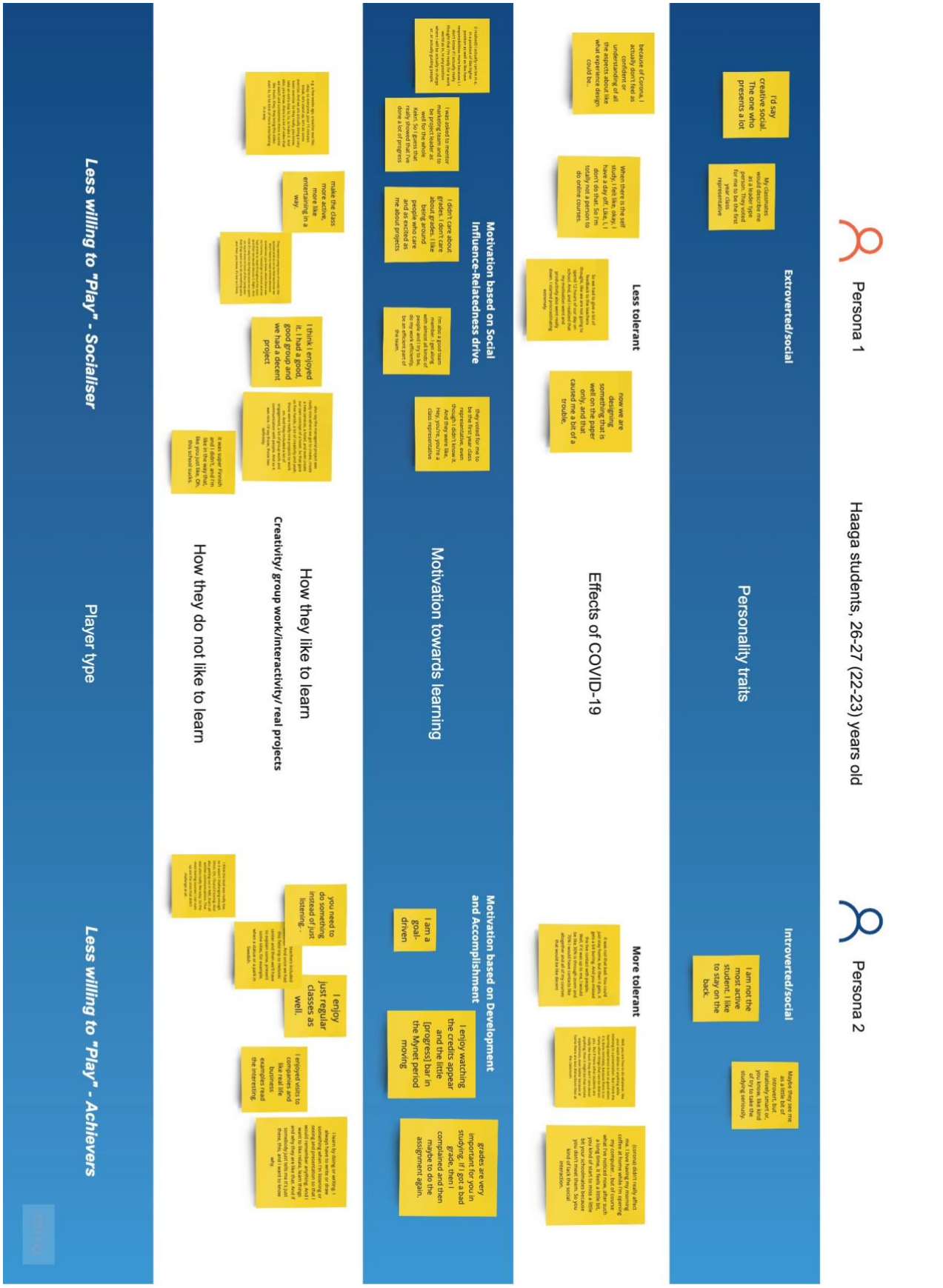


13. I would recommend this activity to other students

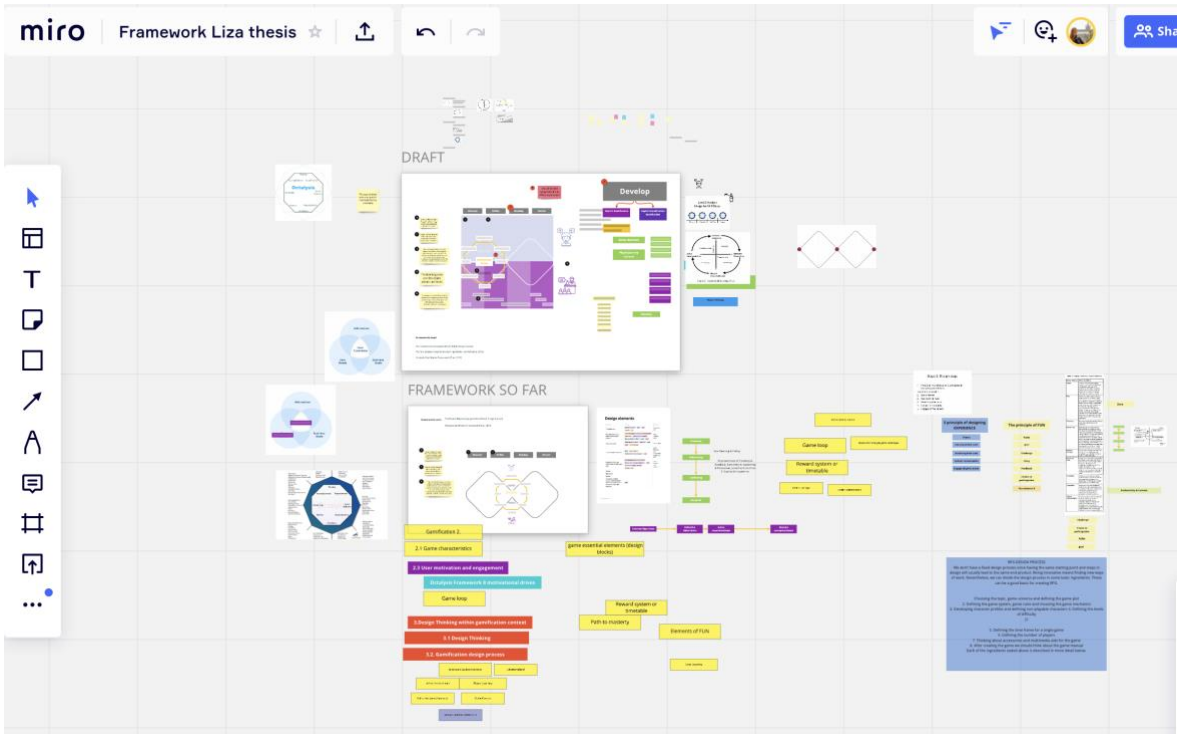
- ◯ yes
- ◯ no

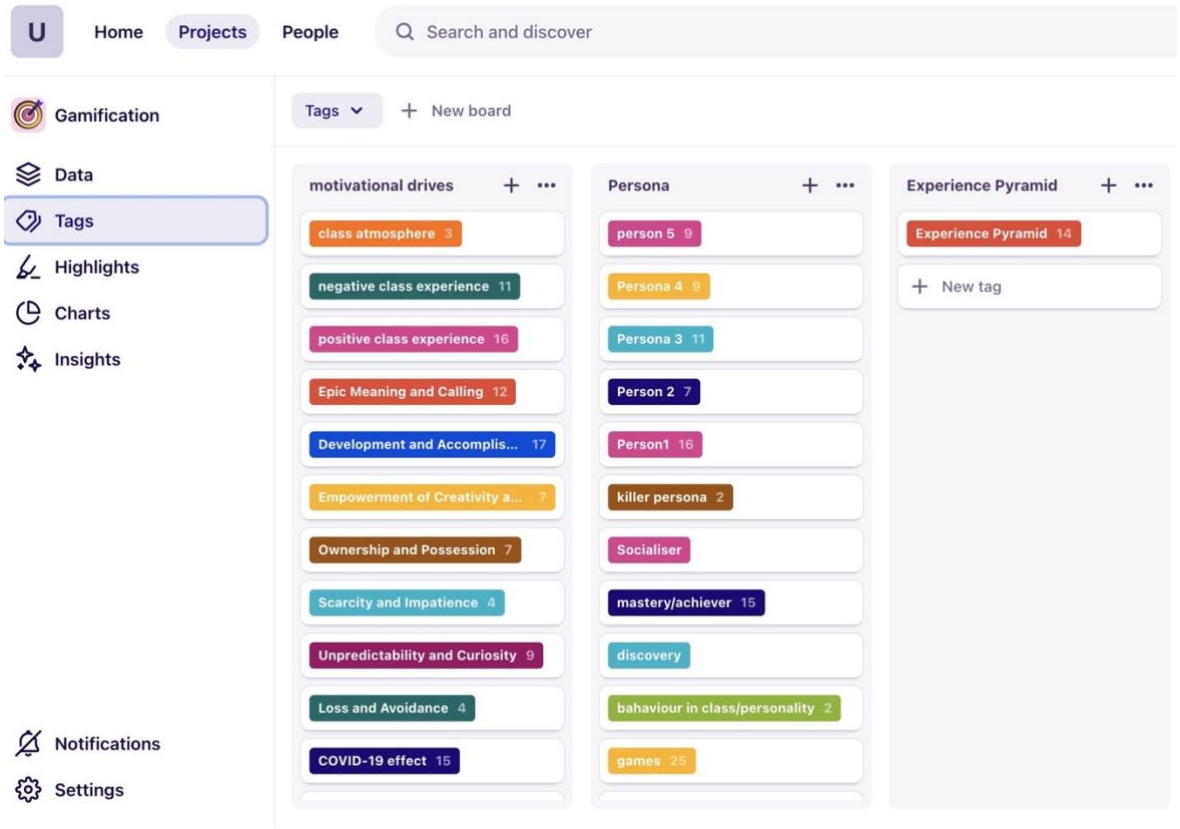
14. Is there anything you'd like to add?

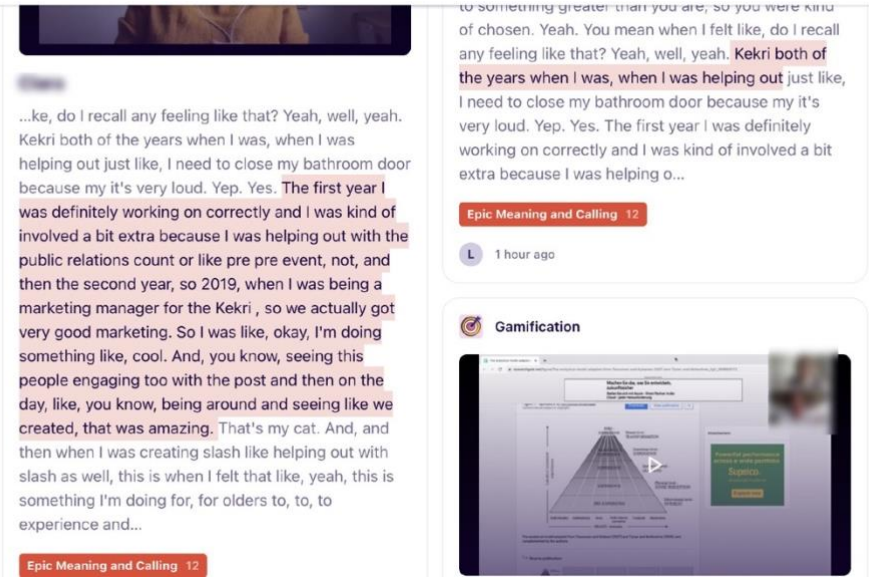
Appendix 3. The Personas

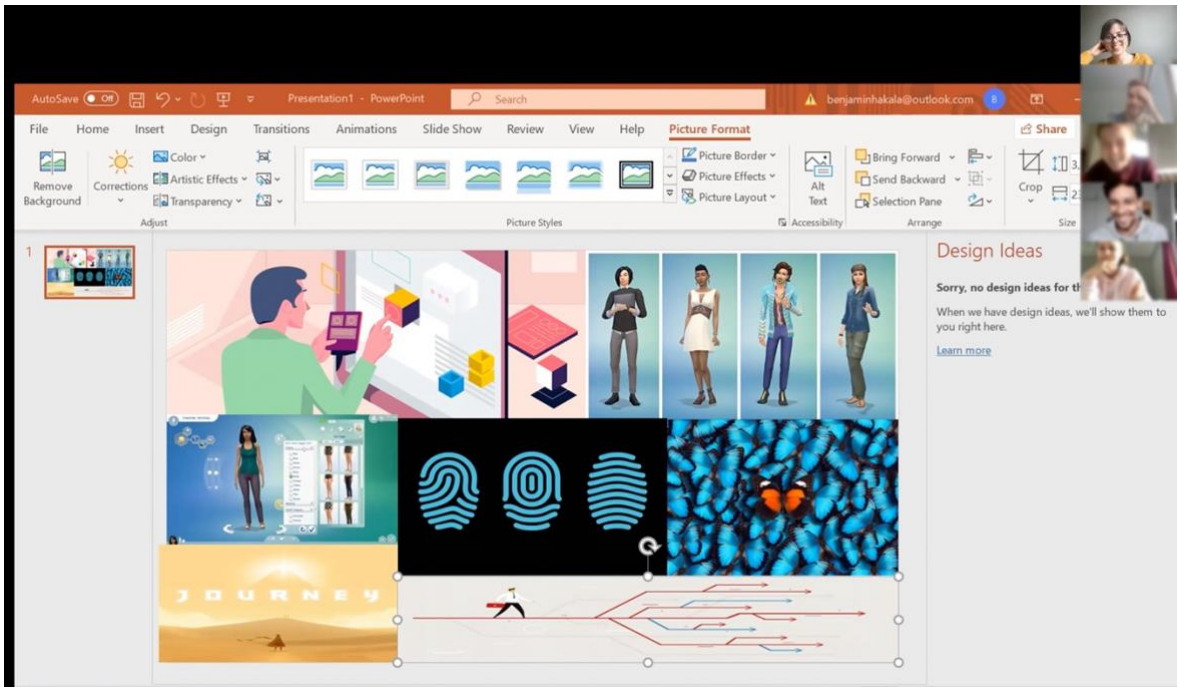


Appendix 4. Product process pictures






...ke, do I recall any feeling like that? Yeah, well, yeah. Kekri both of the years when I was, when I was helping out just like, I need to close my bathroom door because my it's very loud. Yep. Yes. The first year I was definitely working on correctly and I was kind of involved a bit extra because I was helping out with the public relations count or like pre pre event, not, and then the second year, so 2019, when I was being a marketing manager for the Kekri , so we actually got very good marketing. So I was like, okay, I'm doing something like, cool. And, you know, seeing this people engaging too with the post and then on the day, like, you know, being around and seeing like we created, that was amazing. That's my cat. And, and then when I was creating slash like helping out with slash as well, this is when I felt that like, yeah, this is something I'm doing for, for olders to, to, to experience and...
Epic Meaning and Calling 12
of chosen. Yeah. You mean when I felt like, do I recall any feeling like that? Yeah, well, yeah. Kekri both of the years when I was, when I was helping out just like, I need to close my bathroom door because my it's very loud. Yep. Yes. The first year I was definitely working on correctly and I was kind of involved a bit extra because I was helping o...
Epic Meaning and Calling 12
1 hour ago
Gamification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Presentation1 - PowerPoint
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benjaminhakala@outlook.com
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Share
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Corrections
Color
Artistic Effects
Transparency
Picture Border
Picture Effects
Picture Layout
Alt Text
Bring Forward
Send Backward
Selection Pane
Crop
Adjust
Picture Styles
Accessibility
Arrange
Size
Design Ideas
When we have design ideas, we'll show them to you right here.
Learn more
JOURNEY

Appendix 5. The presentation slides for running an "Experience Collage Challenge" workshop

The presentation below is used for introducing students to the challenge. First two slides are hidden by Power Point settings and used by the teacher:

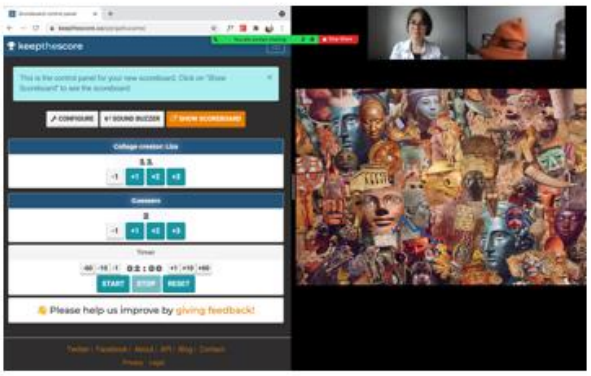
Instructions for a teacher/ facilitator

The set up for a teacher/facilitator

Online classroom	Offline classroom
To create an online leaderboard and set up a timer go to this website https://keepthescore.co/ Click: "Start here"→ "a multipurpose Scoreboard" Adjust the 2 minute timer and name the teams "Creator/s" and "Guessers" Use this tool for each round! Remind the teams to write their own points for the final calculation.	
Be ready to share the link with the individual presentations	Collect magazines, leaflets or print materials with pictures related to Hospitality/Tourism Experiences
	Print Individual Power Point presentations
Create a folder where you will save all the "secrete" collages of students	A3 paper, markers, pens, sticky notes

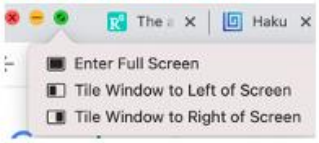
Instructions for a teacher/ facilitator

Technical tips for sharing 2 screens in Zoom



(Before sharing)

- Open a student's collage that you saved on your computer.
- Open the window with the set up leaderboard and timer https://keepthescore.co/
- **Split the screen into two** (see on Mac below)



- Click in Zoom on SHARE THE SCREEN and select two tabs by holding SHIFT

Experience Collage Challenge

Are you ready to challenge yourself with an interesting collage game?
In this game, at the first step **each player needs to create a collage** on a given topic related to Experience Design. After that, other players try to **guess the topic of the collage**.

In this game, you earn points **both** as collage creator and topic guesser. Do not worry, the point system is explained in the following pages.

Instructions

Collage rules

The collage should reflect the given topic within context of tourism and hospitality (preferably) or other industries.

The collage can contain pictures, signs, drawing, personal pictures etc.

The collage should not contain the words (do not make it obvious otherwise you can lose points).

Instructions

The topic (a word) you will be guessing and creating a collage about is...

an element considered during design or creation of experience

Instructions

Points System

You can find the point system for different scenarios in the tables below:

Points (each person) receives as a creator

5	If others guess your topic **on the 1st try**
10	If others guess your topic **on the 2nd try**
15	If others guess your topic **on the 3rd try**
0	If others guess your topic **on the 4th try**
5+	Additional points for **every** example from tourism/hospitality industry

Points (each person) receives as a guesser

15	If the group guess the topic **on the 1st try**
10	If the group guess the topic **on the 2nd try**
5	If the group guess the topic **on the 3rd try**
0	If the group guess the topic **on the 4th try**

*Maximum amount of points is 90 (without 5+) per person/session with 6 participants/teams (1 creator and 5 guessers)

*The points for guessing are given equally to each participant

* During a group activity, guesses will be selected and presented by the group to the creator

Instructions

Steps 1: creation of collage

- Please pick a number from 1-6 in your group and then open this link (or the teacher will send you the link).
- In the link, click on the file with a matching number that you selected.
- Gather information related to the topic in the file and create a collage (Please do not spend more than **25 minutes** for this step).

When the time is up, send your collage to the teacher via personal message

Instructions

Steps 2: Group work

- In each round, one person/group shows their collage to other participants *(in online meeting the teacher shares the collage on his/her screen)*
- Participants (except for creator) try to share their thoughts on the possible topics. Together, they come up with 3 guesses which they will present to the creator.
- The creators share the right answer and explains the ideas behind the collage.
- Participants need to write their points! At the end of the game, the points are calculated and the person with the highest number of points is the winner.

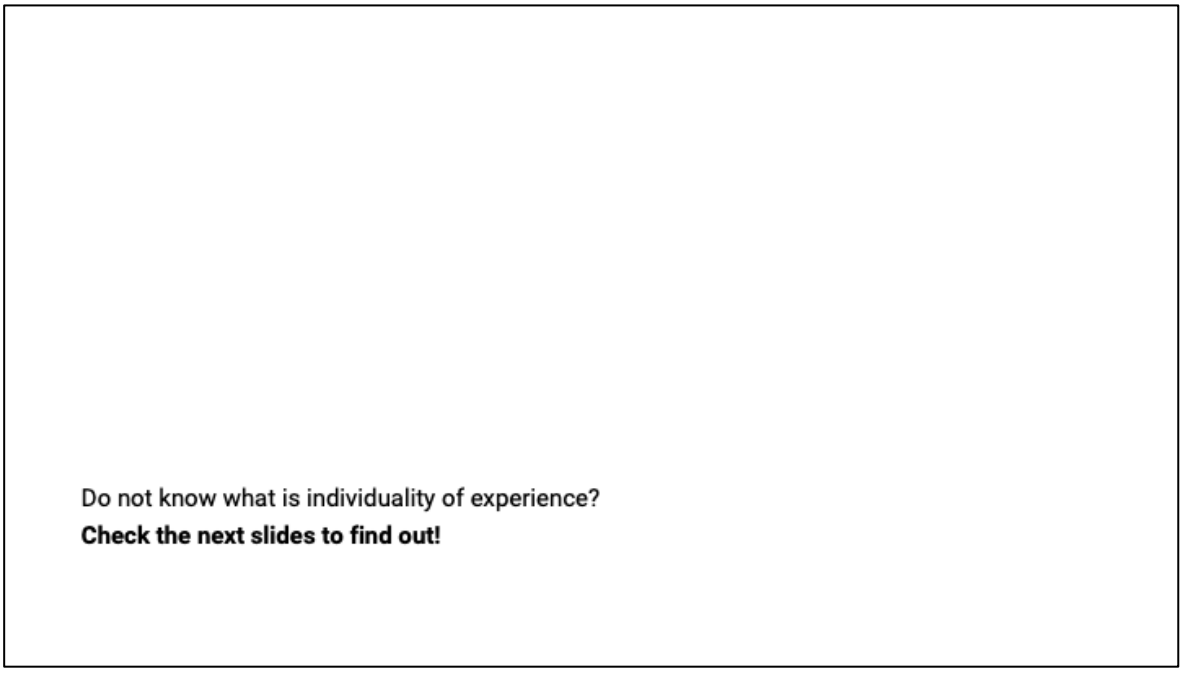
Please spend not more than **2 minutes** per each try (3 minutes in total).

You receive an "Experience Pyramid" badge to your certificate!

- All the class participants who successfully completed the Experience Collage Challenge will receive a badge with the "Experience Pyramid".
- The participants with the highest number of points receive an "Experience Pyramid master" badge (First 5 e.g.).

The badge picture on the right is just an example of a badge. The "Experience Pyramid" badge should be designed with the help of a graphic designer and be in the same style with other badges planned for the course challenges

The presentation below is of the six individual presentations shared to student or a group of students where they receive information on one of the six elements of the Experience Pyramid.



What is individuality of experience in tourism industry?

means the product's own superiority and uniqueness: there is no other product which is exactly or roughly the same. Individuality is also seen as customer-oriented way-of-action in staging the product. When the product represents individuality the customer feels him/ herself dignified and the-one-and-only. Tailor-made product respects the needs and preferences of the customer, and each participant can realize his / her own conceptions on the part of the challenge of the activities or information offered, among other things. In many cases tourists are members of a group when travelling. Sometimes individuality can be experienced through communal situations. When participating on to a group journey the experience is made up of shared moments. Then individuality takes wider forms. Despite the fact, the guests should be treated the most personalized manner as possible. This dichotomy of individuality – communality is one aspect to consider when developing experience products.

Although being part of the same segment or tour customers usually have needs and wants of their own. For offering an individual experience to each and every one of them the customers must be given their own portion of information – both fact and fiction – and activities. Flexibility and sensitiveness towards customers' background and expectations are key terms when meeting the challenges of individuality in tourism markets. Also the communication between the product and the guest before, during and after the product consumption is crucial when meeting the customers' individual needs.

Planning, developing, marketing and selling products in a personalized and customer-oriented way is a challenging task. Usually tourism products are experienced in a group of many people, but the stager however has to lead all the customers into experiential scapes (see Murray 1995, 17-18; Mossberg 2003, 17) of their own. Although rewarding this personalization is expensive too. In terms of quality management and repeatability individuality is seen a little complicated. How to produce personalized situations and settings to customers without forgetting the business? Customization is very difficult but very important when producing experiences. There are some ways to handle this paradox. By knowing your customer, by pricing the product correctly and by segmenting the markets it is possible to create groups who appreciate quite similar products and features. The individualism and degree of custom-planning with respect to the product can be increased practically ad infinitum, but generally costs also grow as individuality is increased. Indeed, the challenge is to produce easily personalized products with a duplicable basic concept. The capacity and the cultural competence of customer service clientele is crucial when meeting this challenge.

Questions to help you in collage ideation!

Think of own experience in tourism industry or the experience that you can find/know about.

What made this experience unique on motivational, physical, and intellectual levels?

Motivational level

How does the experience appeal to different recipients? How does the marketing messages of the experience differ from other advertising?

Physical level

How does the physical environment take into account different individuals/groups? Do repeat visits provide new experiences?

Intellectual level

How does the experience contribute to individual learning experiences?

Your points!

5	If others guess your topic **on the 1st try**
10	If others guess your topic **on the 2nd try**
15	If others guess your topic **on the 3rd try**
0	If others guess your topic **on the 4th try**
5+	Additional points bonus for **every** example from tourism/hospitality industry

	Collage creation
Round X	
Bonus	

15	If the group guess the topic **on the 1st try**
10	If the group guess the topic **on the 2nd try**
5	If the group guess the topic **on the 3rd try**
0	If the group guess the topic **on the 4th try**

	For guessing
Round 1	
Round 2	
Round 3	
Round 4	
Round 5	
Round 6	