HOW TO SUCCEED WITH
DIGITAL GAMIFICATION FOR YOUTH ENGAGEMENT

HANDBOOK

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2018
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INTRODUCTION

Different agents shape youth engagement and civic participation: family, school, peers, non-governmental organizations, media, etc. Based on the fact that non-governmental organizations (hereafter referred to as NGOs) can play an important role in promoting youth engagement, the project’s aim is to apply gamification elements to youth activities, to make them more appealing for the target audience.

According to the European Council and representatives of the Governments from the Member States, “to appeal to young people and to ensure greater impact on their lives, new settings where young people spend their time, such as modern city infrastructure and virtual space, as well as new approaches using innovative online and offline tools such as gamification” are needed.

New approaches should be incorporated into youth work in order to develop the potential of young people. One approach that can be considered is gamification.

Gamification is the application of game elements and digital game design techniques to non-game problems, such as business and social impact challenges. It is a motivation-based approach to increase the engagement and contributions of the target audience, as well as the achievement of necessary results through active involvement. During the project “Digital gamification for youth engagement”, various elements and tools of gamification were researched and different approaches used to collect the most relevant information. This research resulted in the creation of this handbook, “How to succeed with digital gamification for youth engagement”. It covers the following topics:

- What is gamification?
- Why is it important?
- What are the best examples of gamification?
- How to use (digital) gamification?
- How to create a game by using existing templates and applications?
- How to involve and educate a greater number of young people on various topics, such as democracy, unemployment, civic engagement, sustainability, peace-building, environment, local community, etc.

The handbook is intended for NGOs, youth workers and other stakeholders. The project aims to improve the understanding of digital gamification as a pedagogical approach in non-formal education and reinforce an innovative way of teaching, introducing digital gamification as an attractive tool.

THE RESEARCH METHODOLOGY OF THE HANDBOOK

The “Digital gamification for youth engagement” project provides an overview of relevant and up-to-date situations in the field of youth engagement based on the study of various examples, on online questionnaires and on content analysis. The activities described in this project aim to reach, engage and analyse young people from many different geographical locations. The primary focus areas are within the partnering countries: Latvia, Estonia, Croatia, Portugal, Argentina, India, and Vietnam.

The main objective of this project is to promote digital gamification as a new, innovative tool for youth engagement on various topics, including democracy, employment, civic engagement, human rights, youth entrepreneurship, environmental education, social responsibility, and active participation in community activities among youth leaders and youth workers. While exploring the various engagement possibilities by the use of gamification tools, this study focuses on the following sub-objectives:

OBJECTIVE 1: to review gamification as a method and its possible applications in youth engagement.

OBJECTIVE 2: to depict successful examples of youth engagement from the partnering countries.

OBJECTIVE 3: to survey participants aged 13-30, to analyse patterns of engagement with gamification methods;

OBJECTIVE 4: to survey youth leaders in order to analyse possible difficulties for youth engagement with gamification and other methods;

OBJECTIVE 5: to depict relevant successful examples and insights about engagement challenges within the youth sector during the study trips.

The handbook also provides recommendations for long-term work at the national, regional, and global level, using gamification as a youth engagement method.

The research consists of three main research methods and the use of secondary and primary data. The secondary data is used in the content analysis and case studies to analyse the specific situation of each country, while the online questionnaires for the target group are used to collect the primary data.

CONTENT ANALYSIS: The content analysis was based on the available national and local studies, practices, initiatives, and reports about gamification and relevant activities (i.e. the best examples) in particular countries. Content analysis is a commonly used qualitative research method that can be effectively employed to analyse a body of text. Through content analysis, the elements of a body of text are assessed empirically to establish and document specific aspects and the relations among them. Elements of content analysis include words, idioms, sentences, paragraphs, articles, or entire papers and reports. Through a specific sequence of steps, content analysis allows the researcher to meaningfully interpret the content presented, to make inferences about the patterns of the content within specific elements of a
given text. The experiences of the project partners as well as the involvement of the volunteers and relevant stakeholders have been used to gather a wide view on gamification-related quantitative and qualitative data. The results were then filtered according to the relevance of the given title or abstract, and whether or not the subjects of articles found in the search were related to the study. The references cited within these documents were also taken into account. In the majority of cases, the data and information used is not older than 2010. The aim of the content analysis is to identify general trends in the area of gamification and relevant examples of gamification as a method for youth engagement. At the same time, it also important to point out challenges, facing youth engagement in terms of motivation, perception, possible choices, and other factors.

**ONLINE QUESTIONNAIRE:** Due to the difficulty of reaching young people through traditional telephone techniques or meeting them in person, a decision was made to rely on the Internet as the preferred method of questionnaire administration. Two questionnaires for young people and youth workers were distributed in partner countries, and both of the questionnaires were divided into two sets. The first set of questions is related to the main topic of the project, and the second part of the questionnaire studies the demographic data: the age, gender, country of origin, and the education level of the respondents. The final question in the questionnaire for young people assessed occupation, while the final question for the youth workers assessed the specific field of their work.

**CASE STUDIES:** Case studies are in-depth investigation of a single person, group, event, or community. The best examples often provide decision makers (in our case: youth workers, youth centres, different youth NGOs) as well as stakeholders and the public with an evidence-base about a successful model of specific actions (e.g. successfully applying gamification approaches). Case studies in this particular project describe successful cases of gamification in Argentina, India, Vietnam, Croatia, Portugal, Estonia, Latvia, and globally. These cases represent a variety of topics that can be promoted by the use of game-based methods.

**INSIGHTS FROM THE STUDY TRIPS:** A study tour is an exchange visit by an individual or group to one or more countries/areas for knowledge exchange. Study tours provide an opportunity for key stakeholders to learn relevant practices from their peers. Study tours allow a high level interaction among participants and exposure to the study topic. The study trips in this project were necessary for an in-depth learning experience.
1.1. WHAT IS GAMIFICATION?

The last two decades have shown an increased number of people, using gamification methods in real-life interactions to promote desired behaviors. Some visionaries (e.g. game designer Jesse Schnell) predict a kind of gamepocalypse – a future in which everything becomes gamified, from brushing one’s teeth to exercising. Steven Spielberg premiered a movie ‘Ready Player One’ (2018) depicting such a virtual reality world with gamification applied in every aspect of human life.

Before identifying ways in which gamification can help to increase the knowledge, competence and interest of youth in social and political processes, the concept of gamification has to be interpreted correctly. The first task in understanding the meaning, functions, types, and tools of this concept is to acknowledge that “gamification” is not equal to “game”. Gamification is “the use of game design elements in non-game contexts”, which means it is not related only to entertainment. Gamification can be used in education, scientific exploration, health care, emergency management, city planning, engineering, defense, and politics. The objectives of gamification are focused on productive results, whereas games do not share these objectives.

Gamification differs from the game-based learning. Game-based learning includes games in the learning process, while gamification is turning the learning process as a whole into a game. It is important to stress that gamification should not be associated solely with digital technology as it can be applied in ways other than the digital media as well. The non-digital methods are widely implemented in education, business, and marketing, since these fields are largely responsible for pioneering the game-based methods of gamification.

In this research the focus is on applying such methods to formal and informal education, youth work, civic participation, social innovation, healthcare, and self-development.

1.2. FEATURES OF GAMIFICATION

Similarly to any game, gamification uses the motivational power of games and includes such components as: a goal that has to be achieved, rules that specify how the goal is to be reached, a feedback system that shows the progress achieved, and the principle of voluntary participation (as listed by Jane McGonigal4); as well as elements like time, competition, cooperation, reward structure, levels, storytelling, a curve of interest, and aesthetics, added by Karl Kapp5. Elements can be classified more specifically or generally, depending on the author of this classification.

Although the most typical elements of a game are meaningful stories, in the gamification environment, the “player” has to live through a visual avatar and its profile development which represents the person and their attitude towards the avatar, performs quests or tasks, and earns points and badges that reflect achievements.

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4 Schell, J., Design Outside the Box Presentation, DICE 2010, 2010
7 Kapp, K. M., The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education, 2012
8 Sailer, M., Hense, J., Mandl, H., Klevers, M., Psychological Perspectives on Motivation through Gamification, 2013
in the form of scores, *progress bars*, *performance graphs*, and *leaderboards*, corresponding to their progress towards a goal, perhaps comparing this progress to other “players”⁶. A more specific description of each element can be found in the Table 1.

<table>
<thead>
<tr>
<th>Game elements</th>
<th>Description</th>
<th>Motivational functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quests</td>
<td>Little tasks that have to accomplish within the game</td>
<td>Quests provide clear goals, highlight the consequences of a goal and emphasize the importance of a player’s action within a given situation</td>
</tr>
<tr>
<td>Points</td>
<td>Rewards accumulated for certain activities within the game</td>
<td>Points function as immediate positive reinforcement that take form of mostly virtual rewards, provided for executed actions</td>
</tr>
<tr>
<td>Badges</td>
<td>Visual representations of achievements that can be collected within the game</td>
<td>Badges display the player’s success in the form of virtual status symbols and therefore motivate the player. Badges denote group identification by communicating shared experiences and activities, thus enhancing the feeling of affiliation. Badges also represent a goal-oriented function and the player’s competence.</td>
</tr>
<tr>
<td>Progress bars</td>
<td>Feedback on the player’s current progress towards the goal</td>
<td>Both progress bars and performance graphs provide feedback. Progress bars depict distance from the goal; performance graphs compare the players’ performance to previous performances, thus noting improvements and fostering a motivation to achieve mastery.</td>
</tr>
<tr>
<td>Performance graphs</td>
<td>Feedback on the player’s performance in comparison to their previous performances</td>
<td></td>
</tr>
<tr>
<td>Leaderboards</td>
<td>A list of all players, usually ranked by their success</td>
<td>Individual leaderboards foster the sense of a competition and motivate achievement. The players who top the leaderboard may feel especially competent, while those at the bottom may feel demotivated. Leaderboards that provide a team-score can foster a feeling of social relatedness among the team members, since such leaderboards emphasise the collaboration needed for shared goals.</td>
</tr>
<tr>
<td>Meaningful stories</td>
<td>The story line the player lives through within the game</td>
<td>By offering a variety of meaningful stories, feeling of autonomy can arise. An inspiring character can increase positive feelings. Stories should match the player’s interests and spark attention to context.</td>
</tr>
<tr>
<td>Avatars</td>
<td>Visual representations that the player can choose to associate themselves with</td>
<td>The option to choose from various avatars can foster a feeling of autonomy. Positive feelings and emotional bonds can arise by providing many avatars.</td>
</tr>
<tr>
<td>Profile development</td>
<td>Development of the avatar and its attitudes</td>
<td></td>
</tr>
</tbody>
</table>


⁷Ibidem
Additional game elements and mechanics are described by other authors. The most valuable to note are levels, reminders, communication and collaboration (Table 2):

Table 2. Additional game elements and their functions in a game

<table>
<thead>
<tr>
<th>Game elements</th>
<th>Description</th>
<th>Motivational functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levels</td>
<td>A section (part) of a game, which requires the player to meet specific goals or perform specific tasks in order to advance to the next consecutive section of the game.</td>
<td>To reach the next level, players are guided by smaller goals and a sense of competition with other players. While advancing levels, players are motivated by the sense of accomplishment and the desire for more challenging tasks. The advancement of the player is identified by the level reached in the specific game.</td>
</tr>
<tr>
<td>Reminders</td>
<td>Notifications to remind the player to do an action.</td>
<td>By reminding the actions that need to be done to succeed, interest and momentum is maintained. It stimulates learning within the game.</td>
</tr>
<tr>
<td>Communication</td>
<td>Social interactions between players within the gaming environment.</td>
<td>Chatting, passing signals, challenging others, sharing advice, discussing issues in the game, and exchanging other information leads to a community of members who support and challenge each other. It fosters positive reinforcement, helps in making friends, and boosts the self-esteem and social value of the player.</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Teamwork in a cooperative game, where competition between teams takes place.</td>
<td>The social aspect of the game and a shared goal develops a sense of belonging, peer pressure, connections, loyalty, and deeper involvement.</td>
</tr>
</tbody>
</table>

The concept of gamification has more far-reaching goals than just increasing the mastery and experience of the player in a specific entertainment environment. Even if such gamification is completely digitized and the communication with others is online, the player gains knowledge that can be applied to real-life situations. As a result, a temporary tool contributes to a long-term result. Gamification attempts to affect motivation rather than directly changing the attitude and behaviors of a “player” (e.g. employer, participant, activist). Hence, it should be distinguished from persuasive technologies that are meant directly change behaviors and attitudes, for instance choice architecture and decision-support systems that assist decision making, loyalty programmes used for marketing purposes, and the videogames mentioned above. The concept of gamification is not completely new, as it comes along with the game-like principles of business and marketing, so, like them, gamification is carried out in order to create value for users.

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9Hamari, J., Koivisto, J., *Social Motivations To Use Gamification: An Empirical Study Of Gamifying Exercise*, University of Tampere, 2013
By properly implementing gamification, we can promote motivation, encouragement, engagement, and productivity, a sense of belonging, gratification, pride and meaning, self-advancement, as well as overall behavioral change without sticking to any specific area. Before implementing gamification, the purpose of this method should be defined: who are the user (e.g. employers, students, groups, kids, customers, etc.)? What behaviors are to be changed? Then, goals should be set up to track the impact of gamification on those behaviors. Gamification goals for the target groups reveal that the psychological perspective of this method is yet to be studied. So far, it is known that one of the most important functions of gamification is to stimulate motivation to act according to the goals of the gamification strategy.

*Picture 1. Improvements brought by gamification*

This research focuses on youth (as the most active facilitators of non-formal education) and youth workers (who are interested in adding to formal education without demanding special diplomas or certificates for it). A young person is very dynamic and more likely will change his behaviour than older. Therefore, using the motivational, engaging, and empowering facilities of gamification is of high importance when it comes to aiming for positive social change, driven by youth. Behavioral change should change the approach to all informal education, so bringing a general understanding of one’s role and one’s commitment to all of society.

However, ‘motivation’ seems too broad to refer to everyone equally. There are several types of “players” whose behaviors can be explained by their motives:

- Players who are goal-oriented are more likely to be motivated if gamification emphasizes achievement, success, and progress;
- Players who are driven by the sense of power are more likely motivated by status, control and competition;
- Players who regard highly the sense of affiliation are more like to be motivated by membership and belonging.

The way a person reacts to different drives is influenced by their past experiences that can be conceived of as previous stimulus-response bonds\(^\text{12}\). Positive or negative experience that brings understanding of what leads to results is why the player needs feedback on their actions. Immediate feedback impacts the motivation of the player, if sent in the form of positive or negative reinforcement, e.g. providing rewards for positive accomplishments. The stated goal also has an important role in the perception of gamification and the motivation to go through with it. First of all, the goal should be clearly defined and achievable. The player needs to understand the importance of their actions leading towards the goal and the consequent achievement.

Another reason why the player is interested in using gamification is the need to improve skills, while having the opportunity to use gaming techniques adapted to the level of their individual skills and gradually improving them.

Corresponding with the need of social interactions, influences, recognition, and relatedness is an integral part of human motivation used by the designers of gamification. Social influence refers to an individual’s perception of how important others are, and what they expect from the player. This influence is also feedback, given by other players, for instance, in the form of “likes” or comments, and it can positively affect the perception of recognition. The more an individual feels supported and recognised by other players, the better they feel in conforming to the expectations of others. Receiving recognition creates a positive attitude towards the gamification, considering it a reciprocal benefit for community. According to scientists at the University of Tampere, reciprocal benefits, social influence and recognition deepen the meaning of gamification by raising the social benefits as the network of ‘players’ grows\(^\text{13}\). This creates a will to continue using the system and to recommend it to others, as do positive feelings like sympathy and pleasure.

Competition can be used as an additional driver in acquiring new information or skills, for participants already familiar to each other or else to make unknown participants familiar. Competition ensures social interaction and an indirect encouragement to act similarly, giving them the chance to prove themselves. The goal of the competition should be clearly set and the reward system (symbolic rewards for achievements) defined, mentioning that winning or losing is very low in importance, but that learning and integration have the key role.

**Gamification has an integrational function, to create a sense of community.** Cooperation of players adds to the learning process via discussions and additional responsibilities to work towards a common goal. The more individuals work together, the more they are able to achieve. Besides, gamification in a group can be fun and less stressful.

Gamification in general is the combination of motivational mechanisms linked to game elements, providing individuals with power to act more efficiently and develop new competences by more attractive methods. These methods are meant to create empathy and motivation from game-like activities and transfer knowledge to real life contexts.


\(^{13}\) Hamari, J., Koivisto, J., *Social Motivations To Use Gamification: An Empirical Study Of Gamifying Exercise, University of Tampere*, 2013
1.3. WHO ARE THE BENEFICIARIES OF GAMIFICATION?

It is a common belief that gamification works the same for everyone – by positively motivating and engaging. Nevertheless, it seems that techniques used for a child are not motivating enough for an adult, and vice versa. For example, a study on gamification’s influence showed, that promising $10 for completing a task will not motivate a 7 year-old child as much as an adult.\(^\text{14}\) Gamified applications can also annoy adults, while the young tend to find them exciting. Speaking about demographic differences, it was found that, for women, the social benefits of gamification (like recognition and networking) are more effective than for men.\(^\text{15}\) Gamification requires appropriate study and customization to be effective at working towards its goal. Broadly, gamification can be introduced into the lives of personal, regardless of age, gender or social status. The main prerequisite is the tailoring of techniques to the interests, abilities, and needs of the player.

Taking into account the number of programmes, initiatives, movements and funding opportunities for youth, we see that they are considered a priority audience for gamification. Many would agree that young people are flexible and capable of intense study and memorization. Similarly, they are more inclined to entertain themselves with games (whether table-top, party, sports, or videogames) than other age groups, not only because they are still more connected to childhood, but for multiple other reasons. Both facts make the youth sector the most suitable to apply gamification to, including kids, teenagers, students and even youth workers.

Nowadays, the largest field for gamification is education, formal and non-formal. We have tried gamified learning during studies at school, university, masterclasses, courses or conferences, perhaps even without being conscious of it: for example, when receiving points, grades, certificates and other benefits for accomplishing tasks. For gamification designers and specialists, a central focus is people engaged in learning process – kids, pupils, students, youth workers, teachers, professors, and even their parents.

Another large field for gamification is business. Human resource managers are constantly improving motivational and engaging techniques in order to improve efficiency, loyalty and satisfaction of employees. Establishing reward systems of different complexity, leaderboards, tangible and intangible bonuses for long-term employees can turn into bigger profits and recognition from customers. Although gamification can be closely connected with marketing, when gamified loyalty programmes are used, both employees and satisfied customers can benefit from gamification in business. Thousands of mobile applications have been created in the last decade for customers: attracting, customizing themselves, and serving them.

Increasingly, a growing network of institutions and associations which work for the benefit of young people, is working with a young audience equipped with a variety of gadgets, digital tools, specially-designed methodologies and a huge amount of information. It becomes even more difficult to reach a young person, to turn his or her attention to particular issues and to work with, innovative non-formal tools and techniques that are designed for youth and used by formal educational staff and youth workers that may not be proficient in these specific fields of study. Gamification is of special importance when speaking about NGOs, not excluding governmental, municipal and other organisations that can bring a positive impact on youth; it promises to promote their ideas, study their outcomes, and to educate and engage them to take action.

Game elements are implemented in nearly every sphere of interest to young people. Athletes are motivated to do exercise regularly thanks to interactive applications and special programs that evaluate their efforts and bring feedback on the state of their body during training. Trends of being fit and healthy, matches with the companies working on these applications. People working in the cultural sphere designing new


\(^\text{15}\) Koivisto, J., Hamari, J., Demographic differences in perceived benefits from gamification, 2014
digital solutions to attract youth to visit museums, inspiring those interested in culture. In the same way, gamification can bring benefits to other groups, for instance, in social sciences, protection of the environment, active citizenship, the fight against discrimination etc. One advantage of gamification is its integrating and communicative character, that can gather people and groups together, to brainstorm, to create movements and to work on edge-cutting issues, locally or globally. Even charity becomes more gamified, finding new innovative ways to attract attention to people in need.

Special attention within gamification should be paid to the youth as the most dynamic social group, which (as prescribed by generally accepted norms) have to gain new knowledge, skills and competences to assist them in their future professional, social and private lives. Apart from learning, youth is a key group to attract in marketing, whether as employees or customers. This is more true than ever before, with social changes making the young more independent, financially equipped, and demanding. The motivational and engaging power of gamification can meet the needs and interests of anyone, so it is also an opportunity to turn young people towards important issues in local and global communities.

1.4. TYPES OF GAMIFICATION
1.4.1. Online versus offline gamification

Plenty of articles and books analyse business and marketing cases as examples of successful gamification: for instance, frequent flyer programmes (FFPs), loyalty cards, prize-winning campaigns, and many more. The present document focuses on activities specifically for and by young people, however these applications are similar to other kinds of gamification: they aim to engage, inform or build understanding, to break the ice and to build relationships (teamwork). Two types of gamification can be distinguished – online and offline gamification.

If online gamification uses game elements similar to those in games, and can even be mistaken with video games, then offline gamification is more complex, as their design differs a lot. Offline transfers the actions to the physical environment and makes the gamification more difficult to understand (which is also the case in online questionnaire results, as described in Chapter 5).

Online gamification is mainly used in online learning and business processes, however, rapid technological development has resulted in mobile apps for health, self-organization, donations, promotions, research etc. Mobile and computer apps are the main tools for online gamification, as it can integrate all the game elements and design enjoyable experience of learning, doing physical exercises, researching or anything else. As feedback on actions (desired or undesired) is given immediately, online gamification is an effective tool for those keeping track of time. For instance, there are plenty of project management tools, which use task assignments, timetracking and evaluation elements to assess the progress of work, allowing communication with other peers and making the work as transparent as possible. Communication is often done online even if team members work in the same room. It is just a tool which helps to structure work and to motivate them. Similar principles are integrated into language learning apps, which allow us to choose a language, a level of difficulty, show us progress within the level, compare this progress to others’, and immediately respond to mistakes, allowing the collection points and badges, all regardless of the person’s location.

Offline gamification, in turn, is usually dependent on the person’s physical environment. If gamification is implemented in an office or school, points and badges are transformed into grades and other awards, evaluation can be done in groups in the form of discussions, and competitive achievements can be reflected on a employee-of-the-month board, etc.

Youth workers often use ice-breaking activities, team work and creative brainstorming sessions during events for young people. These are the most commonly used offline gamification methods, used during face-to-face
interactions. To create sustainable relations between an issue and the target group, face-to-face communication is crucial, as it shares the responsibility and the joy of achievement among teams, similar to video games. In the majority of situations, the most effective way to do brainstorming is offline gamification activities: they allow participants to socialize more and create stronger bonds. In fields, where the communication element is not so significant, online interactions can save a lot of resources in reaching the goal. Examples include projects initially based on digital tools, for instance, design fields or the collaboration of distant multinational teams.

1.4.2. Structural versus content gamification

Many agree that gamification is fundamentally about design, and it is important to acknowledge the importance of visual representations to keep the attention of the user on the content. This is especially important in the youth sector. The generations born around and after 1990 (called also as “generation Y”) differ greatly from their parents – they are more digitized, require more interactive, novel and challenging interfaces to catch their eye, and are resistant to traditional methods of communication, learning and advertising. The internet has changed the world, establishing new attractive forms of offering information, customized for the needs of the young. The content and structure of gamified applications, exercise and training programs can be observed as completely different, thanks to the visual representation and functions they offer.

There are 2 types of gamification – structural and content gamification. Structural gamification is the application of game elements in order to assist the player in going through content of gamification without changing that content. This type of game-like learning can encourage players to return to the content on a regular basis, maintaining their knowledge. It also motivates them to build new skills and acquire knowledge independently. Structural gamification includes attraction to the content by specially designed interfaces and rewards for accomplishments (for instance, the accumulation of points, badges, levels or achievements). Structural gamification can also include a social component by allowing the player to share their achievement with others, as well as more advanced elements like stories, avatars (characters), etc, without switching from gamification to a game.16

- To some extent, structural gamification is more accessible to stakeholders of gamification implementation. In fact, structural gamification can be easily added to any educational material or training activity by simply adding an appropriate reward or elements of competition. This would especially engage the young and ambitious, making them listen more carefully, memorize and retain learning material.
- Content gamification, in turn, is more similar to a game, as it provides context and activities used within games. It motivates learners through more engaging content, putting them into simulated situations, encouraging players to innovate (in some cases this can be applicable to the structural type of gamification too)17. This approach, if used in youth work, can positively empower young men and women to be active players in given situations: to discuss and evaluate the rules, change the content, positions or roles, co-create, innovate, bring creativity and their own vision of issues, etc.
- The desired results should be specified prior to implementation. Structural gamification would motivate young people to obtain knowledge and competences necessary for completing a degree, improving mastery in any field, to gain better job or simply to prove one’s capabilities. Content gamification, in turn, would transform the user into a participant with more empathy and the ability to discuss, network, and engage into community issues.

Each type of gamification can be used depending on the function it should relate to, but, considering the motivational character of gamification, both strategies can lead influencing user behavior. As a result, it is useful to experiment and combine gamification elements to maximize its potential for youth.

16 Kapp, K., Blair, L., Mesch, R., The gamification of learning and instruction fieldbook: Theory into practice, 2013
17 Ibidem
MOTIVATION WITHIN GAMIFICATION

One of the key elements of gamification process is motivation. Motivation is the reason for people’s actions, desires, and needs. Motivation is also what causes a person to want to repeat a behavior20. All motivation theories that define what motivates different players involve two main types of motivations – intrinsic and extrinsic motivation, both of which play a major role in the gamification process.

Intrinsic motivation is an internal motive of a person: doing something due to innate interest. Extrinsic motivation, in turn, is an external motive of a person, leading them to act to reach a desirable outcome. A few examples of intrinsic motivators, in terms of gamification, include learning, mastery, meaning, love, curiosity, belonging, autonomy, etc; and extrinsic motivations include badges, competition, fear of failure, fear of punishment, gold stars, money, points, rewards, etc.

Intrinsic motivation is more about the self and not the world around us; extrinsic motivation is driven by elements of the world around us. There are claims that intrinsic motivation is more important and more meaningful in the long term compared to extrinsic motivation. To produce efficient gamification, it is important to align extrinsic rewards with intrinsic motivation, so that the player’s motivations are accepted as they are, and the process designed accordingly. It is important to identify useful models of youngsters’ motivations to understand the link between the behavior of young people and game design, in order to connect gamification and youth motivation. Applying factor analysis, the researcher Nick Yee was able to reveal three main player motivation components and ten subcomponents20:

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20 Elliot, A. J, Covington, M., Approach and Avoidance Motivation, Educational Psychology Review, 2001
21 Training Course for Youth Workers, Gamification as a Tool for Youth Engagement, Politechnic Institute of Santarem (Portugal)
20 Yee, N., Motivations of Play in Online Games. Cyberpsychology & Behavior, 2006
ACHIEVEMENT COMPONENT
- Advancement — the desire to gain power, progress rapidly, and accumulate in-game symbols of wealth or status;
- Mechanics — an interest in analyzing underlying rules and system in order to optimize character performance;
- Competition — the desire to challenge and compete with others.

SOCIAL COMPONENT
- Socializing — an interest in helping and chatting with other players;
- Relationship — the desire to form long-term meaningful relationships with others;
- Teamwork — satisfaction from being part of a group effort.

IMMERSION COMPONENT
- Discovery — finding and knowing things that most other players don’t know about;
- Role-Playing — creating a persona with a background story and interacting with other players to create an improvised story;
- Customization — an interest in customizing the appearance of their character;
- Escapism — using online environment to avoid thinking about real-life problems.

Table 3 gives a broader insight into all three components and also the sub-components that are involved.

Table 3. Main and sub-components of motivation

<table>
<thead>
<tr>
<th>Achievement</th>
<th>Social</th>
<th>Immersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advancement - progress, power, accumulation, status</td>
<td>Socializing — casual chat, helping others, making friends</td>
<td>Discovery — exploration, lore, finding hidden things</td>
</tr>
<tr>
<td>Mechanics — numbers, optimization, templating, analysis</td>
<td>Relationship — personal, self-disclosure, find and give support</td>
<td>Role-playing — story line, character history, roles, fantasy</td>
</tr>
<tr>
<td>Competition — challenging others, provocation, domination</td>
<td>Teamwork — groups, collaboration, group achievements</td>
<td>Customization — style, appearances, accessories, color schemes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Escapism — relax, escape from real life, avoid real life problems</td>
</tr>
</tbody>
</table>

Within the literature of game motivations, Bartle’s “player types” is a widely known taxonomy which classifies player motivations from a game designer’s point of view and offers an appropriate starting point to understand the various kinds of player motivations. In this schema, there are generally four types of players:

1. **Achievers** - desire advancement. These players aim only to move forward in terms of gathering points, badges, etc. These players also believe in socializing, in helping others and at the same time getting help to move ahead. These players want to act on the world, or on the process of the game.

2. **Explorers** - desire understanding. This type of player finds delight in discovering internal mechanisms. These players think ‘out of the box’ and are great problem solvers, finding ways to get things work. They look at socializing from a different perspective (they like to gather ideas) and believe in discovery more than achieving something. They are also the type which wants to interact with the world.

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21 Ibidem
3. **Socializers** - desire relationships. This type of players is interested more in what others say than what they have to say. They emphasize the importance of relationships in the game and empathize with other players. These players develop as good listeners and observers. They explore processes to understand other’s perspectives and move forward to communicate more with people, rather than to progress in the game. For socializers, it is all about knowing people, understanding them and forming strong relationships. These players want to interact with the other players in the world.

4. **Killers**. This type of player likes to dominate and impose themselves on others. These players are totally opposite to socializers, feeling others as a threat to their progress. They find delight in killing other players to become more powerful. These players are generally very aggressive, proud of their reputation and their skills. These players like to act upon other players.

In short, Achievers are motivated by acting upon the game world, Explorers enjoy interacting with the game world, Socializers enjoy interacting with other players, and Killers are motivated by acting upon players. It is possible to evaluate player motivations based on their choices of acting or interacting with player(s) or world(s).

Aside from suggesting the player types model, Bartle posits that playing in a virtual world “affirms a player’s self-identity through role-playing”\(^\text{23}\). According to Malone’s and Lepper’s (studies of game design strategies, there are **five primary intrinsic motivations** to the role-playing gameplay: choice, control, collaboration, challenge, and achievement\(^\text{24}\). However, one of the fundamental motivations behind gamification is experiencing a “sense of progress”\(^\text{25}\). The reason game mechanics work is because people enjoy the thought of improving their perceived situations.

Since gamification uses motivational techniques as self-esteem and reinforcement, combined with peer recognition, it is a powerful tool of unlocking the motivation to engage. The **real innovative element of gamification is the digitisation of motivation and engagement. In the near future it will become a key part of any youth organisation’s strategy to appeal to youth**.

Gamification can also be defined as a tool to strengthen ties between individuals, i.e. socialize. Considering that socialization is a basic human need, it can be considered an essential motivator. Socializing helps build positive and constructive relationships, improves overall growth and develops an individual, enhances mental functioning, as the mind is kept occupied with concrete thoughts. Socializing develops our understanding of human perspectives and attributes, is a great tool for developing self-confidence, and is a great way of giving and getting emotional, physical and spiritual support.

How does socializing relate to gamification? In a scenario where a competition between different groups arises, people of the same group share the same objective. It makes them seek in each other the characteristics they find valuable for the group.

To motivate, it is necessary to demonstrate potential benefits and goals, and to identify the types of players and the desired goals. It is equally important to allow young people to identify their expectations in the process of the game, to understand what to expect.

\(^{23}\) Bartle, R., *MMOs from the Inside Out: The History, Design, Fun, and Art of Massively*, 2003


FIELDS OF PRACTICAL APPLICATION OF GAMIFICATION

Moving on from theoretical explanations to practical applications of different kinds of gamification, this section presents a variety of ways to use game-based methods for the benefit of young people. The section describes the ways to create empathy, engage and motivate young people in different fields, as well as explaining the need to do so. First of all, gamification is described in the context of formal and informal education, since education with game elements is one of the most popular applications of gamification for youth.

Taking into consideration the specifics of the young generation and their dynamic lifestyles, gamification techniques have also been discussed within work environments: how do managers motivate their workers to reach better results, especially the young? The section also stresses techniques used to manage human resources and relations within work teams, since these elements are also important in terms of gamification practices.

To develop an understanding of what distinguishes young people today from previous generations, the use of gamification is described in the context of digital tools used to boost civic engagement, social change, charity campaigns, health and self-development. A special section relates to bounds of young people with their physical environments, enhanced by gamification. However, while gamification can be applied to a much larger scope of practice, this particular research focuses on the following topics related to youth engagement and motivation.

3.1. EDUCATION

3.1.1. Formal education

Education and learning are fields where gamification has some recognition due to its attractive form and engaging teaching content. The term “gamification” should not be confused with game-based learning, because the former does not include designing our own games or playing games. The captivating power of videogames that make people spend countless hours in front of the computer or smartphone, and the idea of linking the concepts of game and productivity in educational content sounds quite impressive, excluding times when the content can be exhausting or heavy.

First of all, educational systems around the world already benefit from a gamified approach by giving points to students who complete assignments correctly. Thus, students are rewarded for desirable behaviors and punished for undesirable ones, using a reward system as a common currency. In this case, gamification is used for standardized evaluation of knowledge and skills, making it possible to rank students according to their achievements. On the other side, the right tools must be defined in order to promote motivation in each student, eliminating undesired behaviours like cheating, disengagement, uncertainty and learned helplessness.

There are 3 basic ways of implementing gamification for study: by adapting grades, changing the classroom language, and modifying the structure of the class. The engaging and motivational power of games makes students read, listen, understand and apply by solving interesting quests. It creates a more relaxed atmosphere,
for example in regards to failure. Failure as a possible result of a risk taker’s action is the reason grade scales must be carefully chosen, evaluated and discussed between the school and university leaders. Adaptation to students’ needs must be the primary goal of every education system. However standardized measures are still more popular in learning institutions.

Teachers can learn a lot from videogames. Students often feel more comfortable in gaming environments because of the low-risk engagements that reduce fear of failure. For instance, within a video-game it is often possible to discuss challenges with others (e.g. using chats, forums) and explore the problem, trying again and again, so the challenge can be solved. These principles, applied to modern education, would strengthen the self-awareness of students and their determination to continue joyful learning. In fact, games invoke a range of powerful emotions that both motivate and discourage. The emotional aspect of gamification applied to education is about seeding the understanding that learning means failing repeatedly. Gamification which rewards efforts (not mastery) can shorten feedback cycles and promote creativity, offering the promise of resilience in the face of failure. In gamification, students are taught to see failures as opportunities, instead of barriers.

The most common experience shared by teachers is students’ fear of speaking out and their uncertainty. The reasons can be much more diverse than just an inability to speak, for instance, due to personal traits or cultural norms\(^\text{26}\). Forcing young people to speak may lead to anxiety and apprehension, hence alternative methods should be implemented instead of simply constantly encouraging them. Adding game elements, students can be asked to share their opinion on a topic only with their neighbour, so they can realize they might have similar thoughts, uncertainties or fears, and are able to support each other. After trying out the think-pair-share (TPS) technique, students are encouraged and it is much easier for them to share opinions with others. The same can be applied to group work. Often competitions between groups of students are organized as an alternative to formal grade tests to check their knowledge and evaluate them\(^\text{27}\). The group, supported by the synergy of all members, is stronger than each individually, and can gain by discussing the topic, encouraging each other, and expressing ideas more clearly. The level of stress is lower during group work and the element of competition makes it more exciting comparing to an individually written test.

The gamification of learning is created to encourage and motivate, the classroom is then the space where productive failure is expected. It teaches through experience. It is of much more importance to “engage in the task, make mistakes, get feedback, learn and have relatively few grade consequences”\(^\text{28}\) than to be tested with a simple grade without going inside the mistakes. Thus, the engagement of students during the course is more important than their final results, so the points or grades are given for contribution to the process of learning together. Accordingly, rewards should be given for every effort taken to reach the goal, not only for “correct answers”, so the students do not fear being wrong. If a student misunderstands an assignment or chooses the wrong topic for a presentation, he would still have an opportunity to gain some credit towards his overall grade, even if not for that particular assignment. Every try should count.

Following the game model, participation is important in any interaction. Each assignment is an opportunity to gain experience, as well as badges (benefit points) that can be used in other activities: extensions on assignments, extensions on assignments, extensions on assignments.

\(^{26}\) Osheim, D.E., *This Could Be a Game!*: *Defining Gamification for the Classroom*, San Jose State University, 2013
\(^{27}\) Ibidem
\(^{28}\) Falk, E., *Becoming a new instructor: A guide for college adjuncts and graduate students*, 2012
extra time for presentations/speeches, or any other benefit a teacher could implement to motivate student participation. When, in many schools, teachers are not able to score participation by attendance, gamified systems include giving extra credits as a reward for attendance, thus, giving an opportunity to gain points for active engagement.

A different evaluation system can be applied to group work, where everyone has a role, deadlines, restrictions and a common topic to work on. Usually it is necessary to have a leader or facilitator in a group, in order to organize and be responsible for the whole group project, otherwise shared responsibility can turn into the responsibility of none. As long as the team leader/facilitator has other duties to work on, this different evaluation system can be applied, granting extra points for a higher level of responsibility over the content and organization of work. It does not differentiate the leader from others, rather it values bigger contributions and rewards accordingly. Additionally, it motivates them to take the leading position and develops a sense of initiative in young people.

The third aspect of gamified classroom is a clear and helpful structure. It does not refer only to the rules and objectives of any game-like assignment, but also to the physical prerequisites for successful accomplishment. Just as a video-game screen is always structured for the needs of the player, offering instructions, an avatar, field of action, available resources (e.g. tools, money, armours), progress feedback badges, space for chats with co-players, and other features, so too the learning process should have a structure that makes it comfortable to acquire the content of study.

Besides the objectives of the course, the syllabus, criteria of evaluation and assignments to accomplish, the physical arrangements of the classrooms should also be taken into account. Do students feel comfortable sitting in rows in pairs by the table, or they would better enjoy sitting in a circle, which allows observation and encourages discussion? This is of special importance, similarly to ergonomics, because it creates an overall (game-like) atmosphere and influences engagement in the educational process.

The expectations of the teacher, apart from being completely clear, must also match the background and abilities of students, just as the level of difficulty should be customized to a player’s proficiency in a game. If students can’t get the language of particular literature, the teacher should change matters in order to contribute to students’ positive experience and reach understanding without being discouraged by boring texts.

Also, students can take part in the correction of a syllabus so that it meets their needs, otherwise it makes little sense to push them towards topics they are not interested in. It is useful to change the structure even during the learning process and gain appropriate experience for both students and lecturer. Tracking students’ learning allows customizing the difficulty level of tasks, so the group (or person) doesn’t get bored with too-easy assignments or frustrated with difficult ones. Engagement can be promoted using cognitive stimuli, offering more difficult tasks to evoke challenge. This should be taken into account when evaluating real skills and knowledge, so that a frustrated student doesn’t give up too early. In the best-designed games, the reward for solving a problem is ... a harder problem.

The benefit of using gamification during studies/training is the feeling of ownership over their own learning. Engagement is the key element, without which control over the content and quality of learning cannot be completely reached. Similarly, games provide multiple routes to success, allowing the player to choose their own path within the larger task, supporting motivation and engagement. Also, customizing the process for individual needs brings a creative element to the gamified content, so that different identities and capacities can be explored.

29 Osheim, D.E., This Could Be a Game!: Defining Gamification for the Classroom, San Jose State University, 2013
When completing tasks in gamification, the student can measure the level of understanding and achievement according to immediate feedback. Gamification offers students the possibility to receive positive recognition not only from the teacher or team leader, but also from other students. Such an approach reinforces the development of a school-based identity for the feedback giver and other students too, as it creates discussion. Learning and its outcomes become visible through feedback, so satisfaction with performance can drive the natural motivation to learn more.

As formal education in schools, colleges and universities relates primarily to young people, gamification in the learning environment is of special importance. There are a lot of distractions for young people nowadays, which lead to low performance and demotivation to study. The new forms and modified content should be integrated info formal education with the help of game-based methods and techniques. The social aspect of gamification in the form of rewards and recognition from others can help students think more about their strengths, weaknesses and potential in school, as well as consider what school might mean for them.

3.1.2. Non-formal and informal education

To develop the desire for constant widening of human horizons from pre-school to post-retirement, the European Commission has set emphasis on lifelong learning that includes not only formal educational methods, but also non-formal and informal education that everyone can benefit from. It is especially interesting for youth because of interactive educational methods, tools and varied information sources used in the learning process, as well as general interest in their constantly changing environment, increasing mobility, overwhelming information flows and the dynamic lifestyles of the postmodern human. Besides education itself, the key areas lifelong learning is driven forward in the modern European Union are active citizenship, personal fulfillment, social inclusion, environmental issues, and employment-related aspects.

Gamified learning methods, non-formal, and informal learning techniques have similar roots, which include using creativity and self-motivation while gaining new knowledge or skills. Also, both focus on the learner’s comprehension abilities and engagement, so these are powerful tools to empower young people to act and work on behalf of their personal development and that of their local community. Using less formal methods of education improves learning in the formal academic environment, bringing additional benefits in the form of structural gamification. Generally speaking, gamification is a way to improve the quality and attractiveness of learning content, as well as the overall efficiency of teachers’ and trainers’ work. Teaching staff, parents and youth workers often underestimate the opportunities to adding informal components of gamification into formal educational courses. It demotivates youth to gain further experiences in a field just because, for instance, they once had boring lectures on the topic in primary school, or received theoretical knowledge too distant from practical applications. It is necessary to show young people the advantages and fun of informal and non-formal education, motivating them to learn more and widen their horizons continually.

The best known examples of delivering non-formal (and informal) education to young people with gamified tools and methods are the initiatives under the Erasmus+ programmes. For instance, youth exchanges take
place in all European Union countries (and in programme partner countries) and gather youth (people aged up to 30 years) from different social and cultural backgrounds in order to participate in certain activities, mainly related to developing knowledge and/or competences. The profile of youth exchanges can be very diverse, from learning cultural or language competences, to developing knowledge of social innovation, the arts or any other topic. Usually 2-10 partner organisations send youth representatives abroad, where young people live, network and work together. The work is usually very diverse, including teamwork, presentations, energizers, guided discussions, field visits, games, sports, gamified working methods, to reach the goal of the exchange. Assessment of the project is always present to evaluate the quality of activities.

Although such activities are very far from the traditional learning concept, youth workers can reach even greater results and have greater impact on the young people, as the empathy and motivation of participants is the core of the project. Organizers must focus on the motivation of young persons, as the period of activities is relatively short. However, not only youth is engaged in Erasmus+ and other programmes’ activities - youth workers are also the target of similar activities. They gather together to introduce new topics and learning (working) methods with young people with different interests. Exchange and training activities are the main field for implementing gamification in the present situation, as formal education curricula are often incompatible with engaging learning methods based on social interactions between the “key players”.

Gamification in non-formal and informal education has huge potential that can be turned towards solving social, economical and environmental issues. To act accordingly, one has to understand the risks society is facing, engage in critical study of the topic, and at its best this should be done from an early age. Motivation has the key role in this understanding, and this is where gamification can be applied to motivate, engage and teach to cooperate.

The incorporation of game elements is already well established in many online learning sites. Through different online platforms students are trained to solve problems of interacting with others, playing different roles and immersing themselves in certain situations to understand issues more deeply, learn to think critically, collaborate, share and receive ideas, and to simply engage with the topic.

Coming out of the small classroom, wider collaboration between young learners have been established by the ‘Level Up Village’ project, which connects students with peers in other countries, working on common projects, exchanging video letters, and communicating in many other ways. The Level Up Village concept is already being added to in-school activities, as well as after-school and during the summer in the U.S., U.K. and Australia, with more than 40 partner countries around the world. Participants of the course develop their STEAM skills (educational focus on Science, Tech, Engineering, Arts and Math) together with the soft skills of communication and global collaboration. All projects emphasise integrative meaning by the particular courses offered: Global Water Crisis, Global Doctors DNA, Global Inventors, Global Language Lab et cetera.

This approach, of adding more meaning to the education of future generations who care about the global issues (so called, Global Citizens), transforms every learning process into valued learning. Non-formally and informally educated students have more empathy towards what they do and how they can bring a change to the local community, their country, or global cutting-edge issues.

It is important to note that it this not reached by playing games; however, serious games can also be helpful in learning about environmental, social and economic issues, giving an inside look into causes, development, risks and outcomes of certain human activities. Gamification is often mixed with serious games, creating great virtual reality games like Flash Flood! or TideBox, which educate about climate change and

31 Level Up Village, http://www.levelupvillage.com/#
natural disasters, and which goes under the category of Serious Geo Games. Different business simulations and economic games are designed to experiment with economic situations in a virtual environment too. These are quite interesting and engaging practices to try, however as games they require time, which is usually quite limited when acquiring material in a study course.

Non-formal and informal learning could be the answer to this problem. As in the majority of cases non-formal education is used by young people (however, adults are being actively engaged in it too), gamification is appropriate to address young people. Different courses, trainings, discussion events, exchange visits and other educational activities related to the issues of social exclusion, environmental change, discrimination, violence, gender and sex inequality are being actively held in EU countries, engaging young people in exploration of these topics. These explorations include informal and non-formal gamified activities (simulations, creative projects, discussion panels, workshops etc.), which make the dialogs about serious issues less depressing and more solution-oriented.

3.2. CIVIC PARTICIPATION AND DEMOCRACY

Gamification is an attractive method to keep the track of governance processes, to ensure the implementation of democratic principles, and to keep the bonds between citizens and authorities, to share responsibility among the public. Often the efforts of the education system and the family are not enough in creating a civic identity of a young person, and this is the space for creative approaches – like gamified methods. With the purpose of engaging citizens in political decision making, meaningful stories are used in online and offline gamification to explain how decision making affects groups in society, and why they should care. This should engage not only citizens with the right to vote, but also underaged youngsters, in order to provide appropriate citizen education in an attractive and engaging form.

Different initiatives use gamification for different purposes: to educate young people, to engage them in decision making process, etc.

The Act Now! simulation is a board game developed with a group of Finnish secondary school students aged 15-16. It serves as a teaching method for inclusion in society, and is based on a pedagogic model of enquiry-based learning. Within a game, players choose a concrete problem that involves social tensions and conflicts, and, in order to solve the problem, the players search for different civic channels and ways to act. Cards within the game offer young people choices, which are official or unofficial ways to act in the problem solving process. Also, participants are allowed to use different sources of information, such as the Internet, to fulfil their knowledge and find relevant solutions to emerging problems. The elements of the simulation are based on basic social values and are printed on the game board.

Apart from empathy creation and educational functions, game-based methods can be used for involving community members in the decision making process. Aiming to reach engagement from all ages, a participatory budgeting system has been developed in Ovar, Portugal, allowing citizens to discuss applied projects publicly and vote for the best to be funded. Citizens were encouraged to show their support for various budget proposals by voting online and in-person, and the voting was open for everybody over 15. The scores were displayed on a leaderboard, showing which budget proposals received the most support and which were not popular or good enough.


34 Eränpalo, T., Exploring Young People’s Civic Identities through Gamification: a case study of Finnish, Swedish and Norwegian adolescents playing a social simulation game, University of Helsinki, 2014

Both online and offline gamification, as well as a mix of both, can be introduced as tools of engagement for young people on social issues on the political level. Taking into account the variety of functions of game-based methods, gamification is an opportunity to invite the young generation to express their opinions on what their cities or countries should look like and what decisions would be most beneficial for themselves. For now, the tools and platforms of civic engagement are focused on citizens in general, however a stress on youth is still necessary.

As gamification is still a relatively new area of scientific enquiry, there is a lack of understanding of how such goals could be materialized; however, much is being done towards a clearer understanding of this matter.

We believe that gamification (as an influencer of motivation and engagement, and in combination with the facilitation of deliberation) would fulfill the functional requirements of civic engagement platforms, and so offer a remedy to the challenge of low levels of civic participation, and assist in community building. The achievement of such goals would allow governments to reap benefits from their investments in civic engagement platforms, to increase the involvement of citizens in the governance, especially youth.

### 3.3. GAMIFICATION IN CHARITY

Since research has revealed the ability of gamification to influence behavior through a number of motivational and involving techniques, the charity sector has caught the idea to implement gamification throughout campaigns to help those in need. Gamification helps in spreading awareness of social or environmental issues and fundraising. Understanding people’s motives to act in certain ways brings ideas on how to use donation to meet individuals’ own objectives.

Studies have shown that people’s reasons to donate are not solely economic and altruistic, but also can relate to such issues as social pressure, estate taxation, publicity and recognition, personal solicitations.\(^{35}\) On the other hand, there are plenty of people wishing to contribute to the social good without a clear understanding how to do so. This is where charity campaign come in, offering innovative “products” to public, and at the same time raising awareness and empathy. A few examples of gamification in charity:

- **iHobo** is a mobile application, launched in 2010 by a youth homelessness charity organization from UK. It works just like Tamagotchi, asking the player to take care of a young person living rough on the streets, in real time, for 3 days. Notifications remind them about the need for food, shelter or a sleeping bag, as well as the risks of living outside a home, so the user needs to turn to the game several times a day, and earns points motivating him/her to do so. Neglect, in turn, leads to losing points and risking the life of the homeless person. The aim of the application was to raise an awareness of youth homelessness and decrease ignorance of the problem. As a result, the campaign of fundraising received large media coverage and attention from the public.\(^{36}\)

- **Give Girls Power**, an online game created in 2012 as a part of wider No Child Born To Die campaign, which aimed to educate people on the struggles of children in developing countries, gathering support for a public petition. The idea of the petition was to convince the UK Government to expand its existing foreign aid funding into contraceptives and family planning. The Give Girls Power application used storytelling techniques to put the user in the shoes of a 16 year-old girl, who has to make significant life decisions, **\(^{35}\) Sanders, M., Smith, S., *A warm glow in the after life? The determinants of charitable bequests*, University of Bristol, 2014

taking into account the lack of options teenagers in developing countries have regarding their own future. The campaign, including online application, increased its target petition signatures by 18% and increased the charity’s audience by almost 40%.37

- ‘My Life as a Refugee’ is an educational application, based on experiences of real refugees, that makes the user answer the question “If I were in their shoes, what would I do?”. Several avatars (refugees) can be selected to play the game and raise an awareness of what displaced people around the world face every day. The application includes real pictures of cities, hospitals and refugee camps worldwide, so the player can make an emotional bond to refugees’ problems and becomes interested in learning more through a link to the UNHCR webpage, potentially becoming a potential donor to the charity campaign.

![Picture 3. My Life as a Refugee game, The UN High Commissioner for Refugees](http://mylifeasarefugee.org/)

Generally speaking, any charity campaign can benefit from a gamification strategy by using its potential for informing, convincing, fundraising and influencing policy makers. It doesn’t matter if it comes from private companies, public associations or small NGOs - the most important thing is the influence it brings to society, especially the younger ones. Young people are the future of society, and can be positively affected by the right tools and methods used for educational purposes. Gamification gives influencers like policy makers, youth workers, educators and other stakeholders an opportunity to turn the attention of youth to socially vulnerable groups (those in need, the socially excluded etc.) to help to improve their welfare. Gamification for charity purposes brings greater awareness of the situations people are pushed towards every day and creates empathy, which is the first step toward participatory action.

### 3.4. MANAGEMENT OF HUMAN RESOURCES

Since the latter part of the 20th century, gaming methods found an implementation in business, revealing potential for more productive employees and more engaged customers. Some techniques used by companies are quite old and well-proved, however no one called them “gamified” (or gamification) until relatively recently. Previously they were rather described as marketing activities – internal marketing related to employees and external marketing for customers. The main idea was to motivate and engage, so that the company flourishes.

Modern gamification has changed a lot since digitization has become an everyday part of life. Gamification in a business is now strongly connected with computers, laptops, terminals, tablets, smartphones and other “screens”, used by human resource management to motivate employees. There are several ways gamification can serve an employee in a company, distinguishing progress-based gamification, social-based gamified learning and full-fledged games39.

37 Ibidem
38 My Life as a Refugee, source: http://mylifeasarefugee.org/
39 Petersen, A., The 3 Tiers of Employee Training Gamification, 2015
Corresponding with the motivational character of gamification in terms of progress-based gamification, one of the most motivating elements used for management purposes is a progress bar. **In a game, when a player completes a quest, level or task, achievement encourages the player to continue and play more. Points and badges mean that the player has competences to be proud of.** The same happens with an employee. Usually gamification in a workplace takes the form of software interface elements with well-designed points, badges and progress bars. Then the employee completes a series of tasks and acquires points for them, a sense of progress which can be the same as a “Thank you” from the manager. Considering the employees, who are under 25 and less experienced than older professionals, it may be of special importance to show, that they are doing well and that the management appreciates it. Progress based gamification also helps in time-planning, bringing feedback of how much has already been done, for example. Even the smallest and financially less developed organisation, NGOs and self-employed individuals can benefit from digital tools when working with partners towards a goal. The same can be applied to corporate learning activities to avoid losing interest or getting discouraged.

Young people are often distracted by their smartphones during study and work, so why not transfer the learning process to the smartphone (computer) itself? Besides, gamification often provides more attractive design to the necessary software, so the working process becomes less monotonous. **This aesthetic aspect is significant for younger generations, because they are used to digital and virtual environments from early childhood and consciously or unconsciously require it. This type of gamification is best used to motivate less creative work, like a series of educational modules or completing paperwork, so that the work experience becomes more enjoyable.**

Special software for salesmen are being developed and implemented in businesses around the world in order to boost engagement, high performance, productivity, marketing sales, impressions and content creation. For instance Nitro for Salesforce. Instead of using simple leaderboard and badges, Nitro presents such opportunities as setting up campaigns targeted to the relevant employees, assigning challenges and contests, using notifications, points, levels, badges, certificates and, of course, rewards, as well as gaining insight into what motivates employees, in order to improve the culture and results of the company.

As big online games have proved, game has immense ability to bring people together, so gamification also can be used for this purpose when team work is of key importance. Social-based gamification mechanisms are now found in every social network where young people are engaged, which encourages managers to implement such tools in corporate life. For instance, the limitations of email for employee collaboration are well known, so companies add alternative tools to communicate and share information inside the company, creating an internal network with more features than only text delivery. A collaborative atmosphere and more informal communication can be created by using game elements of recognition and autonomy, so that employees are given a chance to interact with co-workers as they would with friends outside the office. Informal communication helps a lot in difficult situations and solving certain problems that can arise from uncertainty and lack of confidence, just as, when something others perceive as popular or interesting is published on social media, it brings recognition and confidence to the publisher. Apart from informal communication, social-based gamified learning (or working) focuses on tasks to be done regardless of its field.

**The Trello application for computers and smartphones has been already widely implemented since 2011 in digitized project management, using the well-known kanban paradigm already established in the 1980s for supply purposes in big concerns. It is available for anyone, so does not focus on businesses only. Trello offers the creation of “boards” with specific tasks, related to specific partners, public chatting on each specific**
task or topic (without generating long emails between all the partners), sharing files, commenting and changing the statuses of tasks from “to-do”, to “already done”. The interface can be personalized for each user and communication becomes more informal and easy, which is of special importance when dealing with youth. Trello and similar applications are not solely meant for communication between employees or partners, they also manage time well, avoiding unnecessary formal procedures.

The social component is key to successful business, especially in fields closely connected to creative industries, marketing, media, social gatherings etc. It became normal to bring employees outside the office and make connections in environments previously not related to the business. Employees add each other on Facebook, Twitter, Instagram to know more and keep in touch. But new levels are reached when companies establish official profiles in networks like LinkedIn. By playing with content and the promotion of their own products, new professional connections can be found on LinkedIn, not only passionate employees, but also business partners, delivery channels, marketing options etc. Special focus is put on young, just graduated professionals, who search for a job or search for inspirations and connections for their start-ups.

LinkedIn can be considered a game-like network (similarly to Facebook, but specifically focused on careers) because of its profile building structure, which relates to the Curriculum Vitae of individuals. Users are asked to add their previous experience, work, personal and professional achievements, and, by adding new competences, connected people get notifications on achievements, so he/she can receive recognition and be more motivated and encouraged. Others observe how one is constantly developing and are motivated to do the same, promoting principles of Lifelong learning.

At the point of full-fledged games, the difference between the game and gamification blurs. The use of such an approach is hidden behind the necessity to understand something significant and quite complex for a learner. For example, the University of Washington used a game to help scientists fold digitized proteins to better understand their structure. It corresponds with the process of learning things and gaining concrete competences rather than improving the motivation of users in order to optimize their job. Such interactive games may be more exciting to use, but also quite useless in most cases of human resource management.

In general, the use of gamification differs from one workplace to another depending on the number of employees, the required level of collaboration, field of work, technical advancement etc. However, it is present in almost every organisation that young people are involved in. As the most dynamic social group, the under-30s are used to digital devices and softwares, and so require similar interfaces with their work computers, whether they use task management tools, professional learning platforms, collaboration tools, databases, optimisation or reporting softwares. The need is of special importance, if the tasks are repetitive or boring, so that game elements can do the job of motivating and encouraging. Modern workplaces have already acknowledged the meaning of motivation of young employees (more advanced than just “celebration” of an employee of the month), as young people prefer work which brings personal satisfaction.

### 3.5. GAMIFICATION FOR EMPLOYMENT

Another problem, which can be solved by gamification step-by-step, is youth unemployment. Young people in various countries suffer from wrong career choices, outdated education systems, lack of motivation and self-esteem, which results in a number of young people being jobless. After finishing school, college or university, thousands of young people struggle to get a desired job. Often an unsuccessful trial leads to depression and frustration, demotivating young people to develop new skills and search for other ways of earning money.
Online and offline self-development programmes seem to be a solution to described challenges, however they also fail, as they do not match the needs and expectations of specific group of people - youth. Mainly this failure connects with the general problem of educational systems, which often fails in engaging and motivating young people.

As gamification has the ability to motivate, eliminate fear, encourage people to try new things, and to teach necessary skills, it is being used by NGOs, municipalities and whole ministries as a tool to:

• give insight into the work of professionals from different areas;
• educate on the topics related to business and entrepreneurship;
• provide relevant information for job seekers;
• improve skills necessary to acquire a profession;
• recruit employees with the necessary skills and knowledge;
• involve in activities meant to guide young people towards their professional goals;
• self-assessment, which guide young people in choosing the right career path.

Gamification in this area can facilitate various stakeholders by connecting young people and the unemployed of other ages with potential employers, enhancing entrepreneurship with the opportunity of providing jobs to other people, families, whole communities and industries, which are searching for talent.

The main means of young jobseekers is the internet. Websites and mobile apps now offer lists of companies searching for employees, descriptions of the positions, services of job consultants, social media sharing tools, ratings, statistics of application and even average salaries in specific industries shown by the offers. The jobseeker can personalize their profile by adding a picture, description, motivation letter and CV to companies offering some position. By applying, communicating and receiving feedback a young person can be encouraged to be active. Motivational power has the feature of earning points for the number of applications sent.

Additionally, there are various apps and webpages developed for jobseekers who want to know more about the companies offering a job. These platforms can be perceived as gamified, as they contain the review sections, where previous workers can leave a feedback about the management and company as a whole, and rate the profiles of companies offering job. This may result in encouragement of a young person to undertake the opportunity of employment, or warning the person not to make a mistake of applying. The content is fully provided by users, just as with social media.

The approach towards job interviews and the recruitment process has also changed with time. Now companies use a variety of gamified assessment tasks, team discussions, simulations and other digital and non-digital gamification tools. When appropriately selected, recruitment methods and tools can significantly save time and resources, for instance offering group interviews with team work or using digital communication tools (e.g. Skype) or virtual tests.

Another function of gamification in eliminating high rates of unemployment is providing necessary knowledge for young jobseekers. Special applications are developed as simulation games, which demonstrate different ways of gaining a job (e.g. asking the help of friends, career consultants in schools, employment agencies), possible situations in a job interview, describe employee rights, types of corporate cultures and hierarchies, and other issues. If carefully prepared, the gamified tool is an option to decrease youth unemployment to some extent, however, these tools have to be proper and effective.

Another area of gamification for youth employment are gamified tools for potential employers and entrepreneurs. Such tools can involve different activities to run in order to find suitable employees for the company, partners, investors of financial resources for startups and useful knowledge for entrepreneurs.
If the gamified process of searching for an employee is previously described from the perspective of the young job-seeker, then other gamification tools for young entrepreneurs are less known. Gamification can take the form of gamified apps, websites and other online and offline activities for project partner search and crowdsourcing. This relates to both digital and offline gamification activities, like crowdsourcing websites, networking and pitch sessions, online and offline business simulations and seminars, etc.

In terms of employment, competence and business development, a number of countries have developed programmes focused on youth entrepreneurship (activisation). Therefore, engaging activities and methods are developed with the use of gamification, first, to attract the youth’s attention to the topic, encourage them to be active in an economic sense, and to promote constant self-development and education in order to become more entrepreneurially minded. Other trends can be seen within such activities, for instance, the encouragement of young people to develop social business activities and support them.

3.6. GAMIFIED CITY GUIDES AND URBAN GAMES

Even more informal, but no less engaging and popular are modern urban game applications, which guide a person through a city in order to make one move (instead of laying on a couch, for instance), to explore new sites of one’s own city or a tourism destination, to meet new people or spend time actively with own friends. The idea of an application in the form of a gamified guide or treasure map differs from the classical video game, which is meant for entertaining one with the content on a screen, and also differs from the educational game, which has educational purposes more than leisure.

These kinds of gamified activities are strongly related to physical space. Using the game elements to motivate spending more time outside can modify the link between the city and its inhabitants, making the city environment more interesting and involving. Modern urban games change the interpretation of physical space, and the most interesting are environments assisting in reaching it - augmented and virtual realities, usually perceived as opposite to the outside activities. Also, digital technologies emerge as tools usually linked to games, but the reality context (e.g. linking maps with games) make them look like gamification. For instance, Waze, Geocaching, Parallel Kingdom, Pokemon Go!, and similar systems. Apart from their technology-based interface, they have the potential of impacting cities and even rural areas, for example, by bringing people to abandoned spaces and creating interactions.

Also, gamification techniques are beneficially used in the tourism industry, creating attractive maps of the city, both in paper and digital forms, including useful tips, hidden treasures of the city (like alternative places to visit), badges for completing a recommended route and other interactive additions. There are a lot of applications meant for searching for a tickets, hotels, attractions that are gamified with feedback options, earning points or discounts for using certain activities or products, creating own events with foreigners etc., which are used both for external marketing purposes of company and for benefit of active users.

The best known worldwide maps, Google Maps, has gamified the maps by adding such features as searching objects by categories, information about working hours, bus stops, varied routes to destination (looks similar to navigation system), satellite views with moving “avatars” and other useful options to use in real life situations. Users can also contribute by adding missing places (new stores, cafes etc.) to the map so others know about their existence.

42 De Luca, C., Bertolo, M., Urban Games to Design the Augmentet City, Journal for Computer Game Culture, 2012
An example of gamified tours is widely known Geocaching movement, which involves using GPS, mobile navigation or other navigational techniques to hide and seek special containers with symbolic objects (prizes, logbook to fill in) and tasks to complete. The concept became extremely popular all around the world, creating new communities on a local levels and globally because of shared experiences. The whole activity goes well with digitalized tools, mixing technology (geocaching.org sells various applications) with active leisure, creativity and networking. Geocaching explorations can be compared to quests that boy- and girl-scouts in different countries undertake.

As young people are the most active group in emerging technologies and the opportunities they offer, online (and also offline) apps are often designed for young people - the language in the messages and notifications is less formal, and the pictures and animations reflect young and active persons. Such apps are primarily youth oriented but benefit a lot from other groups of users - sporty adults, technologically equipped seniors, often travellers etc.

A variety of less known orientation apps have been developed to be used for educational purposes, making work in a classroom and outside it more fun. For instance, Scavengers Hunt is a party game, making participants seek hidden objects in a defined space, but now it is applied to engage youngsters for searching answers for the questions they are asked by teachers in schools and even universities. This can be applied for mastering a learning programme, as well as an icebreaker. A few simple examples of implementation of this concept (Picture 4):

Picture 4. Three examples of scavenger hunt activities to use in education

Such concepts are successfully adapted by youth organisations that deal with kids and youngsters, as a part of indoor and outdoor activities. At the same time a lot of unknown places and things can be discovered and learnt during gamified tours and games, including social interactions with locals. Orientation activities in groups and number of icebreakers are already widely used during Erasmus+, Nordplus, Norden and other youth and youth workers’ trainings and events for team building purposes. Youth workers use the potential of gamification in order to create bonds between the members of local communities and integrate into groups.

43 Geocatching, source: https://www.geocaching.com/about/history.aspx
3.7. HEALTH AND SELF-DEVELOPMENT

Similarly, to gamified touristic maps, urban games and other outdoor activities, enhanced by gamification tools, various gamified activities have been developed specifically in order to motivate people to take care of their physical condition. Usually these are mobile applications, which help to control daily habits (eating, calories burned, usage of water, counting steps etc.) and at the same time contain the elements of competition or gaining points. Some exemplars could be highlighted, for instance:

- Fitocracy is an online training community that aims to use gamification to help users improve their fitness. The mobile app tracks physical activity and awards points based on the estimated fitness benefit of each activity, allowing to collect points, level-up, as well as receive advice and props from friends and community for advancing. It contains a competitive gaming element, which is an opportunity to compete not only with oneself, but also with others.45

- Daily Water is an application designed to help individuals track the volume of water consumed on a daily basis and schedule reminders for drinking water. The app offers a basic statistical analysis of the amount consumed over the course of the day, week or month.46

- BunnyBolt is an interactive, maps-driven exercise game for youth, which harnesses the elements of an engaging video game and integrates it into an application that encourages children to go outdoors and exercise. BunnyBolt combines the fun of an interactive game with the practical concerns of workouts: it uses the sensors to determine whether the user is running, and if not, it sends an alert to encourage to walk faster. However, the primary audience is youth, BunnyBolt’s quick ten-minute workouts are appropriate for all ages.

Less recognizable as “gamification” are special events, like competitions, marathons, trainings and other sporty actions, organized by NGOs, educational institutions and whole municipalities in order to engage larger groups of people in sports. Such initiatives are especially healthy for children and young people, as they often lack physical activities in their daily routine, spending a lot of time by their gadgets. Gamification in sport events brings value, not only to the general physical condition of participants (as they often train in advance before the competition), but also enhances social interactions and bring life to bigger and smaller areas of population.

3.8. GAMIFICATION FOR ENVIRONMENT SUSTAINABILITY

The impact of irresponsible human behaviour regarding the environment has led to climate change, which NGOs and governments around the world seek to stop or at least limit. However, their efforts, addressed to policy makers, are useless without providing appropriate education for a larger public, especially the young generation. As in the case of any educational activity, special strategies need to be worked out for teaching about environmental issues.

46 TOP Five Drinking Water Apps, source: https://www.culliganwater.com/residential/resources/drinking-water-apps/
Different kinds of mobile applications as gamified tools have been developed to increase awareness of air, water and plastic pollution. They specifically address young people as active users of smartphones and social media. Applications offer informative data, measurements, animations, educational videos, information about the larger campaigns and advices on actions to be taken to avoid being affected by pollution. Some examples can give an insight in gamification methods for environment monitoring and protection:

- Smok Smog (Dragon Smog in Eng.) is an app for monitoring the level of air pollution in smog-laden southern Poland. The data about the CO2, O3 and other gases are collected from monitoring stations in several cities of Poland and presented in easy to read graphic and numeric form, which allow users to see just how much poisonous air they are inhaling at any moment. The programme is supplemented with the animated dragon, which demonstrates negative attitude towards pollution. The application is a part of long campaign of the pressure group Krakowski Alarm Smogowy, which fights ‘dirty fuel’ heating systems, organises protests and demonstrations for a benefit of the region. It is possible to support the environmental campaign by joining the Facebook community through the Smok Smog app and to interact with the members.47

- Pantarevir is a gamified app, which uses game mechanics to form environmental awareness in its players in a fun way. It was developed in Uppsala, Sweden and the overall goal is to inspire an environmental mindset and inform players of how much impact recycling can have on the environment. The software offers competitive game for the users, which conquer territories within a city by recycling more than other users within the same area. The recycling process happens within the real environment. The player uses the camera to scan the barcode and the value of the receipt from recycling deposit system for cans and bottles, adding the points to the player’s total recycling amount. It transforms recycling into a competitive game and encourages to take an action.48

Environmental-friendly gamification can take different forms and functionality, however the central goal is to raise an awareness of population and provide the encouragement to take an action and support the environment protection movements. Especially important is to engage younger generations, as environmental pollution is the issue that affects and will affect their life quality the most. Young people are the main group which actively protest irresponsible decisions made concerning nature protection and resource distribution, and a larger awareness about environmental issues would benefit sustainable thinking and decision making. Gamification is just a tool for changing of perception and attitude towards the environment.

4.1. EXPERTS’ VIEWS ABOUT GAMIFICATION AND ITS IMPACT ON YOUTH

Technology forecaster Daniel Burrus calls the “gamification of education” one of 25 “game-changing hard trends that will create disruption and opportunity” over the next years⁴⁹. However, before identifying the way in which gamification can help to increase the knowledge, competences and interests of youth in social and political processes, the concept of gamification itself has to be interpreted correctly according to the explanations of experts and writers in the field of games, gamification and simulations.

Gamification has been discussed and analysed since the time the term was coined. Different experts from various fields have expressed their opinions, initiated research and published numerous papers creating the background for this new phenomenon. Although the term “gamification” first appeared in 2008, originating in the digital media industry, the concept of gamified elements emerged even earlier, proposing a playful interaction design. However, academic interest and widespread recognition did not appear until approximately 2010. Sebastian Deterding in 2010 proposed the definition of gamification as “the use of game design elements in non-game contexts”⁵⁰, while Gabe Zichermann in 2010 defined gamification as “a process of using game thinking and mechanics to engage audiences and solve problems”⁵¹. Also, such prominent academics as Kim proposed gamification as “using game techniques to make activities more engaging and fun”⁵², but Karl Kapp in 2012 defined it as “using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems”⁵³.

Gamification experts have elaborated further studies on gamification, publishing popular books such as: “Gamify” by Brian Burke, Gartner’s research vice president. Gamification experts explain that gamification is about motivating players to achieve their goals and not about making employees more productive or having fun at work. This is relevant when researching and applying the gamification elements in the case of youth employment and their engagement in the employment environment. “Reality Is Broken: Why Games Make Us Better and How They can Change the World by Jane McGonigal. The expert proposes that gamified elements in numerous aspects of our life make us more creative, more resilient, happier, and better able to handle change. This book also builds up on the notion that the audience is important - some games suit, others not, hence adjusting the gamified elements and techniques to particularly youth is vital and will lead to success. Another reference in the literature on gamification is the published book by K. Knapp “The Gamification of Learning and Instruction: Game-Based Methods and Strategies for Training and Education”. A famous scholar

⁵¹ Zichermann, G., Fun is the Future: Mastering Gamification, 2010
⁵³ Kapp, K. M., The Gamification of Learning and Instruction: Case-Based Methods and Strategies for Training and Education, 2012
in the field, Kapp promotes gamified solutions as providing the right mix of engaging elements from games (like a sense of progress or immediate feedback and visible signs of improvement over time) with content to motivate learners. Games and gamification can both lead to high levels of learner engagement and motivation. However, not all of the scholars and experts agree on the positive impact of the gamification. One of the most prominent critics is S. Deterding, proposing that initial popular strategies for gamification are not fun and create an artificial sense of achievement. In this case, youth has already taken the “fun” part for granted and the achievements are limited to some virtual boundaries which are not extended in the real life. He also says that gamification can encourage unintended behaviours. This can include cheating in the educational environments, promoting radicalized movements and beliefs in political environments, where youth is engaged in violent strikes or riots. Some game designers like Jon Radoff and Margaret Robertson expressed another concern - excluding elements like storytelling and experiences, and using simple reward systems instead of true game mechanics. When the gamification is applied on a very basic level, including just rewards or levels, as an example, the youth engagement can hardly be triggered. Jane McGonigal has distanced her work from the label “gamification”, listing rewards outside of gameplay as the central idea of gamification and distinguishing game applications where the gameplay itself is the reward under the term “gameful design”. As attractive interfaces are becoming the prime competition for companies, industries or any organisations to engage customers, members or students, a gamified application has include something more than just one simple element, but the whole picture to involve the non-standard or out-of-the-box thinking of the younger generation.

Experts on the gamification phenomenon can be found in specific industries and companies. “Gamification is hot right now,” says Thomas Hsu, social collaboration and gamification expert at Accenture. “We’re in the golden age of scientific and neurological research. We understand the psychology, self-determination theory and intrinsic motivators that drive behaviour change.” Accenture each year has been repeatedly ranked as one of the most attractive employers among graduates and youth due to its innovative and alternative methods used at the employment environment.

Some other prominent experts working towards the spread, promotion or even challenging the gamification phenomenon are Jesse Schell; Sergio Jimenez; Victor Manriquey; Andrzej Marczewski; Mario Herger; Ian Bogost; John M. Carroll; Kevin Slavin; McKenzie Wark; Eric Zimmerman. These to be considered for any extensive research or study on gamification and its effects among youth and beyond the youth sector.

4.2. HOW DOES GAMIFICATION WORK IN THE YOUTH SECTOR?

With the development of digital technology and changing social standards, plenty of new communication tools and methods of games have been developed during the last decades and those are undertaken by young people. The motivational function of gamification has increased in importance, as there are plenty of opportunities for youth, which make them less active in the general sense. On the one hand, youth is the most dynamic social group, on the other hand the constant information flow and engagement in too many things make a person less responsive to something new, therefore the creativity used in promotional, engaging and motivational activities increases each year, setting the scene for gamification.

55 McGonigal, J., How To Reinvent Reality Without Gamification, source: https://www.gdcvault.com/play/1014576/We-Don-t-Need-No
First, young people should pay attention to “a thing”, get interested in and motivated to take part (or do something particular), or if the task is obligatory to carry out, gamification should make it enjoyable and easier to accomplish. Therefore, the needs, interests and motivations of young people should always be taken into account, leaving space for observations, research and other activities, initially related to “marketing” (which is considered one of the first fields to implement gamification strategies).

Even not being aware of the “gamification concept”, organisations and individuals working with youth constantly search for new ways of engaging young people and communicating with them in their language. In the 21st century it involves social media, project management and assessment tools, competition elements, special design for tools and campaigns, digital solutions, development of special training and programmes supplemented with different ice-breakers, networking and leisure activities, team works, semi-formal events and many more. Basically, gamification in the youth sector is all about supplementing activities with elements which can help to engage people and maintain their interest in a topic or activity. This can be reached in different ways; as different types of gamification exist.

4.3. GAMIFICATION AS A TOOL IN YOUTH WORK

It is clear that Generation Y and Z cannot be treated the same way as earlier generations: technological progress and social innovation have changed the perception of youth and made them more skilled compared to their ancestors. Moreover, the dynamic development of societies makes them unshielded in terms of professional development, as changes in educational content and methodology are not occurring at the same pace everywhere, producing education that can be outdated for future market needs. Informal education and training run by skilled youth workers is the driver for gradual changes in formal education, as the informal one is often more flexible and innovative.

Preparing for any activity with young people, starting from an organisational meetup to intensive 5-day training, the modern youth worker knows the role and significance of energizers and ice-breaking activities, especially when a group of unfamiliar people needs to be engaged. One may think that these activities are simply wasting their time, but what about a week of intensive psychological training or a weekend of super-intensive conferences, which excludes any visual presentations, certificates to gain, or at least some networking sessions? Information which does not include some eye-catching elements and on-hands additions is quite challenging, especially for modern young people, who always carry their smartphones in case they feel unsafe, bored or tired. The answer to the question, ‘what is so special about the smartphone content, compared to exciting experience of gaining new knowledge from top-end professionals in a field?’ is simple: engaging design.

The main role of the youth worker is to provide experience relevant for young people, and so a lot can be learned from digital app designers. Smartphone apps need to be eye-catching, functional, aesthetical, teaching (contents or experience of use), engaging, social, varied, and giving a chance for self-expression. Various game-like elements are added to digital apps to make them dynamic and to motivate users to return. Just like virtual or board games bring joy to people of all ages, youth workers need to think about making their activities more fun by adding gamification to non-game content, especially while undertaking educational activities. It does not mean that only digitisation can bring fun to learning or practical activities. Any social or educational event can be supplemented with competitions, special design, visuals, gamified interactions,
which motivates, encourages and involves everyone. To gain such results, a few basic principles need to be borne in mind:

1. **Hands-on approach.** Instead of giving knowledge, learning by doing need to be promoted.

2. **Simulations.** The “knowledge to memorize” needs to be substituted with roleplaying, which creates and improve skills, habits and behaviours. It initiates the independent thinking process, problem solving ability and creativity, which are necessary skills for the future market.

3. **Creativity.** There are different ways of problem solving, and each approach need to be analysed individually, not judged. In the case of young people, it eliminates the fear of express, enhances initiative and allows creativity.

4. **Feedback.** Different methods can be borrowed from games and digital apps to give meaningful feedback on the job done and motivate them to do even better. It allows visualizing progress and comparing to others.

5. **Social component.** Synergy can be reached within a collaboration with others, and new things learned, by simply discussing in a team. Self-development cannot be reached without practical life skills training.

Although gamification tools often come from business, marketing and human resource management, they can be applied to youth work, as the motivational and engaging purpose is the same.

Learning to work effectively for a company and learning to act effectively for oneself and society have something in common: learning and communication. What else is important, while speaking about gamification, is that gamification in youth work can be evaluated as a tool for a variety of activities:

- socialization;
- meeting with peers;
- identification with society;
- identification of expectations;
- demonstration of goals to be achieved;
- linkage of expectations with goals;
- linkage with benefits at the end;
- evaluation of achievements;
- identification of further personal development needs;
- soft skills training;
- contributions and appreciation of others.

Since gamification is often used to discuss heavy topics which young people try to avoid, it is important to understand, what kind of activities gamification might be used for. Bullying in school, low motivation to study, youth unemployment, difficult relationships with parents, disabilities, sexual relations - these are only a small part of the topics which need to be discussed with young people in an accurate way, without pushing them to absorb and understand the main parts they need to learn. The simple initiation of interest in a topic would be enough for young people to pay attention and find solutions by exploring individually or in teams of interest. The component of fun needs to added to make young people more relaxed while discussing sensitive topics. Besides, the mechanics of games have the ability to explain the consequences of each action, even if it appears only in a simulation. Simulations, similarly to job trainings and learning, makes young people think about solutions, discuss them with peers, make new connections and expand the horizons.
Gamification as a tool adds an additional stimulus to do tedious tasks, which are necessary in any case. Doing homework, volunteering, cleaning the common space, accomplishing administrative tasks, planning and monitoring the work - almost any task can be gamified by adding a system of awards and competitive drives. In practice gamification may look like a leaderboard on a wall, virtual competition, a chat group with functional features for teams, team-buildings and community events, certificates of accomplishing something and other benefits.

The social relation between young people and youth workers are also of special importance, as they require partnering interactions with no or minimal hierarchy. Therefore, modern technologies come to support communication, for instance, via social media, quizzes, common urban games and other activity platforms, where friendly relations are stressed out. It relates not only to youth and youth workers, but also to other groups of stakeholders, such as parents, teachers, employers etc. It results in engagement in activities organised by members of their own community, improving learning to learn, socializing, language and other skills necessary for development of a young person in the 21st century.
ONLINE QUESTIONNAIRE ON GAMIFICATION USED BY YOUTH AND YOUTH WORKERS

Online questionnaires are often used by young people and youth workers, as an easy-to-use method of gathering information necessary for their own projects, learning or work tasks. Youth questionnaires allow not only to reach as large an audience as necessary via the internet, but also to structure the questions and answers in a logical way, so the respondent does not require too much time and effort to answer the request.

In order to reach the target groups of the questionnaire in the most effective way, an online questionnaire was selected as a quantitative method to be implemented during the research. It contributes to 2 of our main objectives, defined in the beginning of document:

Objective 3: to survey youth participants, aged 15-30 to understand patterns of engagement with gamification methods;

Objective 4: to survey youth leaders, to understand the barriers, circumstances and process of youth engagement with gamification and other methods.

2 questionnaires in English have been created and primary data have been gathered from 7 partner countries: Latvia, Estonia, Croatia, Portugal, Vietnam, India and Argentina. Each of the questionnaires addresses one of two main target groups: young people and youth workers. The central focus of both questionnaires was the concept of gamification and the experience of using the tools and methods of gamification. Majority of respondents answered the questions in English, however additional adjustments have been done in the case of Vietnam and Argentina, where separate forms have been created in Vietnamese and Spanish, and the data translated back to English for the needs of the analysis.

In total 6 standardized forms have been created in 3 languages and distributed in 7 partner countries within the Google Forms service. This particular tool was chosen because of its accessibility, as it was important that the tool is familiar to the planned target audience and that the principles of filling the questionnaire have been used previously by potential respondents. After the online versions of both questionnaires were completed, they were tested, including participants from partnering organisations. Feedback was collected and proper adjustments made, to make sure that the questions appeared in the designated order, that there were no clerical errors, and that the logic and flow of the questionnaire worked properly under all branching conditions. Some technicalities were improved at this stage, before final distribution has started.

Considering the bare minimum sample (described by Roscoe (1975)), at least 30 respondents had to be questioned in Estonia, Latvia, Portugal and Croatia. Considering the difference in size of population in the rest of 3 countries, partners from Vietnam, Argentina and India had to collect at least 50 replies for each of 2 questionnaires. When selecting respondents, a systematic random sampling method was used and determined by geographic location and age group as main characteristics for respondents of questionnaire for youth. The main characteristics for respondents of youth workers were geographical location and the field of work (action).
In some cases, attractive visual materials have been created for the needs of questionnaire distribution and shared in social media and by emails, sometimes including assistance of partner organisations (see example of Latvia in Picture 5). Direct contacts were established with youth non-governmental organisations, municipal youth centres, universities, schools and other institutions involved in the work with youth.

*Picture 5. The poster for questionnaire distribution*

Both questionnaires were distributed starting from the January 2018, and the major part of replies have been collected within the first and a half month of distribution. In total 343 questionnaires were answered by young people in Latvia (31), Estonia (41), Croatia (30), Portugal (30), Vietnam (49), Argentina (52) and India (101) and other countries (9). The questionnaire for youth workers has been filled in by 309 youth workers in Latvia (43), Estonia (28) Croatia (28), Portugal (45), Vietnam (69), Argentina (51) and India (42) and other countries (3).

Both questionnaires in English are available under the following links:

- [https://docs.google.com/forms/d/e/1FAIpQLSf3XLuRB28IPnPnHJsc67p81kCBpf6uYfjVCQwyLRgbMpPlyug/viewform](https://docs.google.com/forms/d/e/1FAIpQLSf3XLuRB28IPnPnHJsc67p81kCBpf6uYfjVCQwyLRgbMpPlyug/viewform) (for young people);
- [https://docs.google.com/forms/d/e/1FAIpQLSfJ5rFd-68tgLoMFzcP5qDNhWkF2QpdwtBeuyQuZE554NyMPA/viewform](https://docs.google.com/forms/d/e/1FAIpQLSfJ5rFd-68tgLoMFzcP5qDNhWkF2QpdwtBeuyQuZE554NyMPA/viewform) (for youth workers).
5.1. THE CONTENT OF THE QUESTIONNAIRES

As the target audience of the research are those working with youth, and the youth itself, online questionnaire forms were adjusted in order to look attractive. Different visuals were chosen for the introduction, where the project and the aim of the questionnaire were described.

**Picture 6. Visual representation of 2 online questionnaires**

Online questionnaires created within this project are clear and relatively short, as it was important to keep respondents focused until the very end of the questionnaire. For that reason, both questionnaires consisted of 13 questions, asked to both groups of respondents: 8 questions directly related to gamification topic and 5 demographic questions. The first 2 questions were the same in both questionnaires and aimed to find out the level of understanding about the concept of gamification. Closed questions with multiple replies to choose from were formulated following:

- **Q1** Do you know what gamification is?
- **Q2** What do you think “gamification” means?

After those questions exact definition of Alexandr Iscenco was put to clarify to respondents, what meaning of “gamification” term is used for further questions of the anquette.

**Gamification**

This survey is part of the project “Digital gamification for youth engagement”. By participating you will contribute to understand perceptions of youth towards use of game-based techniques (gamification) in different areas and the effect it makes on young people. The survey is distributed among youth aged 15 to 35 years in Latvia, Estonia, Croatia, Vietnam, Portugal, India and Argentina to get wider view from different countries. The results will be analyzed and available at www.socialinnovation.lv.

The survey will take only 6 minutes of your time. Thank you in advance.

**Gamification for youth workers**

This survey is part of the project “Digital gamification for youth engagement”. By participating you will contribute to understand how youth work can be improved with the use of game-based techniques (gamification) and what effect it could make in terms of youth engagement in different areas. Survey is distributed among youth workers in Latvia, Estonia, Croatia, Vietnam, Portugal, India and Argentina to get wider view from different countries. The results will be analyzed and available at www.socialinnovation.lv.

The survey will take only 5 minutes of your time. Thank you in advance.

Gamification is the application of game elements and digital game design techniques to non-game problems, such as business and social impact challenges. This is a psychology- and motivation-based approach to increase the motivation, engagement and contribution of the target audience, as well as achievement of the necessary results through their active involvement.

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[56] https://docs.google.com/forms/d/e/1FAIpQLSf3XLuRB28iPnHJsc67p81kCBp6f6u3fVjVCQwyLRgbMpPqyug/viewform and https://docs.google.com/forms/d/e/1FAIpQLSfJ5rFd-68tgLoMFzcsPqDNhWkF2Qpdw4beyQuZE5S4NyMPA/viewform
It was necessary to ensure the quality of the questionnaire, as the following answers could be of no use if respondents do not recognize the core subject of questionnaire. The description was also inserted in order to make respondents aware of this concept in case they have never heard about it before or perceived it wrong. Thus, the first 2 questions and description are equal for both of questionnaires, as, besides the tasks of questionnaire, one was to compare the knowledge about gamification in both groups of respondents (youth workers and young people), and another one was to clarify the meaning of the researched object.

The following questions (with exceptions of some demographic data assessments) differ for both questionnaires are following:

<table>
<thead>
<tr>
<th>QUESTIONS FOR YOUNG PEOPLE</th>
<th>QUESTIONS FOR YOUTH WORKERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 Where do you think gamification should be used more extensively to engage youth?</td>
<td>Q3 Why is gamification necessary to include in youth work?</td>
</tr>
<tr>
<td>Q4 Which game-based elements or techniques you enjoyed the most?</td>
<td>Q4 Does your youth organisation use game elements in work with young people?</td>
</tr>
<tr>
<td>Q5 How the application of game-based techniques influences you?</td>
<td>Q5 What kind of game-like activities is your organisation practicing with youth?</td>
</tr>
<tr>
<td>Q6 In what environment gamification would be more effective to engage you?</td>
<td>Q6 How do you use DIGITAL gamification tools to engage with youth?</td>
</tr>
<tr>
<td>Q7 What kind of digital tools with implemented game elements have you used?</td>
<td>Q7 What kind of activities in your opinion require to use game-based (gamification) methods more to attract the attention of young people and stimulate them to be active?</td>
</tr>
<tr>
<td>Q8 What is the most important that gamification brings or can bring to your life?</td>
<td>Q8 What are the main fields that require implementation of game elements to attract and activate youth?</td>
</tr>
</tbody>
</table>

**Demographics**

<table>
<thead>
<tr>
<th>Q9 Age</th>
<th>Q9 Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q10 Gender</td>
<td>Q10 Gender</td>
</tr>
<tr>
<td>Q11 Residence country</td>
<td>Q11 Residence country</td>
</tr>
<tr>
<td>Q12 Level of acquired education</td>
<td>Q12 Level of acquired education</td>
</tr>
<tr>
<td>Q13 Occupation</td>
<td>Q13 Field of work with youth</td>
</tr>
</tbody>
</table>
5.2. THE ANALYSIS OF ONLINE QUESTIONNAIRE FOR YOUNG PEOPLE

DEMOGRAPHICS

343 online questionnaires have been collected from young people from Latvia, Estonia, Croatia, Portugal, India, Vietnam, Argentina. 11 questionnaires were submitted by young people from other countries, which are also included, however the analysis is mainly focused on the previously stated 7 countries of partnership. 5 answers were not taken into account, as they were submitted by persons under 15 or over 30.

The questionnaire focuses on young people aged 15-30. Participants of this questionnaire are mainly students (over 68%), however other groups (e.g. employees, entrepreneurs, unemployed) are also present and constitutes more than 31% of respondents. Over 56% of respondents have already acquired university or college degree and a quarter of respondents is still studying in college or university. The rest of young people has finished secondary school. About 53% of the respondents are female and 46% - male, which provides relatively balanced gender split.

All respondents have been also grouped by the age: the biggest part are 19-25 year olds (67.1%), then follows the groups of 26-30 year olds (18.7%) and 15-19 year olds (14.3%).

The visualization shows the occupational distribution of respondents, with the majority being students (68.8%), followed by employees (24.2%) and entrepreneurs (4.4%). There is also a small percentage of unemployed individuals (2.6%).
THE SURVEY

The first step within the analysis of the questionnaire for young people was to identify the level of understanding of the concept of gamification. Only 23.3% of all the respondents have mentioned, that they know what it is, and 42.3% have stated, that they don’t know. 34.4% have stated, that they are rather unsure about the meaning of “gamification”. In this regard, it has to be assumed that possibly respondents also had no chance to engage in gamification possibilities as a such or have engaged but without naming the process they are in as ‘gamification’.

**Picture 9. Question 1**

Q1 Do you know what "gamification" is?

- yes
- rather yes
- rather no
- no

However, being sure about the meaning did not deliver 100% of right answers among those being sure, therefore evaluation of the knowledge was initiated by the 2nd questions, where respondents were asked to choose the right definition of gamification those those presented below:

- the science that researches games development;
- playing games during non-game activities or processes;
- playing games during non-game activities or processes;
- application of game elements into non-game contexts of real life;
- putting more games into all fields of action;
- using games as method of communication during work with youth;
- none of these definitions are right;
- don’t know.

For instance, it turned out that only 1 person from Estonia has stated, that she understands the concept, however there were 20 right answers out of 41 given by Estonian young people. Such situation was predicted by researcher, so respondents were asked to choose the right definition of gamification too. At the end 50% of total respondents have chosen the right definition, which might be based also on the well established intuition and possibility easily pick up the right choice out of the bunch of the answers. The highest rates of knowledge have been showed by Vietnam (59.2%), Portugal (54.8%), Croatia and Latvia (both 53.3%). The lowest rate of knowledge has been detected with 43.6% (India) of right answers given, however it does not allow to generalize anything, as the difference between the highest and the lowest rates is not significant.
Q2 What do you think "gamification" is?

- application of game elements into non-game contexts of real life
- the science that researches games development
- development of games (digital, board games and other)
- playing games during non-game activities or processes
- putting more games into all fields of action
- none of these definitions are right
- don’t know

The answers to the questions suggested, that gamification is also perceived as (1) playing games during non-game activities or processes (16.1% of respondents) and (2) development of games (digital, board games and other) (15.2%). No respondents said that gamification means using games as method of communication during work with youth, 10 young persons found that none of the given definitions is correct and only 1 stated that they did not know.

As previously stated, the first two questions were followed by the explanation on gamification. It allowed participants recognize and better understand the concept they are questioned about.

Thinking about the fields of application, young people stated, that the most requiring field for engagement of young people with the means of gamification is education. In general, choices of young people were unlimited while answering to following question: “Where do you think gamification should be used more extensively to engage youth?”. Formal and informal education practices should be supplemented with game elements to make the experience of learning more enjoyable. As formal education is less flexible in using creative approaches comparing to informal learning, the results suggest that the biggest necessity of implementing gamification has formal learning. On the other hand, almost 62% of young people chose formal and informal education practices as the areas requiring gamification the most, as these fields relates directly to respondents in particular period of their lives. It correlates with the fact, that 68.8% of respondents are students. Similar situation is with business: 41.4% of young people have stated that business management, design, sales and other features of work need to be improved with gamification elements. It seems important for young people, as respondents being students are already thinking about future employment, and those already working (employees or entrepreneurs) have experience in business or other fields of work. The fourth most important area to use gamification more extensively in, is citizen engagement and general work of NGOs. This area was mentioned 140 times out of 343 (40.8%) and seems to be significant fields for improvements done by gamified techniques. The reasons of such result can be different: inefficiency of current techniques used to increase citizen activity or general interest of young people in democratic processes that are not engaging enough. This is the topic of deeper analysis for further research based on these findings.
Surprisingly, sports and cultural life was mentioned by only 33.8%, which suggests that these fields are enough (or more) “gamified” and varied to engage young people comparing to previously described ones. However, it might also mean that these activities are attractive and interactive or alternatively not attractive enough and does not require gamification elements. The least appearing field, which requires implementation of gamification, according to young people was public services (like healthcare, social support, governance etc.). Less than a third of respondents have marked it as significant, despite unlimited choice.

The next question focused on more detailed experiences of young people, researching what the most successful gamification is in their opinion: “Which game-based elements of techniques you enjoyed the most?”. Multiple answers were possible, and the majority (55.4%) has marked that they have participated and enjoyed team work and ice-breaking games during events or activities. The highest rate of satisfaction with team work and ice-breaking games as gamification methods has been identified among respondents from Argentina (76.9%) and Estonia (73.2%).
The second group of gamification activities enjoyed by youth the most were the use of social media and digital collaboration tools for communication with others. Almost 50% of all young respondents have provided this answer among others. These two groups of gamified activities represent both offline and online gamification. A little more than a third stated that they enjoyed using gamified mobile applications (33.2%) and specially designed online and offline learning platforms (31.5%).

Statistically the least valued were promotions and competitions in both online and real life environments. Only a fifth of respondents have really enjoyed them.

Answering the set of questions regarding the influence of gamification, young people mentioned that the most positive effect of gamification is its ability to entertain and catch their eye. Over 82% of respondents said, that gamification entertains them, and only 3.5% disagree with this statement. Also, over 77% of respondents stated that they strongly agree or rather agree with the statement, that game-based techniques attract their attention. Only 5.2% stated the opposite.

Around 71% of questioned youngsters approved the suggestion that gamification has a great impact on inspiration and motivation.

For each of the statements, a “neutral” answer was offered to identify the number of young persons, who doubt the effectiveness of gamification. The biggest number of respondents, who could not decide if they agree or disagree, was recorded while evaluating the effect of gamification on engagement in certain gamified processes. Although almost 32% of young people replied, that they strongly agree, and almost 36.4% - rather agree, that it engages them more. A little less than two thirds of respondents replied that gamified techniques makes them more effective during their studies or work.

When the young people have been asked about the environment, in which gamification would be the most effective to implement (in their cases), it turned out that 40% of respondents think that gamification would have the best effect if implemented in physical (real life) environment. Little less, 35.9% find digital environment more appropriate for gamification to engage them.

However, one additional option was added to check if young people think that gamification is related to digital technology only. Surprisingly, but regardless of majority (190 respondents), who has previously stated that they enjoy team work and ice-breaking activities as forms of gamifications during the real-life sessions (Q4), 23.6 % of respondents still think that all real life activities of gamification are linked to digital technology. To identify if these are opposite opinions of different people, additional analysis was conducted. It turned
out, that at least 55 persons from Latvia, Portugal, Estonia, Croatia, Vietnam and India have stated that they enjoy team work and ice-breaking activities (in real life environment), and at the same time believe that all real life activities of gamification are linked to digital technology. This makes to think, that additional research on the perception of young people needs to be conducted, as this question still remains unclear: there is no obvious preponderance in the data which would identify which environment (real life or digital) would be more appropriate to engage youth.

**Q6 In what environment gamification would be more effective to engage you?**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.5%</td>
<td>In digital environment</td>
</tr>
<tr>
<td>35.9%</td>
<td>In real life activities</td>
</tr>
<tr>
<td>23.6%</td>
<td>All real life activities of gamification are linked to digital technology</td>
</tr>
</tbody>
</table>

After all the closed-ended questions, there was one open-ended, that required respondents to type in the answer Q7: “What kind of digital tools with implemented game elements have you used?”. The most often answers were indicating on social media tools used by young respondents, in most cases Facebook, Instagram and WhatsApp. Interesting were other examples of learning apps, collaboration, sports and leisure, gamified inspiration and information gathering tools and other tools, that were recorded in the table below.

**Table 4. Gamification tools used by youth**

<table>
<thead>
<tr>
<th>Groups of tools</th>
<th>Examples given by respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamified communication tools and social media social media</td>
<td>Facebook, Instagram (including functions of advertising and marketing), Whatsapp, LinkedIn, Messenger, Hangouts, FaceTime, Zalo, Tumblr, Snapchat, Twitch, Steam, Telegram, VKontakte, Twitter, Adobe Connect, Skype</td>
</tr>
<tr>
<td>Learning apps (for language, science, music and other learning)</td>
<td>Kahoot, Quizlet, Call-slt, OLS, Bucha, Duolingo, Wolfram Alpha, BYJU’s, Yousician, different simulations</td>
</tr>
<tr>
<td>Sports and leisure apps</td>
<td>Run, Zombies Run, Nike+, Pokemon Go, Geocaching</td>
</tr>
<tr>
<td>Collaboration and project management tools</td>
<td>Slack, Trello, Basecamp, Evernote, Zoho, OneNote, Google Drive, Powerpoint, Prezi, Slido</td>
</tr>
<tr>
<td>Communication solutions for communities/teams</td>
<td>Teamspeak, Twitch, Steam</td>
</tr>
<tr>
<td>Software development apps</td>
<td>Nvidia, Unity, Articulate, c#, Android Studio, Git</td>
</tr>
</tbody>
</table>
Self-development, inspiration and motivation apps | Habitica, Behance, different brain games
---|---
Quizzes and survey tools | (no specific tools were named)
Sources of information | Medium, WCC (campus magazine app), WorldPress, TED app, digital libraries, Google Search, Siri
Other support tools | Youtube, Photo math, InDesing, Airbnb

The results have also shown, that the understanding of the term “gamification” is not sufficient, even though it was explained within the questionnaire. Some respondents still mention games when asked about gamified tools used by them. Also a lot of respondents have mentioned “apps” in general, as well as “computer”, “laptop”, “mobile phone” and other technologies, instead of mentioning concrete apps and platforms. This may lead to the question, what is the level of understanding about gamification? On the other side, few respondents have given examples of communication tools used during the online games (socialization part of the game), which are also used in fields other than games. There were a lot of respondents, who wrote they don’t use digital gamification tools at all, however their participation in a questionnaire itself is a pure usage of such tool.

In order to know what benefits gamification has in perception of young respondents, the following question was posed: “What is the most important thing that gamification brings or can bring to your life?”. Up to 3 answers could be marked by each of respondents. According to young people, the biggest value of gamification hides in its ability to increase the interest towards usual thing. It basically means, that more than 45% of young people believe that gamification can make their routine more enjoyable, for instance, improved design, optimisation of tasks etc. 43% of all respondents have mentioned, that implementation of gamification makes their study or work experience more enjoyable, which is of special importance for modern young people, who have so many things distracting their attention. Although digital tools often show the disturbing effect, the ones meant for learning or managing tasks and projects show a great variety of ways to gain interest, efficiency and succeed in certain processes. However, only 29.2% of respondents have answered, that gamification can save time and increase efficiency. One possible explanation for such a low result could be insufficient access or knowledge about effective gamified tools for young people, which has been partly approved by the received answers to the previous question.

Picture 15. Question 7

Q8 What is the most important that gamification brings or can bring to your life?

- It can increase my interest towards usual things: 155
- It can make studies/work more enjoyable: 149
- It can improve communication with others: 122
- It can motivate for self-development: 139
- It can save my time and increase efficiency: 100
- It can give a valuable feedback on my work: 46
Although a lot of project collaboration tools and platforms have been mentioned by the young people in the previous question, in general there is a lack of working experience or low understanding on how feedback in work can be provided via gamification methods. Feedback is an important tool that motivates gamers and informs about their strengths and weaknesses, so the same can be applied to every business, government and educational activity. For some reason young people in Vietnam have relatively high rate of mentioning this aspect as one of the most important for them, probably because of differences in approach to work habits. The research assumes, that in general the result would be higher for this position for working people of older age, however this needs to be clarified with comparative study.

Taking into account the limitation of the given answers, quite a good evaluation has been given to the ability of gamification to improve communication with others. It has been marked by 35.5% of all respondents and points at popularity of social media and communication tools (also those mentioned in the analysis of previous question). Gamification’s ability to motivate self-development has been stated by 34.7% of young people, as the variety of digital tools (e.g. mobile apps) is huge and everyone has a chance to find the field of interest within the digital environment.

5.3. THE ANALYSIS OF ONLINE QUESTIONNAIRE FOR YOUTH WORKERS

DEMOGRAPHICS

The main criteria for analysis of this questionnaire was the field of work: all the respondents had to be youth workers. 306 online questionnaires have been collected from youth workers from Latvia, Estonia, Croatia, Portugal, India, Vietnam and Argentina. 3 valid questionnaires were submitted by the residents of countries other than mentioned ones and were also taken into account, as they met the main criteria of selection: they were filled in by persons working with youth. 65 more questionnaires were submitted by people, who mentioned, that they do not actually work with young people. This was the reason not to take relatively large part of questionnaires (18%) into account when analysing the perception and the use of gamification within the group of youth workers from different fields.

Participants of this questionnaire were youth workers from NGOs (39.8%), private business entities (20.7%), state organisations (13.3%) and municipality organisations (26.2%). Over 54% of surveyed youth workers have already acquired university degree, almost 14% have a college degree, little just over 8% - have finished only school education. 23.6% are still acquiring college or university degree.

Picture 16. Levels of education and fields of work of respondents
In general, 63% of the respondents were female and 37% - male, however the distribution of gender differs from country to country. The majority of female respondents was identified in Estonia, Latvia, Vietnam and Argentina. The majority of male respondents was identified in India, Portugal and Croatia.

Picture 17. Gender of respondents by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>35.7%</td>
<td>64.3%</td>
</tr>
<tr>
<td>Portugal</td>
<td>44.4%</td>
<td>55.6%</td>
</tr>
<tr>
<td>Croatia</td>
<td>24.6%</td>
<td>75.4%</td>
</tr>
<tr>
<td>Estonia</td>
<td>17.9%</td>
<td>82.1%</td>
</tr>
<tr>
<td>Latvia</td>
<td>18.6%</td>
<td>81.4%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>40.6%</td>
<td>59.4%</td>
</tr>
<tr>
<td>Argentina</td>
<td>15.7%</td>
<td>84.3%</td>
</tr>
</tbody>
</table>

All respondents have also been grouped by age: the majority (71.8%) of all respondents are aged between 18 - 30 years, respondents aged between 31-45 constitute 24.3% and only 12 persons (3.9%) are older than 45.

Picture 18. Age distribution of respondents

ONLINE QUESTIONNAIRE

Similarly to the questionnaire for youth, the research intended to acquire information about the level of understanding about gamification as well as gamified tools used for different purposes during the work with youth. In general respondents were not quite sure about the meaning, when asked if they know what gamification is. Only 28% or respondents replied with “yes” and only 21.4% were rather sure about the meaning. The biggest part – 31.7% answered they don’t.

It turned out, that a higher rate of correct answers was given by youth workers compared to young people: 56% of youth workers stated that “gamification” means the application of game elements into non-game contents of real life. The highest rate of correct answers was given by youth workers from Portugal (64.4%), but the lowest rate – by Indian youth workers (40.5%). Little less than 19% have stated, that gamification is playing games during non-game activities or processes. Also, a relatively small, but significant part of
respondents (almost 18%) thought, that gamification means either the development of games or putting more games into all fields of action. Other answers were relatively unpopular. In general, the distribution of wrong answers differs a lot from the answers given by youth, however the majorities of both groups still perceive gamification correctly.

Picture 19. Question 2

Q2 What do you think "gamification" means?

- application of game elements into non-game contexts of real life
- playing games during non-game activities or processes
- development of games (digital, board games and other)
- putting more games into all fields of action
- none of these definitions are right
- the science that researches games development
- using games as method of communication during work with youth
- don't know

After the first two questions the full definition of gamification was given to the youth workers for better understanding of the concept, just like in previous questionnaire. Afterwards, researchers asked youth workers to answer the following question: “Why gamification is necessary to include into youth work?”. Respondents were allowed to choose up to 4 the most important features of gamification from following list:

- it reveals creativity of youth workers and youth itself;
- it encourages to be active;
- it entertains;
- it integrates and promotes inclusion;
- it engages;
- it promotes usage of digital technologies;
- it increases motivation of youth;
- it inspires and motives for self-development;
- it attracts the attention to important issues.

The majority (54.7%) of all respondents stated that the most important reason to include gamification in youth work is the ability to increase motivation of youth. Gamification can be applied to any work, study or social activity, and according to the theoretical assumptions described in these guidelines and the answers of respondents, it meets the main goal of gamified activities - increases the motivation of involved people. 138 respondents or 44.7% of all have stated, that gamification reveals the creativity of youth workers and youth itself. More than a hundred youth workers have stated, that gamification encourages youth to be active (almost 40%) and engaged (34.3%). The least popular idea was, that gamification promoted usage of digital technologies, however it was marked by more than a quarter of all respondents, so it also need to be taken into account while implementing gamified activities.
Youth workers, while answering if their organisations use the game elements in the work with young people, have revealed, that almost 88% of all respondents’ organisations implement gamification into youth work: 29.4% use it often, 46% - sometimes and 12.6% - rarely. Only 12% of surveyed youth workers do not use game-based methods and tools to engage, motivate, encourage, attract and promote.

To learn more about respondents, work activities, they were asked about the tools and methods of gamification they use (“What kind of game-like activities is your organisation practicing with youth?”). Multiple answers were possible, and it turned out that the usage of gamification is bigger that evaluated in previous question (as “no, my organisation does not use game elements in work with youth”). Only 13 persons or 4% of respondents have stated, that they do not use any of mentioned gamification techniques. The majority of respondents (61.8%) has stated, that they practice collaborative team work and ice-breaking activities during their formal and informal events and activities. 41.1% have stated, that they use social media as a gamified tool to communicate with and engage youth. Almost 39% of all 309 respondents stated that they use online/offline learning platforms and/or digital collaboration tools (like Google Drive, Trello, Whatsapp etc.) for communication with young people. Precisely a third of the respondents’ organisations include attractive and engaging presentations and speeches in their work and activities. The same number of organisations, mentioned competitions during workshops, camps and other activities. 24.6% of questionnaired
organisation’s members stated they use online promotions and competitions in social media, emails, web pages and other tools. Attractive online polls and questionnaires are used by only 23.6% of respondents, however, for youth engagement, the least used tool remain online streaming events (like webinars, online lectures) with engagement of young people (14.2%) and promotion of different tools to use in everyday life (14.9%).

Although the team work and ice-breaking activities, which occur during the real life events, are the prevailing result in the questionnaire, the largest part of given activities happen online, making the digital environment the most beneficial for implementation of gamification.

The next question focuses specifically on digital environment by asking respondents: “How do you use DIGITAL gamification tools to engage with youth?” (the “DIGITAL” has been stressed on purpose – to make respondents think specifically about digital gamification tools and methods). It turned out, that the majority of respondents (68%) use gamified digital tools for communication with their target audience – youth. For that purpose, social media and chatting softwares are used by representatives of these organisations. 30.4% manage and use online/offline educational platforms in their work with young people. Relatively fewer respondents stated that they use digital tools to do research, work on application developments, and work with virtual or augmented reality softwares for young people.
45 or 14.6% of respondents have answered, that they do not use such digital tools, however, 12 of them have stated, that social media, collaboration tools or learning platforms are used by their organisation, even if this is not the duty of the concrete youth worker.

In the next question (Q7) all respondents were asked to evaluate what kind of activities require more gamification to attract young people and make them more active ("What kind of activities in your opinion require to use game-based (gamification) methods more to attract the attention of young people and stimulate them to be active?"). The choice was limited to only 3 most significant ones. The majority of all respondents (54.4%) considers that the most gamification-requiring activities are youth mobility projects, camps and other informal educational courses. 52.8% states these are formal and informal learning activities. 127 youth workers or 41.1% have stated that activities of social and environmental campaigns require more gamification to attract young people.

According to the respondents, the activities that required the least gamification, are cultural sightseeing, tourism activities (27.8%) and sport activities (21.4%). One of the reasons could be that there are already enough gamification processes implemented in these fields by now. However, the field of activity of respondents also matters – as surveyed youth workers may more engage in youth mobility and learning activities, they might not consider tourism and sport as important for youth involvement. A deeper analysis on respondents’ field of action is required to make more precise statements about the outcome of Q7.

**Picture 24. Question 7**

In terms of **main fields, that require the implementation of game elements to attract and activate youth**, the prevailing choice of youth workers remains formal and informal education. Almost 71% of respondents thinks it is one of the most important areas for gamification (which goes hand-in-hand with formal and informal learning activities, stressed out as a second most popular choice of activities in previous question). 175 youth workers (56.6%) state that gamification need to be integrated into general work of NGOs and area of civic participation, which is important, taking into account that 60.2% of respondents are not NGO representatives, but work in private business, state or municipality organisations. 47.6% rank charity and social campaigns in third most important position in terms of areas for youth attraction and activisation. As an example, the environmental and social inclusion campaigns were given, however, it can include other issues significant for
society. As the respondents of the online questionnaire are the one working with young people, sports and cultural life has been prioritized over the public services (like healthcare, social support, governance etc.). Only one third of all the respondents thinks public services require implementation of gamification targeted at youth. Almost 40% have stated, that gamification is necessary in sports and culture fields.

Picture 25. Question 8.

According to the youth workers, the least requiring gamification is the field of business. Only a quarter mentioned it, taking into account that multiple answers were possible.

5.4. SUMMARY OF BOTH ONLINE QUESTIONNAIRES

Taking into account the results of both questionnaires - for youth and youth workers, some deeper knowledge about the gamification concept needed to be provided to both groups of respondents to raise correct awareness. Especially important is to educate youth workers, as they could practically use the methods to engage and motivate youngsters within their fields of work.

According to young people, the most enjoyable activities of gamification are team work and icebreaking activities (as offline gamification techniques) and the use of social media and digital collaboration tools (as online gamification techniques). The most important abilities of gamification are attracting the attention and entertaining young people during the activities they are doing (learning, working, socializing etc.). It increases interest towards things, makes studies and work more enjoyable and can significantly improve the communication with others.

Young people have marked formal and informal education as the most important areas for gamification implementation, as youth workers also did. The difference in evaluation, in turn, is seen regarding business. If over 40% of young people think that gamification would improve the business operations, youth workers do not really consider business as an area for intensive gamification implementation (only 25% of respondents have supported the business gamification). According to youth workers, education, civic participation, the activity of NGOs, charity, social campaigns, sports and cultural life are the main fields that require gamification implementation.
It is still unclear, which environment is considered to be more effective to engage youth (real life or digital environment), as a large part of young people still think that all gamified activities are connected to digital environment. Deeper investigation needs to be done in order to bring some clarification: if there is an insufficient number of gamification activities done by youth workers in real life environment, or whether there is lack of understanding and recognition of non-digital gamified techniques among youth.

In any case, the usage of digital social media and chatting tools is persuasive – 68% of surveyed youth workers use them in communication with their target audience. Online and offline educational platforms are also actively used by them, but more gamification should be implemented with an aim to achieve higher level of engagement and effectiveness during the work and studies, as young people did not evaluate these abilities of gamification as the most influencing them. 9% rather disagree or completely disagree with the statement that gamification makes them more effective at work or during the learning.

Youth workers have also revealed, that closer attention need to be paid to gamified activities during mobility projects, camps, formal and informal educational activities, leaving the sport, culture tourism and business and project management activities behind.
GAMIFICATION AND NEW SKILLS FOR YOUTH

Referring to non-game contexts, the impact of gamification, relates to the development of creative and critical thinking, logic and reasoning, memory, attention, processing speed and other skills. The storylines of gamified learning activities are usually closely connected to reality or future reality which might happen if certain actions are taken. These are simulations, where the “player” is required to make predictions, manipulate variables, observe effects and try to understand complex systems. Similar processes are observed in a scientific thinking, which itself encompasses the set of reasoning and problem-solving skills involved in generating, testing, and revising hypotheses or theories\(^5\). In teaching these skills to young people, gamified learning is appropriate, as it contains the element of fun and makes the learning process “lighter” and more engaging. Besides, the storyline (game element) makes the information easier to remember comparing to unrelated scientific facts, as it evokes imagination, perception and emotions about the content.

Within a simulation, which in this context can also be called “a game with a purpose”, the “player” practices teamwork with its character of a simulation. The real “player” and his character in a game have different features and knowledge, and therefore the “player” can learn from the character and have an insight in how problem solving is run in situations which occur in a real life, in fields of medicine, law, urban planning, or any other field. The cooperation with other “players” and characters within gamification teaches the role of teamwork and strategy planning, which is only possible if proper communication is established inside the game. Such simulation games are already being applied in education, business and other fields, where training is required.

Problem solving within gamification (simulation) is usually a creative process, which does not include some scheme or scenario. The “player” needs to act logically and consequently, discovering their own path to success. It initiates creative thinking, which refers to the cognitive skills of generating and evaluating multiple ideas and alternatives.

as well as novel and practical ideas. On the other hand, youth nowadays need to be sceptical enough to make problem-solving as effective as possible. While simulating situations, changing strategies and discovering the consequences of each action, gamification teaches critical thinking in order to make the best judgments regarding on what to believe and what to do or avoid doing. In trying different models of behaviours with the simulation, one trains analytical skills and memory, being willing to help other “players” in similar situations and maintain the experience to apply in real life practices.

Being used to problem-solving make person resistant to difficult situations and more focused on searching for solution. Practicing gamified activities, attention can be trained without noticing it. While concentrating of the visually and contextually engaging task, the “player” focuses on the main goal and is able to ignore distractions, at the same time keeping in mind the presence of other “issues”, that can also be helpful in other situation. The attention allows to reach the goal of activity faster and generate ideas effectively during the activity. The increase of effectiveness makes accomplishment of tasks more operative, therefore processing speed – higher.

The involving character of gamified activities increases the attention of the person and makes the learning process more effective, and even enjoyable. Often players of videogames do not even notice how much they have learned during ‘obviously’ non-learning activities. This may successfully be applied to fields of work and learning, which are usually not perceived as fun to do. At the same time, such activities initiate serious brain activity, which allow us to memorize the situation and appropriate actions, decrease the level of stress and uncertainty, switch in creative thinking, improve ability to work in teams stimulate scientific and critical thinking, reasoning skills, and many more cognitive and soft skills.

The abilities mentioned above facilitate young people in their active learning process - at school, work, during non-formal courses, business trainings and negotiations, organisational tasks, team building activities etc. On the one hand, gamification is useful to learn things and practice skills, on the other hand, new skills and knowledge can be applied to initiate new activities, and not obligatory to the learning process.
There’s a lot of hype around gamification, partly due to its success stories. While it is a powerful tool, that doesn’t mean it’s a magic bullet. It fails because of how it’s approached and how it’s designed. **There are three main concerns associated with gamification implementation in youth context, which can also be applied in the example for the general public:**

1. misunderstanding the gamification;
2. missing the true objective of gamification and lack of audience-oriented approach;
3. design and technical implications.

Taking into account the above barriers and concerns when applying gamification to increase youth engagement, carefully designed processes would help to prevent the problems and issues associated with it. By clearly defining gamification, properly setting the objectives, investing in thorough analysis of the audience it is directed at and devoting time and resources to the technological support of the project would prepare the gamification implementation for success.

As young person is a very dynamic unit of community, and is more likely to change the behaviours than older person, the relevance of using motivational, engaging and empowering facilities of gamification is of high importance if speaking about the positive social change driven by youth.

It is important to explore the barriers associated to the implementation of gamification to increase youth and public engagement.

### 7.1. MISUNDERSTANDING GAMIFICATION

Gamification has tremendous potential, but right now most organisations aren’t getting it right. The road to gamification is full of pitfalls, and many don’t realise how critical attachment of clear meaning of the gamifying techniques in pursuit of youth engagement is. You need to examine the phenomenon of gamification and decide if it makes sense to gamify the activity.

Lately, the popularity of gamification has blinded potential youth employers, various institutions, officials and the public in general, including even representatives in the IT world. Generally, gamification is taken for granted, without deeper meaning or understanding attached to the gamified mechanisms and techniques. Gamification is not about making games. It is about using elements of games in other areas to increase motivation, engagement, fun (at times) and to encourage specific behaviours. This may include games, serious games, mini games etc – but more often than not, it doesn’t have to. It also doesn’t mean that gamification is limited to points and badges. Strategy, narrative, interactions, choice, random events, levels, challenges etc are all there.

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58 Marczewski, A. 2017, source: https://www.gamified.uk/2017/03/03/misunderstanding-gamification-promising/
One of the **main threats is the creation of meaningless gamification**, which is the baseless injection of gaming elements; point, badges and leader board in informal teaching and learning, it is vital to attach the gamification reasoning to your institution, project or work’s main idea.

If there are no tie-ins with strategy and activity goals, does it really matter whether the new activity is gamified or just amended content presented in the traditional manner to the audience? In order for gamification to succeed it has to support activity goals in pursuit of youth engagement. Millennial generation would like to have a fun and social aspects; transparency is important for them. That’s why they want to know details about e.g. the organisation’s strategy. Therefore, missing the simple connection of the new innovation in the daily life of a young person will usually be spotted and addressed risking to bring gamified activity to questioning.

To be effective, gamified applications have to connect to something that is already meaningful to the user – or wrap themselves in a story that makes them meaningful, as in the walk home from school or tracking their improvements over the course of fitness week. This is nicely put in the recent statement by a founder of financial platform Mintos.com, Aaron Patzer: “What we have learned from our users is that any game aspect has to be, at least for finance, more oriented toward some specific thing that you are working toward: I want to buy a house or a car, take a vacation, get out of debt... Otherwise you have a system of points with no levels or no end game.”

### 7.2. MISSING THE TRUE OBJECTIVE OF GAMIFICATION AND ADJUSTING TO THE TARGET AUDIENCE

By proper implementation of a gamification strategy, motivation, encouragement, engagement, productivity, sense of belonging, gratification, pride and meaning, self-advancement, as well as overall behavioral change can be reached without sticking to any concrete area. Before implementing gamification, one should define the purpose – what set of users (employers, students, groups, kids, customers etc.) behavior would change, and set up goals to track the impact of gamification on those behaviors. It is known that one of the most important functions of implementing the gamification is to stimulate the motivation to act according to the goals of the gamification strategy.

Gamification can inspire a sudden spike in youth interest with even the most rudimentary game elements; however, if they don’t realize the value in the long term, the engagement begins to break down. The clear meaning of gamified activity can also be attached to the personal goals or objectives of a young person. In order to satisfy the Millennial generation’s needs, desires and leverage their potential, as they are a very significant part of the labour and consumer market, we have to know their motivations and expectations. From this knowledge you can build the grounds of your activity with gamification elements.

In the simplest terms, the older generation thinks of gamification and games similarly. But in the core, games are made to entertain players. There’s generally a storyline, elaborate graphics, a winner, and so on. Gamification, meanwhile, uses aspects or elements of games to help people achieve goals outside of games, in non-game aspects of lives. This context is key. Though gamification may share some characteristics with games, the true distinction lies within the differences. Gamification leverages our love of competition and reward and uses it to encourage certain actions that change people’s habits which is so close to the younger generation maximalism and constant reach for excellence. Gamification is learning a new language, a wellness program, a successful call centre, or an innovative rewards program connected to specific, personal

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objectives. As long as the older generation clarifies and accepts the real definition of gamification, it will not stand as an appealing option to use in their institutions to engage youth.

Theoretically this may sound simple, but in the real world, this requires a big investment of effort and thorough planning to adjust the institution’s gamification objectives to the final results it wishes to reach. Especially this is a complex task in the context of youth. The young participants in a game-based activities might be optimizing the end-result of the ‘game’ (eg positions in leader boards), and not the task at hand. Gaming elements, that are lucrative for a single person, can present competing interests against teamwork, thus hindering the team to achieve the best performance through gamification application. That’s why, using badges and leaderboards and offering points for clearly-commercial activities isn’t a magic formula that will engage every single person at any time, be it a young person or even older generation. Demographics are different, behavior is different— things that will work to motivate some people might not work to motivate others. Therefore, it is important to beware of differences in people’s personal objectives, the particular gamified activity’s objective, the institution’s objectives and make sure to combine all three aspects in order to produce the positive results and achieve desired aims.

Any activity in the application has a social meaning in a broader context. In most contests there is always a tiny cohort that completes the game and wins the prizes, with the vast majority losing interest and dropping out before the contest is even halfway through. This disengagement is a problem because it makes no sense to engage and motivate the top performers. Gamification will only survive if the majority is enthusiastic about participation. Taking into account the target group at hand, the Millennial generation, to satisfy their needs, desires and interest, applied gamification should foster a sense of autonomy, mastery, and relatedness, as they become more informed about the world. Youth is always hungry for innovations; therefore, they will not simply focus on the reward, but thrive in the process.

Knaving, K., Björk, S., Designing for Fun and Play: Exploring possibilities in design for gamification, 2013

7.3. DESIGN AND TECHNICAL IMPLICATIONS

Third, but not the least important barrier to the successful implementation of gamification are thorough design and thought, from inception to implementation. The audience needs a compelling attractive or “catching” reason to keep coming back and stay engaged on a continual basis, or gamification might fail to achieve its desired results.

Planning is required to develop appropriate point systems, challenges, badges, and achievements, which allow learners to progress through the course in a manner that gives them free choice, but also guides them. Providing immediate feedback and allowing students to “level up” requires a large investment of time to ensure that there is a close match between the course content, delivery schedule and the gamified environment. The above statement is true not only for students, but for any youth learners as such. Because of the amount of planning and effort required to implement gamification successfully, institutions may consider hiring instructional designers to support the project, implementing game elements into the project and in due course the first quantifiable results. The game designers know what motivates the players and they incorporate elements of surprise and delight throughout the gameplay so that users are engaged and motivated to continue with the activity. Most successful gamification programs also have linkages to elements that matter to players like performance reviews or employee recognition programs.

Emotionally, gamification impacts learners through feelings of success and failure, as well as frustration and anxiety. A well-designed gamification environment allows learners to experience all of these emotions. High levels of frustration or anxiety are best avoided by carefully designing tasks and learning activities with appropriate levels of challenge. Careful sequencing of the progression of learning helps to ensure that learners do not experience high levels of frustration. This is especially important for the youth, where frustration can lead to low level of motivation and willingness to be a part of specific gamified activity.

Poorly designed gamification can result in participants being forced on the gamified elements, spending extra time understanding what is required or how it works in addition to experiencing gamification which is not fun. And youth demands fun. However, it is slippery road to measure the ‘joy’ part of the gamification. It is important to ensure that the introduction of competition through gamification does not encourage carelessness among youth and is not demotivating.

The challenge facing the project managers and persons responsible for gamification initiatives is the lack of design talent to apply to gamification projects. Poor design is one of the key failings of many gamified applications today. The absence of a strong partner who can handle the infrastructure, design the gamification elements and provide the support systems can cause not only problems, but also be doomed for failure. A gamification process that is all about earning badges or trophies fails because these rewards are simply bribes that work only in the short term and are no interest to youth, keen on long term benefits, such as social recognition, personal objectives, immediate feedback or becoming engaged in social change.

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63 Van Eck, R., *Digital game-based learning: It’s not just the digital natives who are restless*, EDUCAUSE Review, 2006
One of the sub-objectives of this study material was to search for successful cases of gamification for youth in partnership countries of the project – Latvia, Estonia, Portugal, Croatia, India, Vietnam and Argentina. Each project partner has contributed with the knowledge of practical tools, methods and events for youth, which are characterized with integrated game elements. The best cases have been selected and described in this chapter to show the variety of gamification used in order to reach youths’ engagement, motivation, and empowerment, as well as to give knowledge about various topics. The areas of gamification implementation, described in the following examples, are education, culture, civic participation, youth employment, architecture, IT, self-development, languages, finance and other fields.

PAKA PAKA, ARGENTINA

*Education, culture*

**Overall description**

Paka Paka is an interactive website and educational public channel which was developed for children and teenagers to promote national identity, including historical, geographical and educational content. It essentially creates a space for gamified activities and imagination, encouraging the discovery, curiosity and knowledge, innovation, challenge fun while learning new information. All the web page is interactive, with illustrations and information for kids and teenagers.

**Why is it important?**

The idea is to reinforce gamified elements with the popular characters of the TV that are made with educational purposes. The public channel, operated by the National Education Ministry of Argentina, was born with the proposal to promote this educational content in general for children and young people. The educational platform embraced gamification to attain the ever developing demands of the new generation of youth. For this reason, its website as well as the channel were created to bring knowledge to its target audience – youth.

**Impact**

The creation of multiplatform formats makes the comprehension of the contents more attractive and engaging, with the knowledge reaching the audience, either by readings, television, games or applications for smart devices.

**More information:**

http://www.pakapaka.gob.ar/
MOVI JOVEN, ARGENTINA

Culture, education

Overall description
An app for smartphones with a focus on people aged between 13 and 30 years. Called “Movi Joven”, it was developed in Rosario, State of Santa Fe, Argentina. The aim of the App is to involve the youth in their approach and enjoyment of the local cultural offer of the city and at the same time to give an extra value to themes associated with sustainable urban mobility in Rosario, such as the use of the public bicycle system “My bike your bike” and urban passenger transport. Movi Joven has a point scoring system. The points are added from different actions that users can carry out in the universe of the public.

Why is it important?
The app links the youth with the cultural events of the city, giving them information about the cultural offer and the chance to win points each time they participate in one of the promoted events. The objective of the youth is to reach points so they can use them in activities or discounts, the objective of the municipality is to give the youth the opportunity - through a game – to become active citizens of the local culture.

Impact
The application intends that the user attend educational and cultural spaces, in which points can be added in the App through the Movi Points previously installed in the place of the event.

More information:

DEMOKRATSKE RADIONICE (DEMOCRATIC WORKSHOPS), CROATIA

Civic participation, education

Overall description
During Democratic Workshops interactive content, adapted to young participants with the help of elected and trained lecturers/trainers, is presented to children and young people aged eight to fourteen in order to learn how democracy works. The acquired knowledge and experience is demonstrated via contributions to a newspaper, radio broadcasts or video materials, which are later published on the children’s parliamentary website. The youth use Adobe InDesign and Adobe Photoshop for writing their own newspapers, MAGIX Samplitude Music Studio is used for the radio programs and Adobe Premiere Pro for making children’s video clips.

Why it is important?
“Democratic Workshops” are aimed at encouraging young people’s interest in politics and democratic processes, and work as a civic education program for elementary school students, gaining knowledge of parliamentary democracy, parliament functioning, law making and enforcement, as well as institutions and development of The European Union, and
the European values and the path of their country to the Union. In addition to learning the basic principles of democracy and acquiring knowledge about parliamentary processes, the program strives to explain the media scope in political arena and freedom and willingness to express an opinion about political matters. Using different media and IT tools kids are gaining more information about political processes using role playing as the prime gamified element of the Democratic Workshops project.

Impact

In addition to learning the basic principles of democracy and acquiring knowledge about parliamentary processes, the objective of the program is to explain the other two prerequisites for political participation - media scope and willingness to express an opinion. Young people learn about a number of subjects, driving motivation and engagement for using gaming elements.

SJEDI5, CROATIA

Education

Overall description

To engage youth in continuous informal education, the website (portal) “Sjedi 5” (eng. “Sit A”) was launched by the Association for Development of Modern Educational Methods in the Republic of Croatia. The project was established in 2010 in Osijek and aims to create an online portal for digitally savvy youth to develop broader knowledge of basic fields required to pass the exams or improve their skills through games and interactive learning. The website is in Croatian language, gives an opportunity to choose interactive games to test your knowledge in such areas as Croatian language, mathematics, geography and logic, enhance the knowledge or prepare for the final exams. It consists of collection of reading materials, latest news articles about the science, culture and events in the local scope. The website also offers interactive games for further offline learning.

Activities of this project are directly linked with playing board and card games, however these are just tools for improvement of knowledge and skills in natural sciences, human sciences, language arts, vocabulary, and thinking through learning together in teams during the informal activities.
Why it is important

Non-standard learning is an essential part of the young generation’s education as their demands and interests are more and more inclusive of digital technologies. As young people tend to seek knowledge from various sources, the digital or e-learning platform is highly important promoting informal education. Interactive games on “Sjedi 5” are meant to be played both during the classroom activities and outside the class.

Impact

“Sjedi 5” emphasises the importance of the fun part of learning the different fields of studies through digital platform. Youth is becoming more engaged with attractive interactive features of the game while enhancing their knowledge in various fields of knowledge. Their motivation is increasing and they are encouraged to discover new things through game and engage in the significant to everyone lifelong learning.

The platform offers a range of different levels of games that help to better understand areas of science such as mathematics, physics, chemistry, geography, as well as spatial thinking and logic.

More information: https://sjedi5.com/

KAHOOT!, ESTONIA

Overall description

Kahoot! is a free game-based learning platform that makes it fun to create content and learn any topic, in any language, on any device, for all ages. Kahoot!’s core concepts and pedagogy methods is to encourage youth to develop from learners to leaders, from listeners to presenters and facilitators. Young people or their teachers can create different quizzes on various subjects and topics to make learning fun, engaging and interesting. In order to take part in this activity, young people have to use smartphones or digital devices with installed app KAHOOT! The participants can make a series of multiple choice questions or try a game “Jumble”, with questions that challenge players to place answers in the correct order rather than select a single correct answer. For quizzes young people can choose what format to use and what number of questions to include together with videos, images and diagrams to amplify engagement.

Why it is important

Due to increasing demand for innovations and new methods of teaching to engage youth in learning processes, KAHOOT! stands out to make learning entertaining and empower young people to take the lead in the learning environment. This game-based learning platform is also a powerhouse of creativity on the go, allowing youth to take the lead at what they are learning and what pace to use. It is easier to teach young people something specific in a fun way. Kahoots are best played in a group setting, so it helps to build a team and trust between young people and youth workers. In Estonia a lot of schools and youth workers use Kahoot in their activities.
Impact

Social learning promotes discussion and pedagogical impact, whether participants are in the same room or on the other side of the globe. After a game, this game-based platform encourages players to create and share their own “Kahoots” to deepen understanding, mastery and purpose, as well as engage in peer-led discussions. Young people who are not active or have lost a motivation to learn, receive some new knowledge and get involved in the learning more with additional motivation and interest.

KAHOOT! is an important platform, already used in learning cases such as teaching/learning a sign language and in the cases of reduced mobility youth education institutions.

More information: https://kahoot.com

MINECRAFT: EDUCATION EDITION, ESTONIA

Learning platform, architecture, IT

Overall description

Minecraft: Education Edition is a collaborative and versatile game-based platform, which can be used by the educators to promote creativity, cooperation and problem-solving in an immersive environment.

Set as a group activity, it is classroom friendly. Young learners collaborate on mutual projects, document their work and share progress, personalize their game-based experience, effectively communicate learning objectives and seek further information using digital resources.

Why is it important?

In Estonia, Minecraft: Education edition is an educational game-based platform for young people to participate in an architectural competition in order to make a building or other architectural structures and then be evaluated by a jury, which chooses the best one.

The game-based platform Minecraft: Education Edition is a base to teach youth to collaborate and communicate while working on common projects, by serving as secured environment for learning and building the 21st century skills so important for future endeavours.

Picture 34. Minecraft: Educational edition

Impact

Minecraft: Education Edition helps to prepare students for the future workplace, building skills like collaboration, communication, critical thinking and systems thinking. The open learning environment gives students the freedom to experiment, encouraging creative self-expression and problem solving.

More information: https://education.minecraft.net/
RAJALEIDJA MÄNG, ESTONIA

Youth employment

Overall description
Rajaleidja Mäng is a gamified quiz for young people aged between 13-17 years, who want to know more about different professions and occupations. Career counselors can use it in their work when young people come to the counseling. The quiz contains topics, which can be used while discussing young people’s work and study plans. Especially useful this tool can be in cases, when young man/woman avoids such topics as working towards their career paths.

Why is it important?
Young people these days can easily get lost among the variety and number of the career paths they can choose. While some of the youngsters have in mind the career they wish to follow or the future they see for their employment aspirations, rather large proportion of youth hesitate or have little knowledge of what is it there on offer.

Rajaleidja Mang offers clarification specifically to this audience, engaging them into an interactive and attractive gamified quiz prompting the discussion, thoughts about or building on the future employment skills expanding the youth knowledge about careers.

Impact
More young people started to think about their career and what they want to do in their life earlier. The quiz is being used in various institutions focusing on youth employment providing grounds for evaluation

More information:
http://ametid.rajaleidja.ee/mang

TÖÖOTSIMISE MÄNG, ESTONIA

Youth employment

Overall description
“TÖÖOTSIMISE MÄNG” is an interactive game intended for youth aged between 13 and 17 to answer any future career concerns and questions related to starting a new job. The game covers the introduction to the job searching activities and contains the questions, which can be asked during a job interview. The main aims of developers of this game are to ease the tension of Estonian youth when looking for a next career, shed the light on the interview process and content, enhance the knowledge about the jobs and market opportunities available to them.

Why is it important?
The interactive game is a significant part of providing information on working conditions attached to various jobs and industries. The youth unemployment in EU has remained at the high level of 15.6% since the economic crisis of 2008, improving only slightly hence demonstrating a significant problem. Therefore, Estonia is taking steps towards improving its youth unemployment rate of 10.5% (as of March 2018, Statista.com) with provision of gamified solutions, such as “TÖÖOTSIMISE MÄNG” interactive game to engage youth and broaden their knowledge to help finding the right path to the future career.
There is an interactive job interview included in the game which simulates the real life job interview and proposes the ideas of dos and don’ts during such process.

Impact

“TÖÖOTSIMISE MÄNG” directly impacts the youth understanding of the opportunities available in the employment market for young generation. It also poses a useful platform promoting the simulation and consequently experience the real-life aspects of acquiring the new employment in the future. The youth has solid grounds to step on the path to their future career with confidence and equip with all-rounded knowledge in the market of employment.

CAREER QUEST, INDIA

Youth employment

Overall description

IYF partner QUEST Alliance, based in Bangalore, the country’s tech hub, has developed a physical board game for young factory trainees. It takes players on a journey through a ‘day in the life’ of a manufacturing facility. Young factory workers compete to earn as many ‘production points’ as they can before their “shift” ends. Producing timely reports and engaging mentors ratchet up a player’s score, while poor time management, conflicts at work, and equipment problems seriously impede one’s chances of winning. The game reinforces the 110 hours of life skills training players previously received, which includes lessons on time and money management, personal values, gender roles and stereotypes, conflict resolution, and other topics.

Why is it important?

In order to understand the different phases and best path to a successful training and workforce development, the board game explores a gamified method to smooth the integration of young workers in the manufacturing industry in India. The board game allows young workers to prepare for the very real opportunities and obstacles they will soon need to navigate. This comes in light with the lack of student exposure to the wealth of professional choices available to them and a limited understanding of how to advance in their field. To correct this, the game enables its players to visualize a range of technical career options.

Impact

To date, EquipYouth has trained 1,000 youth in India, a significant portion of the program’s 8,000 beneficiaries worldwide, suggesting the far-reaching potential for Career QUEST to be incorporated into future curriculum teachings. The board game is now being translated into Spanish for the use in Latin America. Plans are also being explored to adapt the concept for use in a range of industries, including retail.
**REVEAL (L’OREAL), INDIA**

*Youth employment*

**Overall description**

Serving as a business game, ‘REVEAL’ has been used in different countries of the world. Between 2010 and 2015 L’Oréal has used gamification tools to recruit for marketing, human resources, sales and other operational positions within the company in India. Within a simulation players have to participate in the life cycle of the product. Right from the production to marketing/sales of that product. Analysing the situations and taking the right decisions. At the same time the “player” interacts with avatars, representing employees, and get a sense of what department he/she might be the most suitable for at the company.

**Why is it important?**

The objective of the game is to get selected either for an internship or a full-time job. The whole idea of the game was around a L’Oréal Product Launch. The players had got exposure to L’Oréal’s culture and values via this game. It also helped the participants to get more information about their career options and decide on the career choice of the field or department within the company.

![Image 38. Reveal by L’Oréal](image)

**Impact**

Captures techno savvy youth to the cosmetics industry, they could analyse through the game, where they fit in the company. The game secured a number of industry awards including the 2010 National Graduate Recruitment Award for the ‘Most Innovative Way of Attracting Graduates’. By 2015 the game had amassed 120,000 players.

**BE FIRST, PORTUGAL**

*Self-development, inclusion*

**Overall description**

“BE FIRST” is an interactive gamified tool organised as a board game, where each player faces challenges and gets involved in simulating experiences that can help to direct them and clarify decisive facts about life situations. Participants are involved in a board game, where each player is faced with challenges throughout the different chosen paths. These, in turn, relate to the development of skills and the improvement of the performance - so important for a growing young person.

The name of this gamified concept results from the integration of five competences that inspire creative and positive approaches on the five FIRST competences (flexibility, improvisation and creativity, Risk, Stress and Tasks).

**Why is it important?**

This tool offers players the chance to analyse and offer perspectives, reveal action opportunities, and inspire creative and positive approaches on the five FIRST competences (flexibility, improvisation and creativity, risk, stress and tasks). It also allows each participant to master the talents and skills of each player, improving their productivity and performance.

By participating in this gamified activity, each person can become more aware of his/her purposes and the various processes that can be used to enhance and optimize the abilities and talents. For youth it is always important to get to know themselves better and to strive for higher levels of achievement.
**BE FIRST**

Gamified methodology increases productivity and can optimize team interaction, fostering the enthusiasm of young people and the whole teams in order to achieve the goals identified and contribute to a common good. The “BE FIRST” gamified concept is itself a process of enhancing people’s talents and skills.


**LANGUAGE GYM, LATVIA**

*Education, languages*

**Overall description**

In order to popularise and attract more attention to the Latvian language, an interactive game for young people “Language gymnastics” has been created to encourage students to learn Latvian in an interesting and exciting way. “Language gym” is a digital game for pupils, an opportunity to showcase their knowledge of Latvian and compete for prizes for themselves, their class and for school. Answering questions of the game, the student will accumulate points for both his individual assessment and his class and school. At the end of each round, the top 3 players will be rewarded, while the best player. The most active class and school will receive valuable prizes at the end of the game, too.

**Why is it important?**

The game attracts students’ attention to the Latvian language and literature - both by showing how rich the language is and by paying attention to the mistakes one makes. It is also important for pupils to experience the language and understand the role of learner in creation of it.

**Impact**

The game teaches the the grammar and spelling of Latvian interactively and excitingly, as well as increases the understanding of the language as a whole.

LATVIAN CULTURE CANON ORIENTATION GAME, LATVIA

Culture

Overall description
Preparing for the 100th anniversary of independence of Latvia, Ministry of Culture of Latvia have organised gamified educational activity for pupils and their families, involving patriotic symbols and telling stories about them. During the activity, which was titled as Latvian Culture Canon orientation game and organised in National Library of Latvia (huge complex of libraries, exhibition rooms, conference halls etc.), families were given maps and asked to search for 17 masterpieces and cultural values included in Culture Canon of Latvia: literature, cinema, architecture and traditions, visual arts, drama, music, design.

Why is it important?
A number of educational and leisure activities were organized last year in order to promote values and great achievements of Latvia, as the 100 anniversary of independence has approached. This activity specifically engages pupils and their families, giving a reason to visit one of the greatest architecture monuments of the last decade built in Latvia – National Library of Latvia. It is the symbol of nation’s formation in the end of the 19th century as it contains Dainu skapis, the collection of Latvian folklore songs gathered by the famous writer and folklorist K. Barons. Now it contains much more valuable artefacts to show to public, teaching about the culture and meaning of these symbols for Latvia.

Impact
Children have an opportunity to visit the biggest library collection in Latvia, explore masterpieces and valuables, significant symbols of their homeland, as well as spend quality time with families and friends within the thematic event dedicated to the culture. The game includes orientation activities that are conducted in physical environment: architecture monument of Latvia. Tools – maps, descriptions.

More information

ENGLISHCENTER, VIETNAM

Education, languages

Overall description
Englishcenter.vn is an English learning website for community at low cost. It is an interactive platform for Vietnamese people who want to study English. It uses the technology to support the learners, providing opportunity to learn via video, audio materials as simulation examples for practice. The points rewarding system and interactive communication tools are also included in this platform.
Why is it important?

English, as an international language is recognised globally and it is necessary for Vietnamese to get a better job or to travel.

However, the basic level of knowledge of English language is not sufficient and the youth needs to be encouraged to improve their language skills. A lot of resources are spent on teaching children and youth English in specialized language centres or online courses. That is the prime aim why Englishcenter.vn has been established.

Impact

By using a points system, the language learning game motivates people to spend more time online to study. Reaching a certain amount of points, they can transfer them into specific awards. The game also provides the possibility to be connected to each other, learn from each other and maintain the motivation of studying English. The impact of the game can be evaluated as the stimulating learning languages in more attractive way.

More information: www.englishcenter.vn

GFOUNDRY, GLOBAL EXAMPLE

Youth employment, Self-Development

Overall description

GFoundry is a complete digital solution for human capital management with gamified elements included. GFoundry is a mobile application, aligned with a brand or organisation, enhancing employees’ knowledge about organisation, engaging in various activities (quizzes, battles), earning the rewards and recognition in the forms of rankings, badges, with ability to manage and control the communication among the employees and management of the organisation on various issues related to their work.

Why is it important?

To engage and motivate employees to better assimilate the training processes and align them with the company’s strategy and culture. This works best with younger generation, more digital savvy, whose attention is generally driven by innovations, digital solutions, such as GFoundry global app.

Impact

The application GFoundry is created to drive inclusion, encouraging employees, both younger and senior generations of the company to engage in an entertaining and attractive way of training in the beginning of or during their employment. This application provides a good base for building confidence and champion the integration for younger and senior parts of institutions.

More information: http://gfoundry.com/
Overall description

European Banking Federation together with the European Banking Federation, as organizer of the European Money Quiz, have teamed up with Kahoot! to make learning about money and finance more fun. An international financial literacy competition has been launched in 30 European states to promote the awareness about the finance world as well as foster the healthy competitiveness within youth. The competition takes place in two phases. In March, during or around European Money Week, classrooms can play directly against each other in a live Kahoot! (live quiz) webcast on YouTube. The classroom winning this national money quiz on Kahoot! will be the national champion. The second phase is the European final, in May in Brussels. The classrooms that won the national competition will be invited to send a team of two students – and a teacher or parent to accompany them – to Brussels for the European finals.

Why is it important?

As there is low level of knowledge about personal finances not only within youth but even in general population, the aim of this educational contest is to motivate and engage youth in researching and eventually preparing for the competition, broadening the general knowledge and facilitating the opportunity for youth to get ready for the future real-world life activities and stages where financial knowledge is required.

Impact

Youth learns about personal finances trough youth-friendly online platform. European banking associations, The European Money Quiz, organized for the first time in 2018, was played by more than 41,000 13-to-15-year-old students from across Europe.

More information:
https://www.ebf.eu/europeanmoneyquiz/
SUMMARY OF STUDY TRIPS

The study trips in the scope of this project were organized with two main aims:

1. to gain a better understanding of youth engagement by NGOs’ experience in different regions and in different fields, as each region and organization has specific targets, problems and management;

2. to indicate where gamification can be used, how it affects target groups and to help recognize gamification as equal method.

Project partners got acquainted with the regional, local and organizational experience in each organization and met proper stakeholders. Youth workers and youth leaders discussed ways of engaging youth, reviewed actions for their communities that are already in place, exchanged good practices and discussed the possible limitations of engaging young people in social activities.

9.1. VIETNAM

9-19TH OF NOVEMBER 2017

Short introduction of visited organizations:

During the study trip project partners visited 8 organizations and youth enterprises.

**REACH** is a local non-governmental organization specializing in vocational training and employment for Vietnam’s most disadvantaged youth. REACH uses an innovative, highly pragmatic and effective training model which matches the needs of underprivileged youth with local industry and labor market requirements.

**Centre for Supporting Green Development (GreenHub)**, a Vietnamese non-governmental, non-profit organization under the Vietnam Union of Science and Technology Associations (VUSTA) with oversight by the Ministry of Science & Technology. GreenHub’s staff are highly experienced young professionals with on average more than 10 years working in the fields of communications, climate change, sustainable energy, environment and natural resources. The team has worked in national and international projects with governments, universities and investors in Vietnam, Southeast Asia and internationally. With special emphasis on youth, GreenHub hosts interns and volunteers to support its work and develop their skills.
V4D, an NGO managed by the Vietnam Association for Conservation of Nature and Environment (VACNE) with the support of Youth in Action program of European Commission in capacity building, and CCIVS (Co-ordinating Committee for International Voluntary Service) in the volunteer management. Organisation works on sustainable projects to protect the environment, provide career skills education services for vulnerable groups, encourage community development and cultural exchange.

Highland CDS is a social enterprise located in the north of Vietnam which operates as a commercial organization, however it commits to investing at least 51% of annual profit in registered social or environmental goals. The Highland CDS social enterprise commits to reinvest the entire profit generated to improve sustainable livelihood for local ethnic minority youth and indigenous knowledge conservation.

During the study trip, project partners have met several young people from Hai Phong representing several local youth NGOs, enterprises and other organizations found and led by young people. These organisations focus on educating youth and kids about environmental issues, waste recycling and green farming, working specifically with young people from disadvantaged groups (orphans, youth from poor families and rural areas), helping young people develop soft skills, promote volunteering etc.

Conclusions:

- To attract young people to an organization’s activities and to involve them in local activities, educational aspects should be mixed with entertainment. In general, young people are active during the events, but afterwards they lose motivation. Taking into account the environmental problems that exist in the country, young people are a part of society that is increasingly taking on responsibility for the environment, hence environmental issues and related activities are more attractive to youngsters than older generations.
- The Local/regional factor is more important to attract young people; as different areas have different problems related to youth. It is important to tackle youth topic at the local level, for instance, where youth has limited access to education and later on - low level of incomes.
- It is important to give the opportunity to practice, to become a leader in the community, to see the goals and benefits necessary for young people, to train soft skills, and personal competences. Youngsters rarely can see and set goals and the strategy to achieve them, as they have narrow perspectives, limited knowledge, skills and experience.
- When speaking about communication and attraction of youngsters, organizations mainly use Facebook, social media groups and students’ networks. However social media or any other mean of communication should be built with understanding of working with youth.

Despite the fact that each organization has its own specifics activities, the main problem – low level of motivation of young people - was noted during all visits. To achieve motivation, it is first necessary to demonstrate the potential benefits and goals of the activity, to enable young people to identify their expectations and the ability to compare and bring together the expectations and real goals of activities.

During the trip gamification was evaluated as a tool for:

1. identification of expectations;
2. demonstration of goals to be achieved;
3. linkage of expectations with goals;
4. linkage with benefits gained during activity;
5. evaluation of achievements;
6. identification of further personal development needs;
7. soft skills training;
8. practical life skills training.
Short introduction of visited organizations:

Asociación Civil Familia Gangitana de Rosario is oriented towards civic engagement through cultural activities and activities focused on promotion of sustainable lifestyles for youth. It also promotes civic engagement through culture; environmental campaigns and sustainable use of resources.

Fundación Federada promotes and supports a social and solidarity based economy, innovation, development, and sustainability in the region. The organization also works with and supports social entrepreneurship by providing microcredits and by helping of organization of voluntary work. Organization implements a program which helps young people to start an internship and employment, provides health insurance, mandatory health checks, trainings in social business, social and solidarity economy.

Ente de la Movilidad, plays a role between municipality, transportation system of the city and citizens: they inform citizens about new transportation projects in the city in an “easy to understand” way, mostly via games, educates society on sustainable transport means and sustainability of the city with formal and informal educational methods, organizes cycling classes for citizens and kids, stimulates interaction between citizens and municipality, initiates different uses of public space, works with and in schools, kindergartens, with parents and on the streets.

Fundación para la Democracia is an organization that works with human rights issues and strengthening of democracy. It sees education as a powerful tool and closely works with schools and colleges in Rosario in order to establish common understanding of such concepts as democracy, peace, slavery, grooming, bullying and cyberbullying among youth.

Centro de la Juventud, Youth Center of Rosario, is a very important place for local young people. The center works with youngsters from 13 years old on different projects. The activities center different groups of young people, for instance, young parents. The activities let youngsters be more involved in the city life, let them express their voice.

PUERTA 18, a youth NGO launched 10 years ago, working with kids and teenagers. Despite the fact that everybody has access to the Internet and Facebook, the organization is working to help young people use technologies meaningfully, for example for self-development and education. They teach kids programming and coding. The programs and tasks are divided for several age groups. 13-18 years old are learning to use technologies through games and tools for education, 18-24 – go deeper in technologies and the program is accredited as vocational education program.

National Ministry of Social Development, Formerly the Secretariat of Youth, works with the ministry and associations, complementing youth organizations to work with new tools, equipment, trainings, to give young people the chance to try things and see their own opportunities.

Life Argentina, a nonprofit, civil society organization that works with youth living in socially marginalized and extremely impoverished areas of Argentina. It carries out a number of programs and activities for the healthy development, happiness, and a hopeful future for the children they work closely with. Life Argentina works collaboratively with community centers and soup kitchens in the city of Buenos Aires and its suburbs.
Conclusions:

• Despite the fact that different educational opportunities are available, people do not always have job opportunities after graduation due to mis-match of education and labor market. Internship is the way to help young people to find an exact job and get practice.
• Young people are overloaded with information and tools, but they don’t have a practical skill. In other words, “they know everything, but know nothing”. Young people have to be trained to work in teams, take responsibilities, human, communicate, work independently and make decisions.
• The huge information flow and excess of things and information around decrease the motivation of taking action.
• The involvement of young people in different activities is directly related with the accessibility: the closer is the place of activities, the more involved youngsters are.
• It is extremely difficult to keep young peoples’ interest – they often start activities, but then interest disappears. They need to be learned of perseverance, to continue and to finalize what has been started.
• Workshops have a special meaning for young people – they get to know each other, they have a possibility to meet and learn diverse attitudes. During common activities there is no difference whether one comes from a rich or poor family, whether one is educated or not. The environment in the center is built so everyone can feel comfortable. Young people often tend not to accept each other, so the workshops are a chance to meet and get closer. The same with digital communication, digital gaming - it can bring persons together regardless of their origin and wealth.
• Reaching youth is not about creation of more physical spaces, but about networking and spreading ideas. It is not about making places with computers, rather about about content you can reach there, people you can meet and share your ideas with.
• The main challenges:
  • to help youngsters in need, collaboration with NGOs and shelters need to be established;
  • Social media is the essential tool to reach out to youngsters, but it has to be used smartly;
  • Word–of–mouth information is very important. Young people need a confirmation of their peers that something they do is good;
  • Every day challenge the distance – one needs to encourage them to participate in activities distant from the living place;
  • It is difficult to find people (staff), who love to work with kids, not only specialists in the field;
  • It is important to ensure a safe place, where diversities can meet.

Despite the fact that each organization has its own specifics in its activities, the leading need is the need for places, where young people and kids can spend meaningful and qualitative time in safe environment, where diversities can meet.

During the trip gamification was evaluated as a tool for:

1. Meeting with peers;
2. Self-development;
3. Identification of further personal development needs;
4. Soft skills training;
5. Practical life skills training;
6. Identification with society;
7. Different board and interactive games are used – games are considered as the most attractive and effective way for everyone (not only kids) to get involved in community life;
8. A chance to speak with specialists and experts via digital tools, chats, digital communication.
9. Digital games allow not only to learn, but also to test the knowledge.
9.3. INDIA

Short introduction of visited organizations:

Federation of International Innovation and Research for Entrepreneurship (FiiRE), (Aurangabad). FiiRE is the association for the entrepreneurs and its aim is to 1) Providing Industrial Internship Opportunities worldwide to in-demand Indian youth 2) Encouraging youth and youth leaders in Industrial Innovation and Research worldwide and Promoting the spirit of Entrepreneurship 3) Promotion and utilization of Government schemes related to industrial development. The mentors from different background, industries, organizations always support volunteer trainings to the Youth Entrepreneurs. With the joint ventures around the globe FiiRE also take special ‘webinar’ trainings for the awareness of the EU funding opportunities with its partner organization in Greece which is IED-Institute for Entrepreneurship Development.

Sandip Foundation (Not for Profit Organization):

Sandip Foundation was established with the core objective of rendering selfless dedicated service to higher education in the fields of Engineering, Science, Arts, Management studies, Polytechnic and Pharmacy. The Visionaries of Sandip Foundation have been involved in the field of higher education since the last fifteen years. During this period, they have provided the most valuable service to thousands of students across the country. In the quest to enhance the cause of higher education, professional courses across various fields are designed and set up with the institution housed out of Nashik. It is our Vision to provide education aided by the best infrastructure available in the most congenial atmosphere so that every student can aspire high, achieve his dreams and succeed in life. Sandip Foundation is an educational institution which strives to form men and women who will build a more just and humane world. It strives for an intellectual endeavor that focuses on critical and creative thinking, with the aim of social transformation. Our colleges are among the Best Engineering colleges in Maharashtra. The College makes a preferential option for the marginalized and it seeks to forge all-round development, inculcating both human and spiritual values. Competence, compassion and commitment are the hallmarks of the human person we seek to encourage. Sandip Foundation is affiliated with All India Council of Technical education and to the Pune University. In its short span of existence, it has created a name for itself through its honest effort to provide quality education. The Institution is spread across more than 200 acres in a lush green environment in which all the colleges are housed. Being among the Top Engineering Colleges in India, its infrastructure is world class with workshops, state-of-the-art Laboratories, overhead projectors in every classroom, an extensive library and hostel facilities for outdoor students. The faculty and staff are dedicated in their task of making the Institution a world-class learning centre and hence constantly look to improve the learning process. The relentless pursuit of new horizons in research, teaching, and cultural service is what the Foundation considers its mission to be. We aim to create, preserve, renew and disseminate knowledge for the betterment of the world we live in. We believe that we can help our students learn tomorrow today and emerge as leaders with competence, conscience and compassion.
Maharashtra Centre for Entrepreneurship Development (MCED), (Aurangabad) ([http://www.mced.in/](http://www.mced.in/))

Established in 1988, certified organization, having Head Office in Aurangabad, having 8 Regional offices and 35 Dist. Offices in Maharashtra. MCED is having 37 accredited trainers and are having International and National level exposure in the field of entrepreneurship. Have provided an entrepreneurship education for more than 1 miljon participants in 30 years of program. Main target groups: educated un-employed youth, potential entrepreneurs, college students, women etc. Providing different level training programs.

EC. Mobility, (Aurangabad) ([http://www.ec-mobility.biz/about.html](http://www.ec-mobility.biz/about.html)) provides innovative, reliable, accurate and consistent solutions for latest technologies in order to enable a new age of mobility. Employs young people, students, provides also internships and boot camps.

Sandip University icl. Institute of Polytechnic, Institute of Technology and Research Center, Institute of Engineering & Management, (Nashik) ([http://www.sandipuniversity.edu.in/](http://www.sandipuniversity.edu.in/)) Sandip University is one of the top universities at Nashik (Maharashtra) which serves as the destination for 21st-Century Education. The school ranks under the ‘Top 10 Emerging Universities of India’, and the 1st Mega University in North Maharashtra. Sandip University is an autonomous educational university guided and governed by the policy, rules and regulations of Maharashtra state and under the regulations of the University Grants Commission. The University has various schools offering various undergraduate and postgraduate programmes with the latest curriculum with plenty of regular and elective courses, choice-based credit system, outcome-based education, student-centric and employability focused learning. The schools include Engineering & Technology, Computing Sciences & Engineering, Law, Commerce & Management Studies, Pharmaceutical Science, Social Science and Fashion Design & Beauty Cosmetology.

Conclusions:

- It is necessary to study in depth what are the conditions that create new unemployment;
- What exactly skills are lacking in young people? It is concluded that education is not always a guarantee of job opportunities.
- Lack of soft skills – communication skills, setting of goals, work ethic, teamwork, networking, decision making, positivity, time management, motivation, flexibility, problem-solving, critical thinking, and conflict resolution.
- Preparation for job interviews, preparation of cv, interview – how sell yourself are the basic topics which can help young people to begin the job carrier.
- In spite of development of technologies, for most young people the only access to technologies are mobile phones. There is a need to improve the technology’s infrastructure, providing both training and accessibility at very grassroots level.

During the trip gamification was evaluated as a new and potential opportunity, in particular to improve the soft skills and skills of young people to begin their work experiences.
Gamification is a perfect method and possible solution for many issues and it is a great tool for synergy and connections in the globalised world. Even interculturally there are many differences but technologies, applications, mobile devices have become an inevitable part of the life of young people in practically all the parts of the world and all types of communities, social, educational and economic background. That is why gamification tools shall be understandable and effective globally. However, implementation of the gamification approach requires some basic steps to be taken.

There are several prerequisites to apply gamification as a strategy to involve youth in different activities:

a. clear understanding of motivation (described previously);
b. relevant gamification method - consider offline and online (described previously);
c. educated youth workers.

In order to create a relevant gamification project, process or content, several steps need to be followed:

1. **Focus on user needs.** A profound understanding of users, their motivation and needs, as well as of context characteristics are fundamental requirements for gamification projects. Focus on user needs is an essential component. The experts also mentioned user involvement in the ideation and design phase as a requirement.

2. **Defining objectives.** The objectives of a gamification project should be defined clearly, as clear goals are essential (1) to guide the overall project, (2) to evaluate the success of a gamification approach and (3) to be able to assess, whether gamification can be used to achieve the desired objective.

3. **Testing.** It is important to evaluate and test gamification ideas as early as possible. Regular user tests are often mentioned as additional condition for successful gamification projects.

4. **Monitoring.** Continuous monitoring and optimization of gamification projects after implementation is a prerequisite for long-term success.

The creation of content and activities for gamification is one of the most challenging tasks within gamification project. The content should be interactive, engaging and rich with multimedia elements. Gamification content should have an ultimate goal, as well as appropriate conditions and opportunities to achieve the goal. The main feature of the goal is feasibility – all learning activities should be achievable. They have to be tailored and adapted to students’ potential and skill levels. At the same time, each subsequent task is expected to be more complex, requiring more efforts from youngster and corresponding to their knowledge and skills. It practically means increasing of difficulty levels of any activity, just like in games.

In order to develop diverse skills in youth, they need to be able to reach the objectives by various paths, releasing creativity and independent thinking. This allows youth to build their own strategies, which is one of the key characteristics of the active learning. By adding game elements and mechanisms, the tasks that need to be accomplished are supplemented by accumulation of points, transition to higher levels, and winning awards. All these actions are aimed at achieving predetermined objectives of specific gamification project.
Which elements will be best to include depends on the defined objectives. Activities that require independent work of youth bring individual awards (such as badges). Activities requiring interaction with other learners constitute the social element - they make students a part of a big learning community and their results might be public and visible (such as leaderboards, social media etc.).

10.1. PROCESS, TOOLS AND TEMPLATES FOR GAMIFICATION

The gamification process has to be considered as consisting of several steps. A. Marczewski proposes several essential steps for creation of the framework for gamification process\(^\text{69}\). In terms of use, such aspects as “Analytics” might be rather transformed as “Analysis”, which includes indicators and measures, which are reached by youth. These can be quantified, but also quality related indicators. For instance, mood or behaviour improvement of some socially marginalised youth representatives, might be a relevant example of the “Analysis”. For designing and implementation process there are 8 important questions:

1. Do I know WHAT I am going to gamify?
You must be totally sure what the activity is that you are going to gamify.

2. Do I know WHY I am gamifying it?
Just as important as what is why. What do you hope to gain from this project?

3. Do I know WHO will be involved?
In terms of youth, it is clear, but more detailed explanation of age or geography might be settled by youth worker. Who are your “players”? You need to know that to be really able to engage with them.

4. Do I know HOW I am gamifying it?
There are different approaches and these have to be clearly settled. Once you know What, Why and Who, it is time to work out what you are going to do to gamify it all. What elements and ideas will work best for your system? Are you going to employ rewards or are you going to work purely with intrinsic motivators? It will be different every time.

5. Do I have ANALYTICS set up?
You have to have metrics and analytics of some form – otherwise, how do you measure success, check it is working, find critical points and also report back to engaged youth?

6. Do I have TESTED with users?
You must test anything like this with the target audience. They are the ones who will be involved, not you and the designers.

7. Do I have ACTED on feedback?
Collecting feedback from testing is only beneficial if you actually act upon it.

8. Do I have RELEASED the solution with proper informative support?

Finishing and releasing are different. Silently pushing your new system out is pointless and nobody will notice or use it. Make some noise about it, get people on board before they have even seen it! You can engage youth, already development process, which will increase the rate of use and improve distribution the gamified project as soon as it is finished and ready to be distributed.

Picture 45. Gamification framework by A. Marczewski

Different templates like charts, outlines, scoring schemes are available to settle proper gamification process for gamification experience. There are 3 different approaches selected for youth workers to gamify their activities. However, considering gamification it has to be taken into account that three main components need to be taken into consideration in the designing of the gamification process:

- keeping it simple;
- more personalization and focus on the results;
- feedback.

Badges by Badgecraft

Example of such approach, where simple process of offline feedback as engagement component, simplicity and keeping concentration on the main aim - focus on the result (workshop), can be observed from the Badgecraft example (Picture 46).

Picture 46. Open Badges for Recognition and Feedback

Ibidem
Gamification Template by Ozma

The step by step instruction uses terminology “player”, but in context of youth work “youngster” has to be used as main target group. Depending on the approach - gamification can happen as activity with youth and youth can be actively involved in creating rules, actions, rewards etc. If the youth are the proper age, they can also participate in the very beginning of gamification, defining goal and challenge to be gamified.

10.2. GAMIFICATION APPLICABILITY

Gamification applicability and the respective Gamification KIT is simple, but is also a relevant tool for planning gamification elements in every youth activity, adapted for youth workers. There are three main components: the user’s problem (youngster’s problem), the user goal and the value proposition are the key elements. Those effectively managed by the youth worker can lead to great results in pursuing youth specific targets.

USER PROBLEM

Identifying the user problems is the starting point for the user centered design process. There must be a clear user problem that is worth solving, and it is important to write it down when discussing about the applicability of gamification, since not all user problems are relevant to be solved through the means of gamification.

USER GOAL

It is important to understand the meaning of user goal in this context. The user goal means the ultimate objective of the user, related to their personal development, community, education, etc. The goal is the underlying reason why the user wants to use the system. For example, in sports tracking applications, the goal is not to see how much a user has run, but it might be to lose weight or get more motivation to running. In social media applications, the user goal is not to get a lot of likes, but the underlying goal might be to get social recognition or to feel as being important.

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Gamification chart, source: http://www.ozma.se/download/Gamification_Chart.pdf
VALUE PROPOSITION

The value proposition describes the value the solution proposes to deliver to the user. In other words, it describes the current user needs or problems and how it is proposed to be solved in the new solution. The value proposition gives boundaries to the solution, and is thus important to define before thinking about the gamification aspects.

Picture 48. Gamification applicability

GAMIFICATION APPLICABILITY

Are user problem and goal related with motivation?

- No
- Partly
- Yes

Is it difficult for user to find motivation to complete goal?

- No
- Partly
- Yes

Can user goal be divided to meaningful checkpoints?

- No
- Partly
- Yes

Is value proposition encouraging behaviour change?

- No
- Partly
- Yes

EMOTIONAL EXPERIENCES

Which emotions should the users experience while interacting with the gamified system?

- SENSATION
  - Feeling
  - Sense-pleasure, horror games

- FANTASY
  - Power that not in real life

- NARRATIVE
  - Introducing a story, giving purpose

- CHALLENGE
  - Overcome obstacles, puzzle games

- FELLOWSHIP
  - Give a sense of belonging

- DISCOVERY
  - Learn more about the game or yourself

- EXPRESSION
  - Self-expression, Minecraft games

- SUBMISSION
  - Spend time, no constant challenges

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Gamification Kit

Kallioja, T., Gamification Kit: A practical toolkit for designing user-centered gamification, 2017
Gamification Model Canvas is an agile, flexible and systematic tool created by S. Jiménez, to help find and evaluate solutions based on game design and to ultimately develop behaviors in non-game environments. Gamification Model Canvas is based on formal models of game design and experience in gamification projects. This free tool is based on two main works, adopted globally: “MDA Framework: A Formal Approach to Game Design and Game Research” by Robin Hunicke, Marc LeBlanc and Robert Zubek and “Business Model Canvas” by Alex Osterwalder. This model is more complicated, comparing to previous ones and only some elements can be used to create gamification experience, since it is more oriented to the professional gamification development needs. However, some of section can be successfully used or integrated as part of previous templates.

<table>
<thead>
<tr>
<th>PLATFORMS</th>
<th>MECHANICS</th>
<th>Design for:</th>
<th>On:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the rules of the game with components for creating game dynamics.</td>
<td>How will we use the selected components to develop behaviors?</td>
<td>Design by:</td>
<td>Iteration:</td>
</tr>
<tr>
<td>What platforms do we have available for incorporating mechanics?</td>
<td>How can we explain the mechanics to our players?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What platforms can we use to bring mechanics to the player?</td>
<td>How can we increase the difficulty of mechanics over time?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What platforms will the game run on?</td>
<td>Examples of mechanics:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watch this video and get 10 points</td>
<td>Watch survey and get expert level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete this form and unlock this badge</td>
<td>Read content before 15 minutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read content</td>
<td>Recommend something and get this prize</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>DYNAMICS</th>
<th>AESTHETICS</th>
<th>PLAYERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the elements or characteristics of the game to create mechanics or to give feedback to the players.</td>
<td>Describe the run-time behavior of the mechanics acting on the player over time.</td>
<td>Describe the desirable emotional responses evoked in the player, when they interact with the game.</td>
<td>Describe who and what the people are like in whom we want to player over time develop behaviors.</td>
</tr>
<tr>
<td>What components will we use to create our dynamics?</td>
<td>What dynamics will we use to create the aesthetics of our game?</td>
<td>What elements will grab the attention of our players?</td>
<td>Who are our players?</td>
</tr>
<tr>
<td>What components will create game mechanics?</td>
<td>What dynamics work best for our players?</td>
<td>Why should they play?</td>
<td>What are your players like?</td>
</tr>
<tr>
<td>What components will be used to provide feedback?</td>
<td>How will these dynamics work in our game?</td>
<td>How can our players have fun?</td>
<td>What do our players want?</td>
</tr>
<tr>
<td></td>
<td>Some dynamics:</td>
<td>Some aesthetics:</td>
<td></td>
</tr>
<tr>
<td>Points</td>
<td>Assignment</td>
<td>Narrative</td>
<td>Challenge</td>
</tr>
<tr>
<td>Progress Bar</td>
<td>Achievements</td>
<td>Challenge</td>
<td>Fellowship</td>
</tr>
<tr>
<td>Badges</td>
<td>Missions</td>
<td>Discovery</td>
<td></td>
</tr>
<tr>
<td>Avatars</td>
<td>Achievements</td>
<td>Expression</td>
<td>Fantasy</td>
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<tr>
<td>Leaderboards</td>
<td>Missions</td>
<td>Sensation</td>
<td>Submission</td>
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<tr>
<td>Virtual Goods</td>
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<tr>
<td>Levels</td>
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<tr>
<td>Real Prizes</td>
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<tr>
<td>Countdown</td>
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<tr>
<td>Inventory</td>
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<tr>
<td>Dice</td>
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<tr>
<td>Virtual Currency</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>BEHAVIORS</th>
<th>COSTS</th>
<th>REVENUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the behaviors or actions necessary to develop in our players in order to get returns from the project.</td>
<td>Describe the main costs or investment for the development of the game.</td>
<td>Describe the economic or social return of the solution with the introduction of gamification.</td>
</tr>
<tr>
<td>What behaviors do we need to improve the challenges of the game?</td>
<td>What are the main costs of the game?</td>
<td>What economic or social challenges set out the game?</td>
</tr>
<tr>
<td>What behaviors would our players like to improve?</td>
<td>What budget is available for achieving the challenges set?</td>
<td>How will we measure the success of the game?</td>
</tr>
<tr>
<td>What behaviors can be improved?</td>
<td>Can we phase costs over time, based on the achievement of objectives?</td>
<td>What results do we hope to achieve from the game?</td>
</tr>
<tr>
<td>Examples of behaviors:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watch video</td>
<td>Watch survey</td>
<td></td>
</tr>
<tr>
<td>Answer survey</td>
<td>Complete form</td>
<td></td>
</tr>
<tr>
<td>Buy something</td>
<td>Read content</td>
<td></td>
</tr>
<tr>
<td>Recommend something</td>
<td>Recommend something</td>
<td></td>
</tr>
<tr>
<td>Go to a website</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Send an email</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GAMIFICATION MODEL CANVAS

Gamification Model Canvas is based on the Business Model Canvas. This work is licensed under the Creative Commons Attribution-Share Alike 3.0 Unported License. To view a copy of this license, visit http://creativecommons.org/licenses/by-sa/3.0/ or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA.

Please send us your valuable feedback!
canvas@gameonlab.com

www.gameonlab.com

Gamification Model Canvas source: http://www.gameonlab.com/canvas/
10.2.1. Questions to validate gamification applicability

One of the best ways to validate gamification applicability is to check it by different questions presented by T. Kallioja within Gamification Kit.

**Are user’s problem and goal related to motivation?**

The purpose of the first question is to discuss if motivational aspects are present in the user problem and goal. It is necessary to discuss if motivational aspects are related to the user problem or goal. If motivation plays a role, gamification could be used to encourage user activities.

**Is it difficult for user to find motivation to complete the goal?**

As the first question discussed, an essential part in gamification is to find motivational aspects in user goals. In addition to the motivational aspects, these aspects must also be something where user needs encouragement. Gamification is ideally used to encourage activities that the users are interested to complete, but have difficulties in getting themselves motivated\(^\text{74}\). Hence, it is important to discuss whether the user has difficulties to find motivation for completing the desired goals. This way it can be better understood if gamification could be used to encourage and motivate the users to complete these goals.

**Can the goal be divided to meaningful checkpoints?** The identified user goal should not be tied to the gamification context, but be more broadly related to their needs. These goal-focused activities should help the user to advance towards the main goal. Hence, it needs to be possible to divide this main goal of the user into smaller tasks or activities that can act as checkpoints. Checkpoints can be goals in the gamified system, and act as progress indicators, showing the progress towards the main goal. This way, the ultimate goal is divided to more easily approachable activities. The checkpoints are important in gamification so that the user can be given slowly increasing challenges and show progress, keeping user engaged. If checkpoints can be identified from the main goal, it could be meaningful to apply gamification to the concept. If these kinds of checkpoints however cannot be identified, the gamification mechanics would be difficult to be applied, as there would be no clear progress indicators to show the user how he or she is progressing towards the main goal.

**Is the value proposition encouraging behavior change?** Gamification is intended to change people’s attitudes and behaviors\(^\text{75}\). Hence, it cannot be meaningfully applied to any kind of solution without discussing the motivational aspects related to the solution. It is necessary to discuss if the proposed solution is something that encourages users to change their behavior. If this kind of aspect can be identified from the value proposition, the motivational aspects play a key role in the value proposition and gamification could thus be used to encourage the behavior change of the users.

There are no exact rules when gamification should and should not be used, but the answers to the questions should guide the decision process and help the decision makers in making more informed decisions whether gamification could be applied to the concept or not.

\(^{74}\) Hamari, J., Koivisto, J., Pakkanen, T., *Do Persuasive Technologies Persuade?*, 2014

\(^{75}\) Ibidem
10.3. DESIGN OF GAMIFICATION FOR EVENT

Event gamification is a relatively new concept. However, gamification is a fantastic, and simple way to make attendees feel completely immersed in an event. A poorly planned game can break an event. Applying game design concepts—like points, competition, and awards - to non-game contexts is proven to create psychological satisfaction and meaningfulness in tasks. Certain elements of game design help players create narratives as well as experiences of social relatedness. It’s about more than just playing games. Gamification simply encourages to do things in exchange for rewards. It might be a physical prize, emotional satisfaction, or community building. By using the right game design, it’s possible to direct gamification towards meeting any number of event goals.

1. Define expectations. It’s important to define what sort of expectations relate to particular event. An event that is suitable for gamification is one where event planner is interested in understanding engagement, and improving attendee participation and activity in the pursuit of event goals. Gamification is also typically done through an event app, or other dedicated mobile technology. While offline gamification is definitely possible, it is infinitely more difficult to track activity and award points.

2. The demographics of attendees, engagement and importance of reward. In the context of the project, youth as a target group is expected to be “young”, in other words - gamification is suited towards younger millennials, or the quickly upcoming Generation Z. Everyone plays games at some point or another, it’s much more prudent for an event planner to focus on the game design. Planners can create the ideal gaming circumstances for each particular attendee demographic. Instead of asking “Will my attendees play games?”, ask “Why will my attendees play this game?”.
3. **Reward.** An important aspect of motivation is reward. First and foremost, your game should be engaging so attendees want to play it. Try to come up with an overall theme for the game that makes sense for your event. Gamification is more likely to succeed when the creator sets up reward circumstances suitable for the group of players. So when setting up the gamification for event, consider what type of reward will most cater to that particular demographic. Is it physical prizes? Recognition from their peers or other intangible rewards?

3. **Selection of proper technology** to support gamification process and fun. For any event, which anticipates attendees gaining some knowledge or learning, gamification is an excellent way to incorporate education in the attendee’s experience without overloading the user with information—and to make sure that they’re leaving with the information that they need. Incorporating skill testing questions is a great way to gamify education or training events. Like other education apps, players can gain points for answering questions correctly and trying tests again. At an event, you can also award points for downloading documents, or exploring different parts of the app.

Adding an element of competition and motivation via a points system, and even an in-app scoreboard, can go a long way in making attendees more inclined to engage in learning activities. Training events can beneficial, but educational gamification can be incorporated into any event where learning is an event goal. Gamification is one of the best ways to guarantee event app adoption. However, if the game stops being fun – you can bet that attendees will stop using app. Keep attendees using event app by making game fun. Include a leaderboard that displays the top ten players with the highest scores to motivate attendees to keep playing with friendly competition. Up the stakes by having prizes for the top three players.

4. **Make it beneficial.** A key piece to successful gamification is making it easy for attendees to get something out of your event, all while having fun. For example, using gamification to promote networking. Networking can be difficult for many attendees, but with the help of gamification, attendees can easily break the ice in a less serious manner. By adding points to certain networking activities, it encourages attendees to talk to one another while still gaining traction in the game.

All of these elements can lend to a fun and exciting game at event.
10.4. EFFECTIVENESS OF GAMIFICATION

Effectiveness of gamification might be analysed from the very different perspectives. However, in terms of the project, only two aspects will be analysed as the most critical - engagement and sustainability.

MEASUREMENT OF ENGAGEMENT

Engagement plays the key role within the gamification process that also defines how effective the process has been. Measuring the effect of gamification on target users’ (in case of project - youth) behaviour – remembering that gamification can modify user behaviour both directly (i.e. through goal setting, calls to action and effort increases), and indirectly (i.e. by improving motivation and improving team spirit).

As attested by Zichermann and Cunningham (2011)\(^7\) engagement can be measured in five ways:

- Recency (the average time period between one activity and the next);
- Frequency (the amount of times an activity is participated in a given time period);
- Duration (the length in time of the participation of an activity);
- Virality (the rate at which an activity propagates from one user to other users);
- Ratings (the rating or review).

This model of measuring engagement provides the gamified approach with a means of benchmarking the effectiveness of the specific approach itself. All of these are valuable metrics to monitor so that youth workers are keeping a close eye on the ongoing performance of the gamification project.

SUSTAINABILITY OF GAMIFICATION

The effectiveness of the gamification process is connected also to sustainability. The main failure of gamification process happens because it is designed very poorly, hence, relevant design with clearly defined goals, high engagement level and clear benefit for engaged (youth) is a key to sustainability. The Gamification like many other processes is not a “one size fits all” solution and has different aspects. These aspects have to be carefully analysed by youth worker to achieve proper results and impact on the youth by the gamified approach. Gamification has to be observed as a process looked at it in a long term perspective, not a single activity. This statement is also confirmed by Kris Duggan, the founder of the gamification platform Badge Ville. He explains that: “Gamification is not a project...it’s a program that gets invested in for the long-term. Those that understand that see the most impactful and meaningful results”.

The sustainability process has to be observed from the point of view of the evolution gamification process as such. Evolution gamification as a process is in transition from Gamification 2.0 to Gamification 3.0, where the process is presently headed towards sustainability. The Gamification 3.0 is a combination of the traditional gamification and the social and insight driven experience of the Gamification 2.0. See image below:

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7 Zichermann G., and Cunningham C. Gamification by design: Implementing game mechanics in web and mobile apps, 2011
AlMarshedi proposes Framework for Increasing the Sustainability of Gamification Impact (SGI). The SGI framework contains five main elements and other sub-elements (see more details in SGI framework description). These are flow, relatedness, purpose, autonomy and mastery, which work together in order to balance and design the best experience to the user in different scenarios. The SGI framework proposes a focus on flow dimensions and motivational determinants in order to provide engaging and sustainable gamified experience.

The SGI framework could assist designers in several ways. First, it can give them with the ability to create engaging applications that draw upon intrinsic motivation. Second, it can provide elements that relatable to the user, through the focus on user’s skills and expectations.

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78 SGI Framework, source: https://www.researchgate.net/figure/SGI-Framework_fig1_281459732
CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Based on the results of the literature review, case studies, experience exchange trips and the online questionnaires, a number of conclusions regarding the state of gamification in youth work were made. The primary conclusions are discussed below and recommendations are given, however the analysis made is much broader and some of the areas are still less covered due to the volume and variety of our findings.

There is an enormous amount of information available about gamification and its application through a variety of sources. However, little research and lack of attention is paid to study the benefits of using gamification to engage youth in particular. Informative guides for organisations or institutions planning to use gamification as a tool to engage youth are often missing. Previously published materials on gamification in the youth field are mainly limited to collections of attractive ice-breaking and networking activities, however the deeper sense of gamification needs to be revealed and explained for use in youths’ education and engagement in various topics and activities. Hence, a list of relevant research and publications available online, and sources of additional information on youth gamification tools is an important area to pay attention to.

This handbook was created with exactly this aim - to educate youth organizations on how to use digital gamification, how to create and integrate gamification elements by using existing templates and applications, how to involve and educate a greater number of young people on various topics such as democracy, unemployment, civic engagement, sustainability, peace building, environment, local community development, etc. Although the handbook “How to succeed with Digital Gamification for youth” will be useful to a broad spectrum of readers, the primary audience is likely to be youth organisations or institutions working with youth and its stakeholders.

It is important to establish a coherent and clear understanding of the gamification and its types in order to effectively use these tools. Commonly accepted and the most relevant to youth field is Deterding’s definition of gamification as “the use of game design elements in non-game contexts.” The whole handbook is based on and around this definition, shedding the light on the explanation of gamification and game design elements which can be used in a number of contexts. There are also opinions and definitions expressed by other prominent and actively working game design experts, such as A. Marczewski, G. Zichermann, J. McGonigal and others.

The handbook provided a range of sectors and fields where gamification has recently been used and had some effect on youth engagement. Most commonly, gamification has been applied within the educational environment: in formal, non-formal and informal education. Starting from basic school education programmes with innovative gamified elements to less formal gamification tools such as interactive presentations, social media, digital apps or gamified simulations, as an example, to make education attractive and integrating.

To promote the digital gamification as a new, innovative tool for youth engagement, a wide list of topics related to youth and youth workers was discussed: democracy, unemployment, civic engagement, human rights, youth entrepreneurship, environmental education, health and self-development, social responsibility,
and active participation in community. As gamification is only a means to reach greater involvement, interest, motivation, determination and other useful characteristics, all mentioned areas has been analysed from the perspective of young people and youth workers: what benefits gamification brings to these fields of action and how it is (and can be) used.

Various methods of learning and teaching were discussed in the sections describing gamification in education. A lot of the tools and methods are already implemented by schools, universities and informal educational entities, however still efforts are missing in increasing the interest and motivation of young people. Instead of building rooms for discussions, simulations and project-based work, formal education general is still less flexible than informal one, concentrating on personal achievements reflected in grades or attendance of theoretical lectures. Non-formal and informal education is richer in terms of application of engaging gamification tools and methods. However not all youth workers and non-formal educational entities have fully acknowledged the role of digital and offline gamification – the successful application of such means understanding of the target audience, the needs and interests of it, as well as the objective of each specific activity organised for the target group – youth.

Gamification for youth does not appear solely in organised youth work. Each individual can benefit from the digital applications and materials developed for youth regardless of the place and time. It is well known, and also proven by an online questionnaire for youth, that young people are actively using different gamified digital tools (games, learnings apps, collaboration tools etc.) for their private use and learning, for instance, in order to create healthy habits, learn new languages, improve the knowledge about various topics (ecology, social trends, programming, entrepreneurship development etc.), search for a job, train brain activity, gain inspiration, communicate with peers, express one self, involve into community activities and political decisions and many more.

Youth workers can even be unaware, however various gamified opportunities are already been used by young people, therefore youth workers need to apply appropriate ones for their work to go hand-in-hand with their target group. The specific events and activities organized by youth workers are opportunities to personalize activities for concrete groups during offline activities. Online activities are good for informing and teaching, however face-to-face events are more engaging as they involve a socializing element, build deeper empathy and in general are more effective. However, it does not mean, that offline gamification is completely separated from digital gamification, as the internet is still the most powerful media to link with young people.

The struggle, which appeared during the analysis of the questionnaires within this study, is understanding “gamification” itself. In order to evaluate the situation of gamification use among youth and youth workers and provide areas of potential improvement and development, the online questionnaires were distributed in the partnering countries of this project to the youth and youth workers. The results have shown, that only 50% of surveyed young people and only 56% of youth workers truly understands what “gamification” means, therefore bigger attention should be put on promotion of gamified learning and “doing” techniques among both groups to reveal the potential of young people to the maximum. The quantitative results of this survey does not necessarily mean that youth workers are not using gamification methods, rather they are unaware of it and/or not using the opportunities to the full. It is partly proved by quite large part of the young people, who thinks, that gamification occur in digital environment only. However, this is not true, unless the surveyed youth has never been involved in offline activities involving gamified icebreaking, networking, learning and other kinds of activities, or are not aware of it.

According to the youth and youth workers in Latvia, Estonia, Croatia, Portugal, Argentina, Vietnam and India,
formal and informal education are the most important areas for gamification implementation. Youth workers have stated that other most requiring fields are civic participation, the activity of NGOs, charity and social campaigns, sports and cultural life. Youth in turn rate business management as the area also requiring attention to game-based techniques and tools for increasing motivation and engagement. In general, young people think, that the greatest benefits, what gamification brings, are attraction of attention and entertainment of young people during their activities - learning, working, socializing etc., as well as raising of the interest towards usual things, that makes studies and work more enjoyable and can significantly improve the communication with others. This need to be taken into account by educators, employers, youth workers and other stakeholders.

Another thing to note is that, according to surveyed youth, the most enjoyable activities of gamification are team work and icebreaking activities (as offline gamification techniques) and the use of social media and digital collaboration tools (as online gamification techniques). However, the survey was not able to rate which online or offline gamification is more affective for youth, and this question requires deeper analysis.

To gain deeper understanding on how youth workers are implementing gamification, study trips were organised to Vietnam, Argentina and India, which were reviewed and analysed to provide insight into youth engagement
RECOMMENDATIONS

Regardless of the variety of inspiring examples, there are still struggles with the application of gamification on a wider scale. The basic barrier for stakeholders and organisations is misunderstanding or a lack of clear definition of gamification. The creation or application of basic gamified tools and elements such as points or/and reward systems without understanding of clear objective poses a potential threat for gamified activity, being ineffective and meaningless. This in turn will not affect youth positively in the long term, the way it should. Missing the right objective also reflects on missing the needs of target audience, the audience itself and implementing the wrong approach. Young people are of different ages and interests, so different approaches need to be applied in terms of gamification. It is worth remembering that motivators for 15 and 29 olds are also different, however both are considered as ‘the youth’. It refers to the content, as well as the design of the gamified activity. The right tools and methods need to be selected. The youth today are quite demanding in terms of proper design, regardless of the activity - offline event setting or digital app design. Young audiences need a compelling, attractive, or “catching” reason to keep coming back and stay engaged on a continual basis, or gamification might fail to achieve its desired results. It is recommended to invest in a planning of infrastructure, design of gamification elements and provide the support systems that will maintaining the attractiveness and engaging elements of gamified activities.

Before applying gamification, not only the right game elements need to be selected, but the whole strategy of gamification has to be settled and revised. In Chapter 10, recommended guidelines were provided for gamification process planning and executing, offering the examples of A. Marczewski’s several steps for gamification framework creation to simplify the processes of planning and design development.

It is crucial to understand WHAT to gamify and WHY this needs to be done, as it is important to identify gaps, improvement areas and challenges related to youth engagement in terms of motivation, perception, possibilities of choices and other factors. The next reflections, that have to be done prior the gamification activities, are related to: WHO will be involved and HOW the gamification need to be run, not forgetting to identify the criteria of result assessment and testing gamification with the final users – youth. The participation of target group and their feedback is of special importance, just like marketing research before the launching the business. After testing and reviewing the feedback on planned activities, the important part is to take the feedbacks in account and improve the experience for others. It does not matter; it the object is digital learning app or educational summer camp. We recommend to review and apply these steps for clear understanding and connection of your objective with the gamification aims.

Different templates like charts, outlines, scoring schemes are available to settle proper gamification process for gamification experience. It is recommended to design user-oriented activities, identifying user problem, user goal and value proposition. In case of this study, youth as a user group is what matters the most.

As a recommendation to establish gamification process, the Gamification Model Canvas - agile, flexible and systematic tool, presented in Chapter 10, can help to find and evaluate solutions based on game design and to ultimately develop behaviors in non-game environments. This and other tools and template are recommended to be used as support for designing gamification process.

Hence, the recommendation is to follow and establish a tracking system, while designing the gamification pathway, which clearly follow specific changes of such indicators like behavior. Measuring the effect of gamification on target users’ such as youth behaviour, it is recommended to keep in mind that gamification can modify users’ behaviour.
both directly (i.e. through goal setting, calls to action), and indirectly (i.e. by improving motivation and improving team spirit).

Taking into account observations, questionnaire analysis and available studies, researches and other publications, more initiatives and studies are required in order to promote the concept of gamification and showcase possible results and impact of proper gamified techniques used for the benefits of young people. Although, this requires long term observations, the gamified tools are already widely used even without noticing the presence of special “gamification”. Bigger awareness gamifying the work with youth need to be reached by integrating communication and learning (teaching) methods into fields that at the first glance still seem to be far from flexible gamification implementation, for instance, formal education, business management or employment.

The creation of this handbook has prompted a need for future long-term work at national, regional and global levels with the main subject of gamification as youth engagement tool. The recommendations are based on a literature review, data collection through the desk research, observations and meetings during the study trips, case studies and the online questionnaires as well as feedback from the project partners. The experiences of the project partners, as well as the involvement of volunteers and relevant stakeholders have been used to gather a wide scope of gamification related quantitative and qualitative data as a contribution to the handbook. The created handbook should be viewed as supporting guidelines and a reference tool to increase the application and use of gamification elements in the youth sector.

More studies and youth work projects towards understanding on establishment of effective gamification environments (real life or digital environment) need to be launched. The most effective way to reach a deeper understanding of the concept is working out guidelines for gamification implementation, based on deeper research. Gamification as a part of youth work is still poorly described, as gamification is studied more in the contexts of education and business management. There is a need to research more such questions. For instance, if there is a sufficient number of gamification activities done by youth workers in a real life environment, or whether there is a lack of understanding and recognition of non-digital gamified techniques among the youth; or which – digital or non-digital – environment is more effective in terms of gamification.

These topics are important and can bring a valuable contribution to the knowledge pool about the application of gamification in the youth sector.
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