

**GUIDE ME AND FIND ME: GAMIFICATION AS MOTIVATIONAL DRIVE
FOR PARTICIPATION IN CROWDSOURCING**

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**GUIDE ME AND FIND ME: GAMIFICATION AS MOTIVATIONAL DRIVE
FOR PARTICIPATION IN CROWDSOURCING**

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JÜRİ VE ENSTİTÜ ONAYI

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ABSTRACT

GUIDE ME AND FIND ME: GAMIFICATION AS MOTIVATIONAL DRIVE FOR PARTICIPATION IN CROWDSOURCING

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In 21 century technology has been erupted like a volcano, new technologies has emerged especially the Web 2.0, and with the fast pace of development and the appearance of smart phones, video games, programming languages, it allowed for “Gamification” to be derived from video games, and open sources allowed crowdsourcing to emerge in companies and work place, with the combination of these two we got what is called gamified crowdsourcing project.. For our study, we are studying the motivations behind why users are contributing to Google Local Guide (gamified/crowdsourcing project), and what is driving them to participate. Therefore, in-depth interviews were formulated beside observation to study and analyze this phenomenon; why people are participating and contributing in projects like this. 12 users of Google Local Guide from all around the world were interviewed, and social media channels and forums has been observed to study the motive behind why people are contributing. This study will show the results why people are contributing and are the game mechanics and dynamics in gamification what is driving them to participate. The results showed that gamification triggered the users' intrinsic, external, internalized extrinsic motivation to participate more. All participants agreed it is a good strategy to keep them engaged and loyal to the program and without gamification they wouldn't have continued participating.

Keywords: Crowdsourcing, Gamification, Motivation Theory, Google Local Guide, In-Depth interviews, Game dynamics, Game mechanics

ÖZET

21. yüzyılda teknoloji patlak vermiş, yeni teknolojiler ortaya çıkmıştır. Özellikle Web 2.0'daki hızlı gelişme ve akıllı telefonların, video oyunlarının, programlama dillerinin ortaya çıkması “Oyunlaştırma”nın video oyunları ve açık kodlardan türetilmesine imkân sağlamıştır. Video oyunları ve açık kodlar “Oyunlaştırma”nın şirketlerde ve İş yerlerinde ortaya çıkmasına izin verdi, bu ikisinin birleşimi ile gamified kitle kaynağı projesi olarak adlandırılan programlara sahip olabiliriz. Çalışmamız için, kullanıcıların neden Google Local’e (bir gamified / grup projesi) katkıda bulunduğunu ve bunların katılımını sağlayan nedenleri inceliyoruz. Bu nedenle, bu olguyu incelemek için gözlemin yanı sıra derin görüşmeler oluşturuldu; Neden insanlar böyle projelere katılıyor ve katkıda bulunuyor? Dünyanın dört bir yanından 12 Google Yerel Rehber kullanıcısı ile görüşülmüş ve insanların neden katkıda bulunduklarının arkasındaki nedeni incelemek için sosyal medya kanalları ve forumları gözlemlenmiştir. Bu çalışma, insanların neden katkıda bulunduğunu ve oyunlaştırmanın oyun mekaniği ve dinamiği olmalarını neden bulduklarını göstermiştir. Sonuçlar, oyunlaştırmanın, kullanıcıların daha fazla katılım için içsel, dışsal, içselleştirilmiş dışsal motivasyonu tetiklediğini göstermiştir. Tüm katılımcılar, programa bağlı kalmaları ve programa sadık kalmaları için iyi bir strateji olduğu ve oyunlaştırma olmaması durumunda devam edemeyecekleri konusunda aynı fikirdeydiler.

STATEMENT OF COMPLIANCE WITH ETHICAL PRINCIPLES OF RULE

I hereby truthfully declare that this thesis is an original work prepared by me, that I have behaved in accordance with the scientific ethical principles and rules throughout the stages of preparation, data collection, analysis and presentation of my work; that I have cited the sources of all the data and information that could be obtained within the scope of this study, and included these sources in the references section and that this study has been scanned for plagiarism with “scientific plagiarism detection program” used by Anadolu University, and that “it does not have any plagiarism” whatsoever. I also declare that, if a case contrary to my declaration is detected in my work at any time, I hereby express my consent to all the ethical and legal consequences that are involved.

.....
Mohamad Eyad AL KAHWAJI

AKNWOLEDGMENT

First, I wouldn't have been here without YTB scholarship, their full scholarship gave me opportunity to continue my studies and get my master's degree. This research wasn't done singlehandedly, without the help of Prof. Dr. Metin Argan I wouldn't have been able to finish my thesis. I would love to thank him for having patience with me all the time even when I was lazy. I would love to thank all my teachers who understood my situation as a foreign student, Especially Dr. Gülfidan Barış for her precious heart and who was the reason why I choose this topic. I am grateful to Aisanat MAKSATBEKOVA for her help. I would love to thank my friend Dr. Deema Souqiyyeh for helping me editing my research. And absolutely I wouldn't forget the help of the PHD graduate Mohammed Abbas who helped me many times.

I would love to thank all my friends Houssam, Yassin, Mohamad, Aziz, Akbar, Jihad, Yousuf, Adel, Nawal, Hanan, Abeer, Fayha and Rasha for their support, I would love to thank all my classmates. And absolutely I am grateful for everyone who have participated in my interviews and who ever helped me in this journey.

DEDICATION

Never thought in my life that I would continue my studies, I cannot forget the first day I entered Anadolu University saying “Not again, not again as student” but fate brought me to this university, and I was destined to continue my studies. The story behind why I continued my studies because my elder brother Eng. Mohamad Shafic Al Kahwaji the one who pushed me to continue my studies, he asked me to apply for the YTB scholarship even though I refused many times, but in the end I applied and got my seat as a master’s degree student in Anadolu University. You have no idea how hard it was on me to be back in university after 5 years with different language. But with the support of my family I managed to finish my thesis, I would love to dedicate my graduation to my mother Eng. May Al Safadi and my father Ghassan Al Kahwaji, my two brothers Rebal and Rashad, and my lovely aunt Nancy my cousin Ali who have been a major support in my life, without them I wouldn’t have reached where I am now. I dedicate my success to all of them, so thank you for being there for me.

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1.INTRODUCTION

Boredom has been and always been the society's illness, people when they are bored, they tend to search for something fun to do. Therefore, games were designed and introduced to escape life since the beginning of humankind. Starting from ancient times where gladiators fighting each other in stadium to entertain the crowd, to making cards and board games, and until our contemporary time where games integrated with the fast pace of technological development that has been available everywhere. People play games everywhere, in cafes or parks with friends, in home with the family, at work with colleagues. Games do not stop on personal level, organization and companies have a history with the use of games to motivate their workers, like employee of the month contest. Firms are harnessing the power of technology, and with rise of web 2.0 and the increasing importance of video games, the term gamification has found its way through this flowing stream of technology. Gamification has been used in marketing, behavior change and motivation trigger purposes (Hamari & Koivisto, 2013). We have seen the implementation of gamification on many well-respected companies like Microsoft, Google, Facebook, Twitter. Microsoft for instance harnessed gamification in Windows 7, they needed to correct translation and fix bugs in international copies of Windows 7 and the results were positive that the developers participated in this game in their free time and spent hours and had found the bugs and corrected mistakes that windows 7 had. Loyalty, science citizen programs are all proof that gamification is an effective way to change behavior. As Gartner (2011) had expected that by 2015, 50% of the companies will gamify their systems. It has been applied now in e-learning as well to raise engagement among the students and making learning experience fun (Muntean, 2011). It is also has been seen in healthcare industry the employment of gamification, they have seen positive results of possible changes in players long-term behavior and it improved and made their lifestyle better in terms of their health. It is just appealing for the players receiving rewards for their contribution, and that is very fundamental component of psychological cycle associated with games (Freudmann, & Bakamitsos, 2014). Understanding games is very crucial and important now, by understanding games we can design games for firms who are wishing to gamify their systems by making the experience fun, so they can raise engagement, change behavior and achieve other purposes that they have. Due to the lack of understanding of gamification,

scholars and game designers showed interest in studying gamification like how to design a gamified system to inspire the users and change their behavior, because a lot of projects failed to do so (Robson, Plangger, Kietzmann, McCarthy & Pitt, 2015).

Scholars got more interested with the rise of importance of open source software in the fields of innovation and organization (Dahlander & Magnusson 2005). Crowdsourcing projects has emerged to utilize the power of the collective wisdom of the crowd, meaning that it depends on the number of the crowd who are willing to participate, and its success dependable on the amount and quality of these contributions (Zeng, Tang & Wang, 2017). Crowdsourcing projects have been gamified and these projects have been spreading widely such as Threadless which had been studied by Brabham (2010). However, there are not many studies about gamification in terms of crowdsourcing projects. Therefore, in my thesis we will be looking into gamification mechanics and their effects on users' motivation (Internal, internalized extrinsic and extrinsic motivation). And does gamification really effects the user's motivation to contribute more in gamified crowdsourcing projects.

1.1. Google Local Guide

Satellites are famously effective for mapping, but they don't take photos of must-have breakfast sandwiches, update hours of operation or tell families when places are wheelchair accessible. That's Local Guides territory. Local Guides are people who share information on Google Maps to help others discover where to go—and there are more than 60 million of them in our global community, with the most prolific contributors hailing from the United States, India and Brazil. They guide worldwide users each day, rack up millions of views, support small businesses and literally put important, sometimes vital, information on the map for others to use (<https://www.blog.google/products/maps/seven-kinds-local-guides-you-might-spot-google-maps/>).

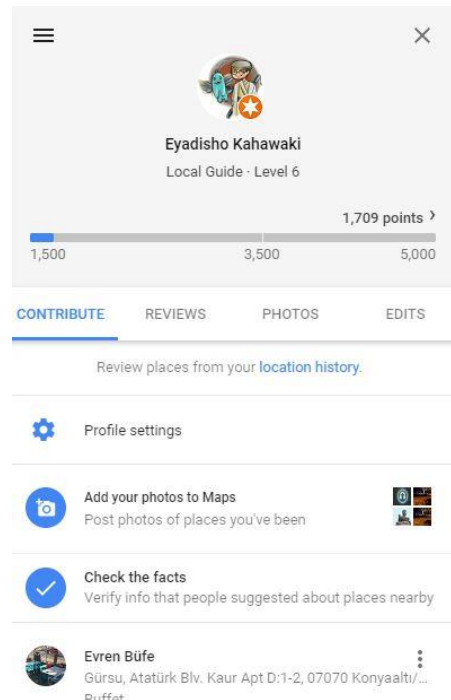


Figure 1.1. *Google Local Guide Profile*

Google Local Guides (GLG) is an initiative created by Google to give travelers insight into where to find the best local activities and entertainment. It's Google's way of creating an interactive environment for people to feel engaged, as if playing a game, while giving Google a lot of useful information (Kärpuk, 2016). Karpuk follows with explanation about gamification is implemented, GLG in its essence focuses on a person's drive to have a social status. Being a tour guide is like being a teacher — people perceive you as intelligent, smart or “in the know”. Being a local is a badge of honor. People try to avoid tourist traps when travelling so they turn to locals who can give them that “real local experience.” “Local” as a status defines someone who can help others with their specific knowledge.

“As a Local Guide, you'll help others explore the world and get great benefits in return. It's a win-win. Every place you improve on Google Maps earns you points towards unlocking something new.”

“Google Local Guides is a volunteer only program. And there is no payment or compensation in any way for contributions, financially or physically. These perks serves just as a token of appreciation for our participation & contributions, and should not be taken as compensation in any way. There is no commitment or guarantee for any future

perks. Our contributions help everyone else around the world and in this same way, we also benefit from contributions of others.”

You can receive points when you upload photos, share reviews, add new places, update information about a business or answer questions, it all depends on your level of contribution. The more points you earn the more perks you receive. Benefits as a local guide include early access to new products and features, 1 terabyte of free storage for your Google Drive, a free three-month Google Play Music subscription and more.

Google Local Guides is in-app application comes with Google Maps, so it is basically coming with every android device, registering there is very easy, all it needs is an google account which for most sure that people has one, you can become a user in GLG with a snap of a finger and you would be ready to contribute for the society.

Also, even if you don't own a google account or you are an iPhone user and you do not use Google Maps, you can benefit from GLG when you look for a place on google search, GLG will provide with:

- The location of the place and how to reach the it
- The opening hours,
- Phone number,
- Question & Answers; sometimes people ask question about the place and the local guides users answer their questions,
- Popular Times that people visit the place, how long do people stay
- The pictures section of this place, it contains pictures from the atmosphere, the menu, 360Degree pictures and videos
- The Review Summary, this section shows how many person reviewed this place and who commented on it, and whether the person who commented is a Google Local Guide user or not, his level of contribution, you can get to check their profiles on GLG and the places they visited and left review and pictures there.

For this reason, it became easy to search for a place and get a clear idea about whether this place is worth going or not, and this is all goes for the Gamified and crowdsourced program the google employed in it search engine. And for the purpose of our thesis we need to breakdown the elements that GLG are using.

1.2. Google Local Guides Games Elements

1.2.1 Points

Earn points by contributing content to Google Maps. Score a place with ratings, describe your experience with reviews, share photographs and videos, provide insights with answers, respond to questions about a place, update information with place edits, add missing places, or verify information by checking facts. We can see the points system in the table 3.2.

Table 1.1. *The points system in Google Local Guide*

Maps contribution	Points earned
Review	10 points per review
Review with more than 200 character	10 bonus points per review
Rating	1 point per rating
Photo	5 points per photo
Video	7 points per video
Answer	1 point per answer
Respond to Q&As	3 points per response
Edit	5 points per edit
Place added	15 points per place added
Road added	15 points per road added
Fact checked	1 point per fact checked

1.2.1 Badges

In GLG you will receive one badge at every level (it even says “The Badge” in the help section) which will be shown off in your GLG profile. In this case the badge is a mix of a trophy and a status symbol. The Badges range from 1-10 to get Level 6 badge you have to get 1500 points etc...

1.2.3. Levels

There are 10 levels in GLG, and every level needs an amount of points to achieve them. Tasks you can find these in the badges section, for example they ask you to share 100 photos to get the Novice Photographer badge.

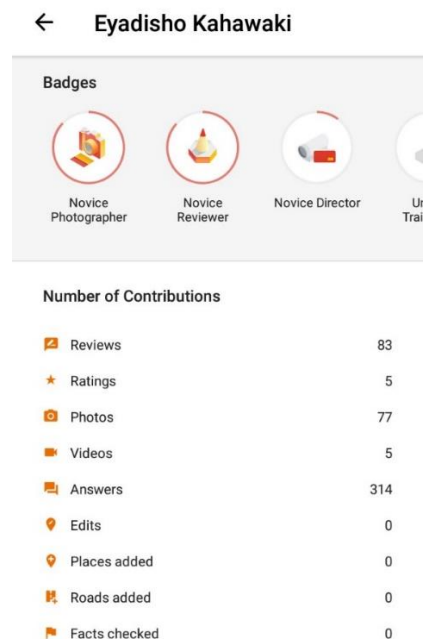


Figure 1.2. Badges for Google Local Guide Account

And what do you get in return for achieving high scores and levels, on the google website they shortened the benefits in one short sentence “Get recognized as you earn more points.” Also we must mention that there was some real material perks which were applied in exclusively in part of the world, for example, you can get temporary 1TB of storage for Level 4+ to 5, but this offer expired in 2016 (https://maps.googleblog.com/2015/11/get-your-favorite-places-on-map-with_13.html).

1.3. Google Local Guide Social Media Channels

1.3.1. Local Guides Connect

Local Guides Connect is an online forum where you can get to know other Local Guides, share your discoveries, keep up to date on the latest product info, and more. You can also suggest improvements for the Local Guides program and features on Google Maps. In addition, many Local Guides visit Connect to learn more about photography, food, and travel.

Local Guides Connect is a forum for the people who wants to dive deeper into the society and get more recognized, this forum is gamified crowdsourced forum, which means it consist game elements that drive people to contribute more, The forum is very active, it has more than 658933 members online and with 102647 discussions (dated 2018), these numbers are dated for last year, this social phenomenon is worth looking more closely to examine what is really going on there and what is so engaging in that particular website.

Your level of contribution in GLG is the same in this forum and you can gain points and badges for participating in this forum, but it has different game mechanics, they replaced the like button with something called “Kudos” which means “praise and honor received for an achievement”, the tasks are different and the badges looks different. The forum is wider and vary, it is the more in-depth version of GLG. The forum consists of 9 main forums, the first section is:

Photography; where local guides share their best pictures and the stories of the new places they visit,

Travel; you can share posts about your recent travel and share new information with the local guide users,

Food & Drink; it mainly used for sharing pictures about the local foods, new recipes, the food you tried overseas etc.,

Local Stories; local guides users share their own stories and they introduce themselves about their life, hobbies, visits, pictures, and food, lets say their personal life,

Meet-ups; it is a unique service because it lets users in the same area or nearby meet up and travel together to discover new place or have small tour inside the city, you can make friends from Meet-ups by joining together and discover the new places,

How-To; Google has done very impressive work in this forum, this forum helps you learn how to do stuff and answer your questions that are related to Local Guides ,like how to write a useful review, how to sign up for the website and how to get more attention etc. You can share your experience to help other people.

Announcements; this section where the moderators share news and announcements that are related to Local Guides.

Help Desk; is where you the moderators answers your questions and help solve your problems and the last forum is

Idea Exchange; The users share their own thoughts on how to improve Google maps, users exchange their ideas with the moderators, and the most liked idea will be applied by Google to improve the service.

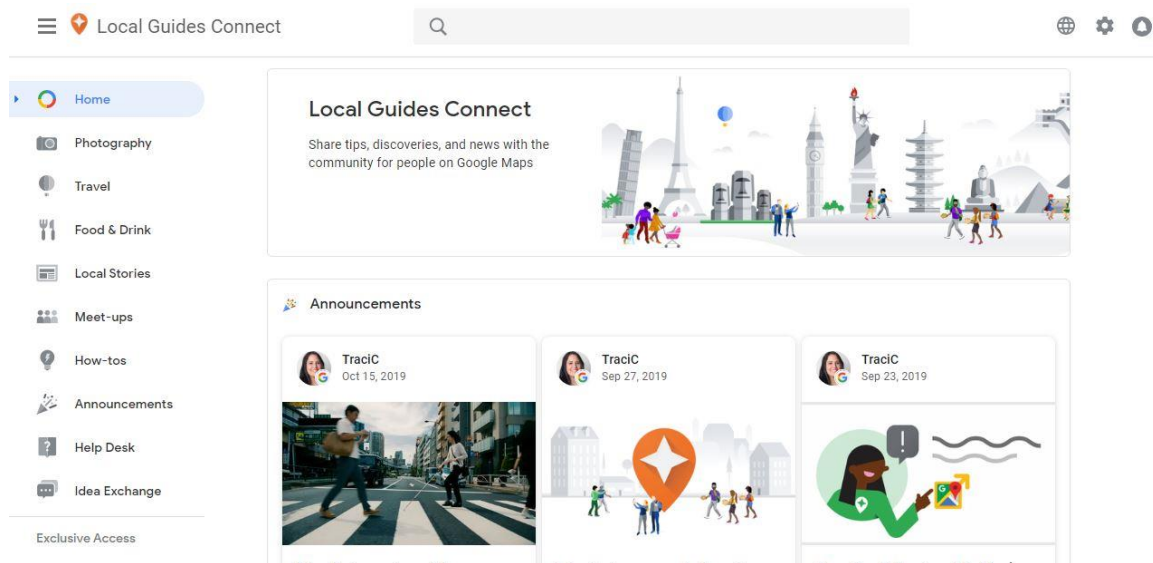


Figure 1.3. *Connect Live Website*

1.3.2. YouTube

With 219,763 subscribers for Google Local Guides channel on YouTube and with the total 51,293,951 views, we can understand that Google Local Guides has attracted a lot of

attention which caused more contribution, because the videos that are shared on their channel are videos made with real local guide stories shared by their users, real people who are helping the society to improve the maps, which they all have common interest which is “Voluntarily doing good to the society”. Every month they share around 2-6 videos about a city, what is the city famous of, what to do there for example, Where to Eat Ceviche in São Paulo, the video was made with local guide her name is Ellane Franco, she is level 8, she shares in this video what are the best food you can eat in Sao Paulo, she wander the city with her family showing us what are the best places to eat food.. Also, their videos are educational, they give you lessons about photography, for example, Los Angeles Photography Tips - Photo Journey, a video made by Michael Jiroch who is level 8 local guide.

1.3.3. Facebook

Facebook works like twitter except you can share more on Facebook, you are not limited to character limit, they share the recent events pictures, their upcoming plans and videos etc. GLG Facebook page has 257562 users

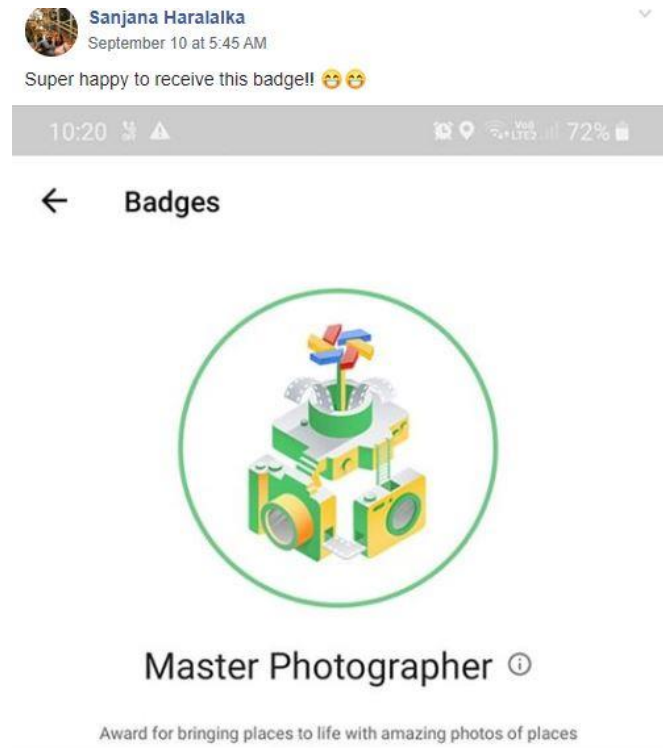


Figure 1.4. User Showing his badges on Facebook group.

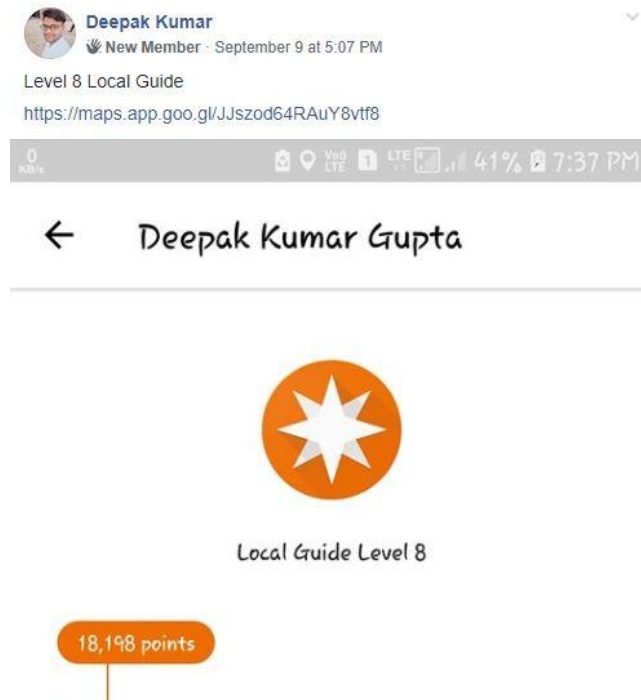


Figure 10.5. User showing his level on Google Local Guide on Facebook Group

1.3.4. Twitter

With Google Local Guides on Twitter you can follow up the recent news with GLG, the events they held with local guides, even users use it to brag about their achievements; the badges they won and how views they got, once you reach to a new level they give an animated gif that you can share on your twitter account. Google Local Guide twitter account has around 116 thousand followers.



Figure 1.6. A weekly post on Twitter by Google Local Guide team asking the users to show their progress



Figure 1.7. One of the users of Twitter showing how many views he got on Google Local Guide

2. GAMIFICATION

2.1. History of Gamification

In the second half of 2010 a new term has emerged in the digital media industry which is “Gamification” but gamification dates back before that time which was in 2008, but it was unknown and not widespread that other terms were known instead of gamification, such as “game layer, behavioral games, or applied gaming” (Deterding, Dixon, Khaled, & Nacke, 2011, P.9). The term gamification later became more popular and common that is used in big companies. The problem with the term “Gamification” that is misused and misunderstood and not explained enough in the game industry and game studies that it led to terms that arguably relates to gamification (Deterding, Dixon, Khaled, & Nacke, 2011).

2.2. Why Games and Now

There is a misunderstanding that Gamification is about games only, but to have more understanding of Gamification we have to look deeper into the meaning of games. Games are all around us and it effects our everyday life and with gamification it showed us that video games are everywhere (Xu,2011).

Koepp et al. (1998) discussed the reasons why we study and taking interest in games is because it has been noticed that players while playing video games are releasing dopamine. Dopamine is released when the human exposed to external trigger, like food, pleasure rewards and sex. The study they indicated showed that the pleasure centers of the brains are stimulated while playing video games.

Since 2010 scholars are taking more interest in gamification, one of the professors who has been taken big interest in gamification is Jesse Schell, Jesse is a professor at Carnegie Mellon University and a game designer. In 2010 he held a summit called (D.I.C.E) and he explained and talked about games and their possible implementation on real life situation. According to him, we live in a fast pace where living was about surviving to a life searching for efficiency then lastly to a time that is centered around searching for and while designing “pleasure”. Due to the invasion of technology in our current world, online games became unseparated aspect of our life that was risen by the rise and development of platforms such as tablets, smart phones, Twitter etc. Therefore, what is

pleasurable for people can be understood by applying gamification because it gives an essential understanding of what this phenomenon does.

Schell (2010) has summarized why games are important in three points:

- **Big Bucks**, 10-million-dollar market share is what game industry has taken. They are the largest category in entertainment categories, their high profits are stemming from video games on consoles and pcs, sales on virtual goods, unlocking items, premium account fees etc. that falls into their gaining.
- **Big People**. The misconception of being a video game player mean that these people are not working and spending their time on video games all the time and most of them are young is easily proven wrong. In one of studies it showed that there are many players in MMOs games have high income around 85000\$ and most of them are college graduates. Also, other statistics show that the average age for video game players is 35 and 26% of players are over 50.
- **Big Time**. Grown up men around 30 spend their time playing MMOs games more than 25 hours a week, and they are working full-time job and they have family, in contrast they play 7 hours a week for other games.

2.3. Definitions and Utilization of Gamification

Deterding, Dixon, Khaled & Nacke (2011) have defined gamification as “The use of game design elements in non-game contexts” P (10). In order to better understanding gamification, we need to divide the definition of gamification in understand every part of it.

2.3.1. Game

Most importantly, we need to distinguish between game and play where “Play” is used for games as well as for toys. Therefore, we examine Caillois’ concept, which describes paidia and ludus as two poles of play activities (Caillois and Barash, 2001, as cited in Groh, 2012). “While paidia (playing) describes free-form, expressive, improvisational behaviors and meanings, ludus (gaming), on the other side, characterizes rule-based playing with determined goals.” (Groh, 2012, p.39). In the matter of gamification, we are discussing the design elements of gaming (i.e. ludus) since critiques from the academic as well as the industrial point of view have specified the emphasis of gamification is almost exclusively

on Ludus with just a little space for Paidia (Alfrink, 2011, as cited in Groh,2012). Additionally, gamification should not be limited to digital technologies. Whereas most gamified applications is digital, this constraint is not required.

2.3.2. Element

Werbach in his online course (2013) talked about the meaning of elements in gamification, we think about games elements as a toolbox, the tools that you have to work with. if you are willing to build service that uses the bits and pieces of games. For example, any social game on Facebook has mostly the same game elements (Empire and Allies) different game mechanics and elements can be used to serve different functions in satisfying players' needs, and the basic elements such as points, badges, and leader boards are the defining attributes of the current gamification practices (Deterding, Dixon, Khaled & Nacke, 2011 as cited in Xu, 2011). As you can see there is Points, every game has points you collect, Challenges, you can accomplish to earn points, Level Up so you track your progression, Social Graph so you see what your friends do they need and how are they progressing. We can also do the same things for services that are not games, a website called Keas, It is a service that has been used in companies to make employees engage in activities that makes them more healthier, whether exercise, eating well etc.. The website was started by a guy called Adam Bosworth who was in Microsoft then he later ran Google Health, so in this website you can form groups within your company and you get a series of challenges and you reports on your activities like exercise and so forth.

If we check this website, we can realize the elements in this website are very similar to social games, graphically it is almost identical on the screen, and this is not by accident, Keas are using structures that some of the players are familiar with, they are not only adapting the conceptual elements of the game, but also adapting some of aesthetic of them as well.

2.3.3. Design

Games are not just the elements. Games are not merely a junk of elements that have been piled up together in random way. Games are things that are canned systematically, thoughtfully, artistically for the determination of amusement. The things that designers prepare are not just pure engineering. The engineering involves a lot of algorithm and

technology. Moreover, there's also an artistic experiential side of game design that include thinking about problems in a certain way. Here means using games elements can be applied outside the games (Werbach, 2013).

Another side of understanding game design technique is it involved way of thinking; it is a way to approach the challenges that you have.

2.3.4. Non-game contexts

Game design elements are usually designed for the purpose of entertainment. However, for the case of gamification these elements are now used to enhance other applications, like serious games (Deterding, Dixon, Khaled & Nacke, 2011). Nonetheless, they suggests to not limit the definition of non-game context any further for any specific usage, intentions, contexts, or media, because (a) there is no clear advantage of such a restriction and (b) serious games have also developed themselves into all kind of contexts, although there was a specific purpose (e.g. learning) at the beginning.

2.4. Gamification and Games Are the Same

According to Kapp (2014) he has differentiated between Gamification and games; gamification is the use of few game elements. Player do not play an entire game from start to finish; They join activities that include mobile game elements or video such as overcoming a challenge or receiving badges for accomplishing tasks or earning point. While games have definitive start, game play and ending. Players are aware they are engaged in a game activity, and at the end there is a “win state”.

Understanding gamification is essential, otherwise there is going to be this misunderstood concept of this phenomenon, gamification does work but lack of understanding is what makes fail, so for developers they must understand it and know its limit and study its architectures. Gamification when designed on the right guidelines we can get the results we want to get under the right circumstances (Cugelman, 2013).

According to Kiryakova (2014) Games have some distinctive features which play a key role in gamification:

- **users** are all participants – students (for educational institutions), or clients (for companies), employees.

- **challenges/tasks** which users achieve and develop towards defined objectives.
- **points** that are accumulated as a result of executing tasks.
- **levels** which users' level-up depending on the points.
- **badges** which aids as rewards for completing actions.
- **ranking of users** according to their achievements.

2.5. Smart Gamification

Gamification has been criticized for being focused on external motivation, on the other hand Kim (2011) has introduced “Smart Gamification” that uses game elements effectively in “Player Journey”. In smart gamification intrinsic motive is more favorable than extrinsic. She thinks that intrinsic values are greater than extrinsic values. The players go on journey while playing the game, they start from being novice to the state of “mastery” and only good games are able to do that. Game designers and developers should take in consideration to train the newcomers on novice level and overtime until they become experts. There are different techniques presented by Kim (2011) to make the player journey successful, where players' needs are fulfilled. Novice players are introduced by simple tasks in onboarding level, the experts are provided by new challenges that fits their levels and masters are getting premium and exclusive content.

According to Werbach (2013) the player is engaged in an experience; the player is going through journey in playing game. The journey is the conceptual path they follow through the game, you want your player journey to have a beginning, a middle and an end, and going through this journey is their progression. You want them to get a point of mastery. The first aspect of players journey is:

- **Onboarding:** is other words how to get the players into the game as quickly as easily as possible.
- **Scaffolding:** demonstrate how does the game lever training wheels to make the game easier and overcomes the difficulty that otherwise would get a user wedged.

- **Road to Mastery:** and finally does the game enable players to get to mastery, to get the player to conquered and achieve some real skills.

2.6. Principles of Great Games

Reeves and Read (2009) described 10 ingredients of great games, they thought about why games are fun and are they engaging and attractive to players. The latter scholars suggested that these ingredients should be applied in all game to assure success and engagement. The following ingredients are extracted and analyzed from Massive Multiplayer Online Games (MMOs). These ingredients are important for gamification as a blueprint when designing the game and it doesn't mean that all ingredients must applied or implemented:

1) People love video games because of the use of avatars, avatars are the “mini me” representation of player in the game, it helps changing the psychology of using technology, because with avatar the player can represent him/herself within the game or media. The features that avatars give are reasons why it should be used which are the attractiveness, engagement, the ease to use, and the indication of the player identity in the game and in the real world. Another reason why avatars are important are because they represent the player achievements and progress and people can get information from the avatar. The best feature about avatar is that they let the play personalize their appearance and modify it the way they would love to be seen by others. and this result to more engagement and enhance self-representation.

2) Video games feature virtual reality, virtual reality is the representation of real world, 3D environment. People already know what to do in real life, so making a game that is representative or close enough of the real world make it easy for the player to know what to do and more understood from gamers. 3D environment represents vast areas to discover and many options to take which is a reason to play the game.

3) Good stories are what define a successful game, stories are very important in game and crucial to determine its success. For example, the story “The Last of Us” game of the year and most sold game on PS3 and this belong to its great story beside gameplay. Everyone love a good story; stories are fundamental experiences and emotions for human

beings. It what drags player to continue playing the game and finish it, it gives happiness, sadness and all sort of emotions. What makes stories great in video games, is because it let the player to be the hero of the story and let them live the moment in the story in every chapter. Therefore, the engagement and attachment to the game get higher because of the excitements that stories give to players.

4) With feedback players can know their status. Feedback in videos games include health bar, points, leaderboard and progress bar and these help players to engage more with game and make them try harder to enhance their progress. You can get either external or intrinsic feedback from games such as MMO games. Intrinsic feedback is important because it shows the gratification for achieving a challenge. Therefore, this insensible feedback can affect the player physically. The feeling of joy from experiencing the game in such situations make the player want to play the game again to feel these feelings again. Intrinsic feedback is important especially in long-term behavior change.

5) One of the most important elements of games are the reputations, levels and ranks. Websites that sell stuff on the internet like eBay or Gittigidiyor, reputation is what make people trust the seller, the higher the level the more people trust the store or the person. Reputation and ranking are important in games because they give status to the player, it helps them outstand the others with their ranking and gain respect from other players. This is why levels and other components are always precise and up to date. And to due to its nature that are able to see your level and what gained immediately it made it more engaging. It is a way to represent the players achievements in the game. We can see the reputation in the charts of leaderboards.

6) In video games like RPG or MMOs synthetic currencies are created, other kind of games also use these currencies, but they are less effective. This kind of currencies made virtual game has an economic system where players exchange items and buy/sell digital stuff for currencies that are not real. This economy system resembles real life situation where players should make decision based on the amount of synthetic currencies they have. This kind of implementation of synthetic currencies made the economic behavior the same as in real-life situation where you have to spend depending on what you have.

7) Well established rules, drive fair competition between player, an essential principle for great games to be considered. In video games people love to win and their motivation

for winning vary between players. Rules can help enforce and increase the engagement and competition in the game, because without rules players' tendency to cheat is higher. Therefore, a game with well-established and polished rules allow players to trust the game better and effect their behavior accordingly. In this matter there two kinds of decisions taken by the player. First one is internal oriented players which think that their actions are triggered by the own decisions. And the second one is external oriented players who believe their actions are stemmed from luck or fate or any other external condition. Rules are very important for games that has internal oriented and developers should take in consideration making rules that gives internal control.

8) Games like Dota, League of Legends are teamwork team building based games and this is what makes them so fun and special. Forming relationships in real life is important as well as such games. Games like this the team is dependent on each other and game cannot be played without cooperating with other members team, doing challenges together, farming for coins, killing bosses, make sure they survive. Players are very influenced in such games it drives them to not let their team down and show extra efforts to win battles and challenges.

9) Online chat in video games is very essential in MMOs games, it allows player to communicate with each other and organize their team fight and coordination, it allow social engagement and facilitate cooperation. Good online chat system is very effective, it helps building and enhance relationships and cooperation between players whether in private chat or the public chat.

10) Special events, sales, time limits put time pressure on players. Some challenges have a time limit and countdown timer on the screen that push the players to finish quest faster to gain extra coins or items. Auction in MMOs games are very common it also excites the players to bargain and bid synthetic currencies to get the rare items. This kind motivation triggers players to play more and finish challenges at the required time.

The previous ingredients of successful games are taken from MMOs games; therefore, they are not applicable to all kinds of games which mean not all of them are applicable to be applied in gamified systems as well. Nevertheless, they are good guideline for developers to follow and consider while designing a gamified system.

2.7. Gamification and Marketing

What is relationship between gamification theory and marketing and how are they relevant to each other? Marketing can adapt small games easily. Reward in games has always been a motivator for customers to participate in games, and in this new era rewards are no longer the fundamental motive for consumers to participate, it is the fun, enthusiasm and experience of the game itself (Zichermann & Linder, 2010).

Gaining status, success and sociability in game-like behavior are important drivers. Game designers in marketing field can create gameful environment in several easy means: badges, points, leaderboards, feedback etc. According to the scholars this gameful environment create positive relationship between consumers and brand and long-lasting engagement. Customers in such games might be not aware that they are playing a game or taking part of it. Zichermann and Linder (2010) have discussed this idea in their example in Starbucks stores. In Starbucks stores usually customers take part in the game by the following: order, pay and wait for the order. But then it comes that customer come, proceed directly to pick his/her drink, pays and leave the store. And he even gets his favorite flavor or complementary drink, how is that possible, the solution is simple: this customer comes every day to the store and order the same coffee, the employee recognizes the customer and this way Starbucks offers rewards to customers and makes them come more and play the game to get the reward.

The last mentioned researchers think that Starbucks example is very good interpretation of the connection between accomplishment and game-play, and it is considered passive game because customers are not aware that they are part of the game, and the only evidence or symbol that they are part of the game is the use of points (scorekeeping) method. Points are usually awarded for doing certain actions and this can be applied broader in such cases like Starbucks. Marketers can adapt such method of scorekeeping because customers love scorekeeping and by doing that you get their loyalty, long-term engagement and raise the value of the company.

Zichermann and Linder (2010) discussed that to reinforce gamification in marketing, then the use of leaderboards is the one of the easiest methods because of its cost-effective and easy to implement and adapt to make a game-like environment for the consumers.

Leaderboard will make consumers pay more attention to play the game when they realize its presence, therefore it is a good initial approach for adaptation in marketing. One of the fundamental features of leaderboard is the motivation to rise up among others, consumers love to get to the top of the leaderboard, and when social ranking system integrated, it makes consumers more motivated, because social ranking is important component and plays big role. Social ranking drive consumers when are they see their friends in the leaderboard and trigger them to compete, and this will result to more participation as a result of the desire to beat your friends.

Another gamification element that is favorable and easy to use and adapted in marketing is Badges. Badges are the artistic visualization of the accomplishment that is visible to others, and this motive consumers to participate more to gain and collect more badges for their achievement.

Games of chance are what Zichermann and Linder (2010) differentiated from other game that need skill, because these games are won by chance, for example: casino-like games. These games can leverage from badges, points and leaderboard just like the other games. Prizes are not enough to gain long lasting loyalty and it cannot be bought, these game elements that are implemented in the game make the consumers accustomed to them so it affects and influences their behavior with time, because after doing an action in the game the customer is expecting receiving a reward. And if the rewards are not constant, the danger of becoming addict to the game is high and this is called operant conditioning, which marketer can use the power of this stimulus to create excitement among consumers.

According to the past studies, it is shown that gamification has been used in advertisement as well, from points, level, badges, prizes, membership or progression bars. But due to the oversimplified games and the incapability of engaging the consumers for long terms, problems have revealed when using this kind of techniques, so such games doesn't provide excitement to consumers or the companies (Brieger, 2013).

Brieger (2013) mention that the downside of gamification in marketing is the over usage of this method that makes customers only participate for the sake of points, level, virtual rewards. It falls in the danger of conveying gamification rather than the content itself. Small games are good source for motivation, but they are not the only motivation for

consumers that is available, because not all consumers are gamers, and they get motivated by different things. Zichermann & Linder (2010) saw that it is dangerous to use games in advertisement and fall in the wrong tendency that games are sufficient to motivate users in long-term. Games of chance and sweepstakes are an example of the lazy method to integrate games in marketing, because the customers will see the prize and focus on it, so their loyalty will end when the game end. Therefore, loyalty must be the central focus of gamification in marketing.

2.8. Motivational Aspects of Gamification

In previous researches another fundamental of gamification that has been examined which is what motivated people to play games. When it comes to building consumer, relationships persuasion is a big ingredient, and that is noticed in the field of marketing. To fall in such persuasion customers, have to fall for that. This where games mechanics and dynamics helps to engage customers in doing a continuous activity. Extrinsic, internal motivations are what motivates consumers, an external factor would be the reputation among friends or the material gain, the intrinsic motivation would be the joy and fun of playing the game itself (Brieger, 2013).

“Flow” is a concept that can be applied to gaming (Csikszentmihalyi, 1997, as cited in Brieger, 2013). It defines the experience a person has while becoming engaged in activities that has tasks and challenges to a special skill set. It is the coherent between high skill and a high challenge done by an action. Personal ego or self-consciousness disappears when good flows engages you that people appeal feeling more strong and vital.

To engage the player into a game you have to set them up under the flow condition and this the key to a video games’ common appeal and excitement, and to acquire this a balance must take place between skills and challenges that every game should have, and to reach to the level where the gamer only focuses on the game and ignore the surrounding environment around him/her (Brieger, 2013).

2.9. Implementation of Gamification

Starbucks: Customer and employee loyalty and engagement is something Starbucks is very well known of. Starbucks employed gamification to transform the old school

tradition of card loyalty program into something more complex and compelling that is called My Starbucks

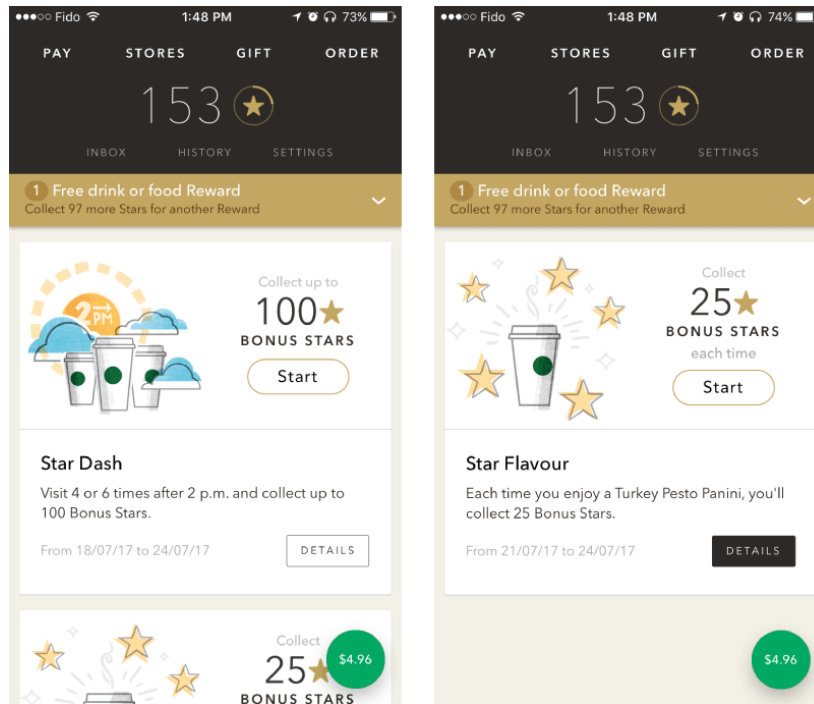


Figure 2.1. *My Starbucks Application*

The concept is simple, you just register into their application and the customer start gaining points and stars after purchase which can be later exchange for free drinks and food. My Starbucks game mechanics contains three levels, clients can get to the next level according to their loyalty- and the trick is that next levels are open to those who visit Starbucks store. The extrinsic and intrinsic motivations are triggered by this simple game which is a perfect marketing tool!

Nike Fuel: Another implementation of gamification is campaign known as Nike Fuel a part of its Nike+ community. The users of Nike Fuel compete against each other through an application that calculates their daily amount of physical activity. The application is installed on their smartphones whether it is IOS or Android and what it does that it transforms the user's activity into points.



Figure 2.2. Nike Fuel Application

With progress you move to the next level which enable unlocking special trophies and rewards. This can be seen as motivational driver for Nike's customer, and that's not only doing sport but also enable its customer to share their results and compete with each other which make its customers more engaged and motivated enough to enter the flow state of playing the game while enjoying it.

2.10. Stories and Games

Throughout the history of time, games and stories have been around since the dawn of humankind, games feature many possible outcomes that experienced by group of people, and stories as well have been enjoyed by the individual. With the rise of video games, games were simple and tradition like tic-tac-toe, Pac-man etc., but later in mid-seventies stories have been introduced into single-player games, horror, adventure games likewise game, made the player become the center of the game, he became a character in the storyline of the game. Gradually, with massive success of integrating storyline into videogames, has led to thousands of employments of combining games and stories together, whether on computers or on paper, some were failure, and some were a success.

Implementation like this showed that we can use elements from both stories and gameplay to create this experience (Schell, 2005).

According to Shell (2005), to kill time, people tend to entertain themselves, and entertainment is the actions that are made in leisure time when we don't have important matters to do. Shell (2005) summarized the importance of entertainment in the following:

1: Entertainment defines a society's culture. to understand society's culture and how it functions, we got to look and examine the entrainment process, in society's culture people enjoy music, games, and stories and this kind of entertainment what get people together.

2: Entertainment is a cornerstone of communication. Ideas and events have been transferred through time in the shape of stories, through the visualization of scripted stories people will understand more, and this how they communicate to us. The more interesting the story the more interested the listener will be, therefor, this will lead to true understanding

3: Entertainment is a cornerstone of discovery. The key to discover the world is play, with play we can discover the hidden places of the unknown. Scholars, scientists, musicians etc., have played to discover and create something new, Scholar played with hypothesis, scientists played with experiments, musicians played with musical notes and all this led to new creation and discoveries. Therefore, by understanding creativity and learning we can get to understand the process of play.

4: One of the most basic needs of humankind is entertainment. Entertainment helps people to have fun, feel alive, bond with others, and feel of belonging. It is a desire and need and its fulfillments differs from one another. Therefore, understanding entertainments means understanding how the human mind work.

2.11. Storytelling and Gamification

Kumar J. Herger M. & Dam R. (2018) have noticed storytelling element can be integrated into gamification projects, because it helps excite the players and make them more engaged in gameplay, this will make the gamification experience better and result to more loyalty and more fun. To make the experience of gamification more alive and closer

to reality, storytelling considered to be a useful tool to engage the player and gain longevity connections with players. Gamification and stories are not easy to combine. But with both of two terms together it can make a useful and powerful tool that can be used in different situation. The key to the success of this combination is the effectiveness of the mix methods that will be used in game design (Giakalaras, 2016).



Figure 2.3. *Zombie Run Storytelling Example*

Example: a famous game called *Zombie Run*. *Zombie Run* is a fitness game make the player think they are followed by zombies who wants to eat them. Zombies are successful famous character are well known in movies and games. The players cannot kill the zombies; therefore, they have to run from them or otherwise their brains will be eaten by zombies. The story of this game is designed to encourage players to run and make them fit, instead of pushing them to reduce weight, they made it as escape game from zombies which led to the success of this game because of being fun.

3. CROWDSOURCING

3.1. History of Crowdsourcing

Jeff Howe is the first person who brought the concept of crowdsourcing into scholars' journey, he wrote about it in Wired Magazine in 2006, but the origin of crowdsourcing wasn't in 2006 it goes back to the early of 1714. The massive success and innovation of many brands are related to crowdsourcing since its beginning. The Longitude Prize is one of the earliest examples of crowdsourcing that happened as mentioned earlier in 1714; "The Longitude Problem" was a problem which made sailing difficult and unstable that made the British Government seek for a solution (killing 1000s of seamen every year). The British Government presented a prize for whom can solve this problem in innovated way (£20,000). This considered as the first examples of crowdsourcing. John Harrison was the son of carpenter who managed to solve the unsolvable and won the contest, he invented the 'Marine Chronometer' (i.e. an accurate, vacuum sealed pocket watch). Fun fact that the British Government were hesitant about giving Harrison the £20,000, but they eventually did, and with that they introduce the world to the first examples of crowdsourcing because it features one of the principles of crowdsourcing – creativity and innovation can come from anywhere. The Toyota Logo contest in 1936, the Sydney Opera House in 1955 and of course YouTube, Google Local Guide, and Wikipedia that started in 2002 until our contemporary life are all examples of crowdsourcing.

3.2. Definitions of Crowdsourcing

Estellés-Arolas & González-Ladrón-De-Guevara (2012) saw in Jeff Howe research that the word crowdsourcing is used for a wide group of activities that take on different forms. There is no unified definition for crowdsourcing, and you cannot categorize it in a specific category even though the versality and adaptability of crowdsourcing enables it to be effective and power practice. Therefore there are a variety of definitions of crowdsourcing because it doesn't have any theoretical knowledge base from which one could extract information about crowdsourcing exist, which acknowledge crowdsourcing from different aspects including innovation applied to business process involvement or problem resolution.

Estellés-Arolas & González-Ladrón-De-Guevara (2012) have realized that definition of crowdsourcing differs according to the perspective on the authors, for example some authors considers Wikipedia as crowdsourcing example while others thinks the opposite. And for the purpose of their research they have listed numbers of definitions of crowdsourcing to show the difference between the authors' perspectives (Estellés-Arolas & González-Ladrón-De-Guevara, 2012, P.5):

“Howe ...a web-based business pattern, which make best use of the individuals on the internet, through open call, and finally get innovative solutions.”

“... the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call.”

“... the mechanism by which talent and knowledge is matched to those of need it.”

“Kazai ...an open call for contributions from members of the crowd to solve a problem or carry out human intelligence tasks, often in exchange for micro-payments, social recognition, or entertainment value.”

“Mazzola and Distefano ...an intentional mobilization, through web 2.0, of creative and innovative ideas or stimuli, to solve a problem, where voluntary users are included by a firm within the internal problem-solving process, not necessarily aimed to increase profit or to create product or market innovations, but in generally, to solve a specific problem.”

3.3. Concept and Types of Crowdsourcing

Crowdsourcing is the coherent between “crowd” and “outsourcing” to form what is called and proposed by Jeff Howe (2006). Outsourcing tasks is one of crowdsourcing act, employee or specified citizens do perform this kind of acts to an undefined large group of people or community by an open invitation to anyone who wants to join. if it needed to be these tasks can be with more than one person together, but usually its done by one person, but it is true dependence of crowdsourcing is on the fact an open call to an undefined group of people, those who are suitable to the tasks offered by the company or brand.

The old methods of companies or organizations to solve problems or create innovation ideas has been outdated and everyone now trying to use the power of public because it showed a lot of potential to outsource the tasks (Li & Hongjuan, 2011).

With the fast pace of technology development and the rise of Web2.0 it made reaching large group people an easy task, therefore, “crowdsourcing” became an increasingly a popular concept (Morschheuser, Hamari, Koivisto, & Maedche, 2017). Many of the hard tasks that cannot be done by computers or even done by the employees of the company are handled to public to benefit from their collective intelligence to solve the current problems, which is very useful way (Morschheuser, Hamari, Koivisto, & Maedche, 2017).

According to Morschheuser, Hamari, Koivisto, & Maedche (2017, P.27) “Crowdsourcing systems can be categorized into four categories, depending on the characteristics of the crowdsourced work”, the latter researchers broke them down into four characteristics:

First, crowd-processing approaches are similar tasks that are performed in large quantities by crowd, doing homogeneous tasks contribute in raising the quality of the work’s validity. The worth is gotten straightforwardly from each detached commitment (non-emergent) such as Galaxy Zoo. Second, crowd solving, when we need big number of identical solutions to a certain problem, crowd solving can be used because it employs the diversity of the crowd to find the solution, and this approach can be used in very complex and hard problems such as Foldit, or if no pre-definable solution exists . Third, crowd-rating approach essentially uses and seek the wisdom of crowds to benefit from it to do collective calculations or predictions. Crowd-rating stems its value from the extensive number of identical solutions ‘votes’ such as NASA. Fourth, crowd-creating solutions are the most common approach in our time that we always see in social media, generating content like YouTube or generating information like Wikipedia.

3.4. Emerging of Crowdsourcing

The emergence of crowdsourcing from the perspective of innovation and business management has been investigated by Li & Hongjuan (2011). A survey has been published between companies that is related to the growth of corporate profits, showed 52% growth caused by the technological innovation and high-quality workers. The latter researchers

saw in Hopel research the one who made the survey that companies must pay attention and make full utilization of customers, whether it is a company or individual, and engage them in the innovation activities. Letting the public participants into innovation activities can create great value to the company and allowing this kind of participation into the product design is an effective way to reduce the risk of new product manufacturing.

In a word, the emergence of crowdsourcing lies in the following perspectives (Li & Hongjuan, 2011):

- Cost saving. Giving the enterprise tasks to be outsourced by amateurs but also qualified people, this results to reduce the labor costs because the enterprise usually pay small amount of money for these participants.
- More efficient. With the help of the internet the enterprises managed to involve large-scale of public participants into the development and problem solving stages, which lead to shorten the time that need to do the tasks, and since the products' consumer are the same participants, therefor they are more well known about what the product needs which leads to more efficiency in the production and strengthening the relationship between consumers and organization.
- Accelerate the globalization of labor. The rise of web 2.0 helped enterprises to break the boundaries of borders and let all customers from all around the world to be part of the development; which means a large of external staff.

3.5. Motivation Theory

The reason why we study the motivation theory is to understand people motives and what drive them to do certain actions. Many of the modern studies have consensus that motivational states can differentiated by the level of actions as well as by the attitudes and goals that led to these actions, these are thought to be reflected by needs of an individual (Ryan and Deci, 2000, as cited in Kaufmann, Schulze & Veit, 2011). The most applied motivation theories among all the other motivations theories are the extrinsic and intrinsic motivation and self-determination theory (SDT), The self-determination theory has been to see how companies can encourage contribution in crowdsourcing projects, this has been applied on Threadless case study (Zeng, Tang & Wang, 2017).

Ryan, Connell & Deci (1985) formulated Self-Determination Theory. They broke the motivations down to three main types: internalized extrinsic motivation, extrinsic motivation and intrinsic motivation. Intrinsic motivation happens when the individual want to fulfill his needs that is coming from the same activity that the individual is doing, like playing a video game for fun. In contrast, extrinsic motivation happens when the individual exposed to extrinsic motive that activate his motivation to do a certain action, such doing some task to gain some reward like money (Kaufmann, Schulze & Veit, 2011).

The internalized extrinsic motivation is defined as “people taking in values, attitudes or regulatory structures, such that the external regulation of a behavior is transformed into an internal regulation and thus no longer requires the presence of an external contingency.” (Zeng, Tang & Wang, 2017, P.74).

Through Füller (2010) studies on motivation driver in the context of open source software, the information he gathered shows the reasons that drive consumers to participate, and it is divided into three main motivation that are ranged from purely intrinsic motives, such as kinship, altruism and fun, through internalized extrinsic motives, such as reputation, making friends to purely extrinsic motives such as monetary rewards. Shortly, it is the combination of multiple intrinsic and extrinsic the motivate consumers engage in the process of the activity that needs to be outsourced. The contributors motive differs from one another. For example, some users participate for the sake of the fun, while other are participating to achieve skill development, making new friends, get praised. Wikipedia is a good example for altruistic motives that are more emphasized than the developers, who are usually motivated by reputation-building and self-development. The motivation may change over time in crowdsourcing projects, meaning that in come situation where the user engagement is due to his expected value received from participating; may change in the long run, that fun and enjoyment are motivation drive for engagement. Füller (2010) has identified 10 categories of motivation in innovation crowdsourcing project and he managed to interpret these motivations which are introduced in Table 3.1.

3.6. Motivation Mechanism of Gamification in Crowdsourcing Projects

The number of participants in crowdsourcing projects are important because it depends on the numbers who are willing to contribute and put some efforts into the project. This is where gamification role comes in because it helps attracting new participants and

improve engagement. Gamification might be able to get through the failure of crowdsourcing project when it lacks number of participants. Therefor applying gamification in the right way helps to increase participants to engage and participate (Zeng, Tang, Wang, 2017). The latter been said because many crowdsourcing projects have failed due to the lack of participants (McGonigal, 2011, as cited in Kavaliova, Virjee, Maehle & Kleppe, 2016).

Hunicke, LeBlanc & Zubek (2004) framework for games is MDA framework where game elements have been abstracted into three parts: game mechanic, game dynamics and game Aesthetics. The mechanics refer to the core settings and rules including leaderboard, badges, achievements, points, trophy and virtual gift; the dynamics refer to the motive drive that could lead to some certain emotions, like status, achievement, self-expression, altruism, reward and competition; and last Aesthetic, which sometimes addressed as emotions, and it indicates to the emotions that have awaken or evoked by game dynamics.

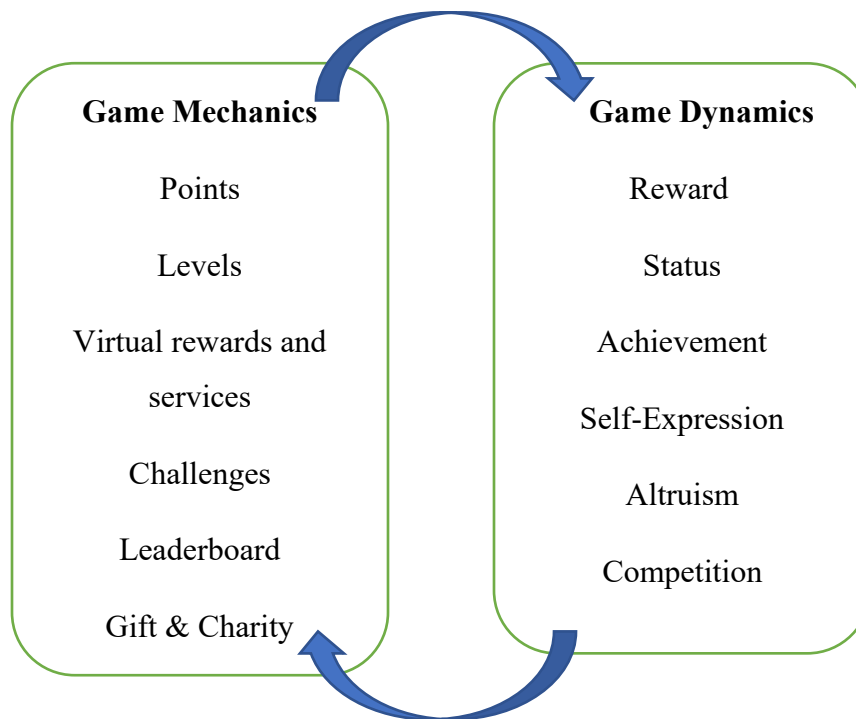


Figure 3.1. *Connection between game mechanics and dynamics*

Kavaliova, Virjee, Maehle & Kleppe(2016)

In Table 3.1. the motivations in crowdsourcing project has been introduced, and they have been taken from the motivation theory. Distinct motive that outstand between all other motives in crowdsourcing project is “reward” which is very important that you can find in all motive lists of distinct crowdsourcing projects (Zeng, Tang, & Wang 2017). “Recognition” according to Hamari and Koivisto (2013) “fundamentally describes the social feedback users receive on their behaviors: users interacting with other users” (P.3). and it appear as reward. It is noticed that internalized extrinsic and intrinsic motivation is less to be found in crowdsourcing projects. Also some of the motivations such “professional development”, “social reason and “skills development” that are listed in Table 1 are determined by crowdsourcing projects context and the purpose of itself, which means it is not an easy for designers to employ them in any crowdsourcing project. “Relationship building” is related with function of the crowdsourcing platform, that means if the crowdsourcing is well designed and it aid social norms like giving utilities such sharing to other SNS (Social Network Sites), commenting, liking, creating group/forum such kinds motivation will exist. It is hard for any game elements to achieve (Zhen, Tang & Wang 2017).

3.7. Participants Characteristics

The consumer characteristics play crucial role in motivation drivers, consumer personality affect their behavior in open source programs. People differ in their motivations to participate in crowdsourcing projects, some individual enjoy the process itself regardless of what the external rewards are. And some individuals participate for the sake of achieving a valuable outcome that is separated from the activity itself. There are numerous of characteristics and personality traits that affect the participants motive, but Füller (2010) has focused on the characteristics that are related to co-creation activities in crowdsourcing project, he summarized the meaning of every motivation in the following table 3.1. and these motivations are for co-creation websites such as Threadless, but for the purpose of our thesis we can project these motivations to our thesis due to the resemblance in needs and motives behind the users’ behaviors to participate in crowdsourcing projects.

Table 3.1. *Type of Motivations in Crowdsourcing projects (Füller, 2010, p.105)*

Motive Category	Description
Intrinsic Playful Task	Individuals contribute to new product development because they may consider it as playful and enjoyable activity, valued for its own sake, and therefore perceived as intrinsically rewarding rather than an effort.
Curiosity	Consumers may engage in virtual co-creation projects during NPD just because they are curious. They have a desire of knowledge because of intrinsic reasons.
Altruism—Community Support	Altruism may motivate consumers to engage in virtual co-creation activities and to support producers in innovating new products.
Make Friends	Getting in touch with like-minded people—employees and consumers— may be a reason for consumers to participate in virtual NPD. Beyond the interest in the topic, the possibility to get in contact with like-minded people is a reason why consumers engage in virtual communities
Self-Efficacy	Consumers virtually working on new product development tasks, similar to “Hackers,” may derive a sense of accomplishment due to their contributions. They may perceive the co-creation activity as a challenge to be mastered
Information Seeking	Consumers may engage in virtual co-creation projects because they are seeking innovation or product-related information pertinent to their hobby, upcoming product purchase, or just through novelty seeking behavior. Prior studies show that people participate in online communities because they are looking for information relevant to them.
Skill Development	Engaging in virtual new product development enables consumers to improve their skill and gain additional knowledge. They may be interested to learn more about new technologies and products and find solutions to hitherto unanswered questions.
Recognition—Visibility	Consumers may participate in virtual new product development to become visible and get recognition from other participants as well as from the producer. Online community members are motivated to share their know-how and participate in activities for ego gratification or the desire for peer recognition.
Personal Need—Dissatisfaction	Personal need may motivate consumers to virtually engage in virtual NPD. Sports enthusiasts start to modify or develop their own products because they are dissatisfied with existing products and because they derive benefit from using their innovation.

Compensation —Monetary Reward	Immediate as well as delayed payoffs such as . . . may be the reason why consumers engage in virtual co-creation during NPD.
--	--

3.7. Motivation to Participate in Online Platforms and Online Communities

There are many reasons to participate in online platforms, and without doubt one of the most dominating reasons to participate is to give back to the society, other motivations to participate are enjoyment hobby, reputation and self-image etc.. (Wasko and Faraj, 2002, as cited in Hossain, 2012).

To measure the success of crowdsourcing, we have to know quality and quantity of participants contributions because the crowdsourcing is essentially depending on the users and their motivation to participate. Therefore, knowing the motivations of users and what drives them to contribute and keep them contributing is very essential. And this is all started when open source software was introduced to the public which led to “users’ motivation to participate” studies to understand their motivations. Programmers who are highly skilled participated in these open source platforms without any paycheck, they did use it as a hobby. Besides, in a specific situation the motivation arises through interaction between incentives and different motives (Hossain, 2012).

In online platforms the motivations are divided between intrinsic motivations such fun and enjoyment, extrinsic motivations factors are different such as, fame, building relationships, status, reputation etc. There are many researcher’s emphases rewards and recognition as a worthwhile factor, and some other believe that financial rewards are harmful in innovation ideas such idea creation (Hossain, 2012).

He defined community as a social group that shares the basis of authority. Online communities has been spreading since the dawn of the internet and their role has been more important than ever, due to the wide range of activities that are accomplished voluntarily by community members, and sometimes by introducing rewards to keep them participating, these online members usually have the same interests and needs. The benefit from online community is basically cost saving.

3.8. Crowdsourcing and Gamification

Internet and smart phones came due to the recent technological development that led to increasing the spread of ubiquitous interrelatedness, and this made management and economics coordination more practical in new methods, like sharing economics and

crowdsourcing, and these new methods has been employed by new companies that at least 50% of the organizations are gamifying their innovation processes, and now organizations try to make their innovation processes and product development like playing a game and this provides more motivations for the users other than monetary compensation (Morschheuser & Hamari, 2019). And the latter came from the literature reviews about gamification that the largest domain employing gamification are crowdsourcing systems (Morschheuser, Hamari, Koivisto, & Maedche, 2017).

Goh, Pe-than & le (2017) saw that games that are embedded in crowdsourcing tasks and are known for games with a purpose or human computation games or crowdsourcing games, because in our contemporary world the growing number of video game players has been increasingly rising worldwide. The adaptation of games in crowdsourcing considers to be a successful incentive to motivation participant and that's beside monetary rewards and volunteerism.

Morschheuser & Hamari (2019) saw in the previous studies that the participants of crowdsourcing projects are motivated by craving for to fulfill intrinsic and internalized extrinsic needs, such as satisfaction, curiosity, altruism, a sense of competence, curiosity, possibilities for self-development and accomplishment when engaging in crowdsourcing tasks that needs to be solved or their relationship with other community members. Designers are increasingly gamifying crowdsourcing systems because games are effective in satisfying intrinsic needs (Goes, Guo, & Lin, 2016; Jung, Schneider, & Valacich, 2010 as cited in Morschheuser & Hamari, 2019).

When crowdsourcing is designed appropriately, which means making the experience appealing as playing games, designers need to employ game elements in their design for crowdsourcing approaches to fulfill the crowdsourcees' intrinsic needs, because gamification is believed to achieve intrinsic need satisfaction, which is, feeling of being respective in a meaningful group as well as a sense of self-sufficiency. Therefore, gamification can make the participants more creative beside of being possible cost efficiencies as participation incentive (Morschheuser & Hamari, 2019).

Long term engagement, the contribution quality and quantitative crowdsourcing participation are increased by gamification because it is an effective approach to increase

motivation of crowd workers and impact their behaviors (Morschheuser, Hamari, Koivisto, & Maedche, 2017).

Different crowdsourcing designs that rely on gamification can lead to different behavioral outcomes and benefits. For example, one of the most commonly profound practice in gamification of crowdsourcing system is the use of gamification features that appeal competition between participants, and this practice is positively affect the performance of participants in repetitive and monotonous crowd. Contrarily, there are different types of designs for gamifications that support the outcomes of crowdsourcing or to motivate people to work together. The flexibility of games and the possibility to adapt them can make easy to apply and design for gamified crowdsourcing projects. Moreover, some famous examples for gamified crowdsourcing project, such as Foldit (a gamified crowdsourcing approach for predicting optimal protein structures and foldings), Yelp (a crowd-generated world-spanning business directory), or Ingress (an augmented reality game with a crowd-generated database of landmarks and public art), these examples indicate that gamification can be applied in different kind of purposes.

Therefore, crowdsourcing appears as exceptionally unintuitive form of organizing as coordinating a crowdsourcing project can be regarded already complicated. However, it is generally observed that within games, collaboration forms effortlessly and organically. Therefore, compared to competitive gamification, cooperative game design not only holds the potential to have people working together seamlessly, but gamification in crowdsourcing also enables further cost effectiveness by reducing the cost of coordinating human capital (Morschheuser & Hamari, 2019).

Gamification first stages is onboarding and training of crowdsourcees which can be very beneficial and useful other than just increasing the motivation of participants and the opportunity to reduce cost. Game designers must perfectionate the ways of design because games are challenging, require specific skills and challenging, therefor a good designer must break down the game for the players and design it in a way to teach the player the right way to play to it and be able to do the complicated tasks in simple and engaging way, for example, in onboarding stage tutorial are introduced, it break downs the game for the player to make the task complexity aligned with the player experience, and also make the

tasks more appealing. This is very essential in environmental work with identical and hard tasks, this approach is important to teach and train the participants in the execution of complex tasks, lower entry barriers, and attract new crowdsources, which is fundamental for the long-term productivity of any crowd. (Morschheuser & Hamari, 2019).

3.9. Virtual Reward Systems in Crowdsourcing Games

Entertainment and computational outputs are generated by crowdsourcing game that serves dual-purpose artifacts (Goh & Lee, 2011). Crowdsourcing games differ from normal games, because task completion and enjoyment are fundamental features for this kind of games. Normal games have only important goal which is enjoyment, whereas crowdsourcing games has task completion and enjoyment together. For Instance, crowdsourcing location-based game, such as Tidy city gives the users riddles on maps, and they have to figure out what are these places in their real location, the players are gaining points for solving the riddles, and their solution are used as description for the corresponding location (Goh, Pe-than & Lee, 2017). Essentially in crowdsourcing games virtual reward system foster enjoyment, reinforce gameplay behavior and an essential mechanism to engage player. Virtual rewards help to translate the crowdsourcess efforts and time that they have invested into a quantifiable mean that can be compared and communicated. Therefor it gives feedback on players progress within a game so the appropriate actions will be taken. Also, these virtual rewards provide status on their performance that encourages competition against other players. Moreover, it presents an enjoyable experience for the participants, and this might lead to a continuous gameplay. Points and badges are the most common elements that are used in crowdsourcing games virtual reward system, badges are awards shaped as digital symbols gained by doing task which are non-numeric and points are numeric rewards for progression and achievements and these used to show players status and achievements of goal. In previous studies, virtual rewards tend to affect users' awareness in different way. For instance, Richter, Raban, and Rafaeli (2015 as cited in Goh, Pe-than & Lee, 2017) discussed that sort of social shaping that has been given by badges because they produce interactions that are common between players who hold them. Points evoke self-efficacy and foster direct competition, because they are used to demonstrate the player's performance and progression. Thereby, players

might consider either points or badges as rewarding based on their motivational needs (Goh, Pe-than & Lee, 2017).

4. RESEARCH METHOD

In our research we will be using qualitative research method that can be applied to explore participants' experiences and a study phenomenon or problem (Peredaryenko & Krauss, 2013). To understand the underlying phenomena qualitative research let us have open discussion with the participants that is related to the phenomena which under study (Patton, 2015). With interview transcripts qualitative methods, we draw results from the data have been collected, it determined the themes and trends that is common in the participants responses (Yin, 2014). A qualitative method allowed us to gather rich, meaningful data on gamified/crowdsourced program employed by Google to increase the contribution and gain free data from users.

Qualitative methods give more depth than structured quantitative methods (Yin,2014) as it gives statistical results. For our study statistical tests were not suitable to answer the underlying research questions. Rather, qualitative methods allowed us to capture the necessary data to find if gamified crowdsourced program do motivate users to contribute more. Biklen and Bogdan (2011) stated that “the qualitative approach demands that the world be examined with the assumption that nothing is trivial, that everything has the potential of being a clue that might unlock a more comprehensive understanding of what is being studied” (p. 5).

In our study, in-depth interviews and observation allowed us to capture key themes related to successful gamified/crowdsourcing implementation that is employed by Google. Also, this design allowed us to gather data from multiple sources. The current study involved Google Local Guide, the main data came from in-depth interviews of Google Local Guide, and data collected from social media channels (Android/IOS App, Forum, YouTube, Twitter, Instagram, Facebook). By gathering data from multiple sources, we obtained deep and rich data on the gamified crowdsourced program strategies used by Google to reach users and increase contribution.

Several previous researchers employed case study designs to investigate Gamification as a motivational driver. For example, Kavaliova, Virjee, Maehle & Kleppe (2016)

conducted a case study explore how companies can employ gamification—game elements and design techniques—to motivate contributions to a crowdsourcing project. Fan, Liu, Wang, Jiang and Liu (2017) used a case study design to utilize the crowdsourced driving information to combat the last mile puzzle for road navigation. Zeng, Tang and Wang (2017) studied the gamification mechanism in crowdsourcing projects and revealed their ability to effect positively/negatively on participants motivations. Similarly, Brieger (2013) used a case study design how to use such strategies in the communication or branding environment and how to use them when a global brand wants to communicate across cultures while adapting the approach to each individual one. In each of these studies, researchers used a qualitative method to explore the underlying gamified/crowdsourced projects using different data types to discover key themes. Similarly, we employed a case study design to explore how Google company can employ gamification—game elements and design techniques—to motivate contributions to a crowdsourcing project (Google Local Guide). An essential element of qualitative research is data saturation, which is indicated when categories and themes begin to repeat, and no new information emerges (Patton, 2015).

When the repetition of themes occurs when collecting data, this indicates that the researcher got all ideas that are related to the problem under investigation (Sikweyiya & Jewkes, 2013). To reach to a saturation point we have to continue doing semi-structured interviews until the saturation occurs because saturation point is not exact and it takes time to reach (Patton, 2015).

4.1. Aim of the Study

We believe that crowdsourcing projects that use gamification as motivation driver has the ability to gain and mine data from its users by introducing a game like program which makes the experience fun.

Google Local Guide program can encourage people to get up from their seats and be more active, in a challenging and rewarding ways of entertainment. Google Local Guide can be more fun than sitting on your couch checking Google maps without doing any contribution. Google Local Guide harness the good will of the people into making good

contribution to the society. The underlying question is why people are contributing this massive data to Google without any monetary rewards.

For the purpose of our study which is the studies of Gamification as motivation driver in crowdsourcing projects. The aim of this study is to provide important feedback and data about the motivational drivers by contributing to the literature within the framework of the findings to be obtained from the people who experience this program. In this context and based on the literature and the importance of information and findings emerging from the proposed conceptual framework, the following research problem and sub-problems have been developed:

The main problem: What are the most emphasized motives behind participating in gamified crowdsourcing programs such as Google Local Guide?

Sub-Problems:

1. trying to answer the questions that concerns the experience of the users toward Google Local Guide?
2. What are the effects of gamified/crowdsourcing programs on individuals and how can the underlying factors be explained?
3. What are the general attitudes, feelings and thoughts of individuals?
4. How is the overall satisfaction of the program?
5. What are the external and internal motivations for gamified/crowdsourced program?
6. What are the causes of negative attitudes and behaviors towards gamified/crowdsourced program?

The aim of this study is to look deeper into the motives behind why the users of GLG participate and contribute. And does Gamification works as a real motivation driver to make the users contribute more.

4.2. Sampling and Population

In many qualitative studies, purposeful sampling is used based on the assumption that collecting data for the purposes of the research and the collected data can best represent the research problem and purpose. In this respect, because it allows qualitative researchers to select a representative group of participants with experience in the field of study, a

purposeful sampling technique was used to involve the participants in the study (Flick, 2018). With purposeful sampling we can select participants who are experienced in the studied field and fit to the specific criteria of study (Cope, 2014).

Table 4.1. *The participants' information*

Demographic Charts		N	%
Gender	Male	7	58.3
	Female	5	41.6
Age	20-30	2	16.6
	30-40	4	33.3
	40-50	3	25
	50-60	3	25
Education	Bachelor	8	45.4
	Masters' Degree	2	11.4
	PHG	1	2.3
Income status	Low	3	25
	Average	4	33.3
	High	5	41.6
Nationality	USA	2	
	Mexico	1	
	Bangladesh	1	
	Germany	1	
	Italy	1	
	France	1	
	Hungary	1	
	Belgium	1	
	Nigeria	1	
	Pakistan	1	
	Malawi	1	

The research was conducted with users of Google Local Guide from all around the world. According to the statistics there are over 60 million contributors, all ages participating in Google Local Guides. For my research the users I have conducted with them the interviews are from different ages and different levels, but I have chosen the users

who are over level 5 so they would have some kind of commitment to the program or at least they are aware of the basic concept of the program, because reaching to level 5 is very easy and they can be not aware of this. The participants are from both gender (58.3% males and 41.6 females) and the ages varies so we can have a wholesome perspective. Group of 20-30 (16.6%), group of 30-40 (33.3%), group of 40-50 (25%), group of 50-60(25%) and all of them are educated, some are still in university and the others graduated and have masters' degree and PHD, their income varies between low, average and high, Low (25%) Average (33.3) High (41.6%), their income status helps understand if these users are able to travel more and see new places to contribute more to Google Local Guides.

In order to conduct this research, an in-depth interview and observation were used, the in-depth interview conducted with questions that were generated with me and my advisor. After the interview questions were identified, the first part was guide the participants and give them information about the type and purpose of the study, and they were given the opportunity to ask about the research, I managed to get the participants from different social media channels, first one was the forum (Local Guide Connect), Twitter and Facebook group. Following the approval of the participants, informed volunteers who wish to participate voluntarily. I took the approval to record the interviews and use their names in the study. Before the final interviews with the Google Local Guide users, a pilot interview was conducted with a person who had previously played this game to test the topics and the clarify of the questions in the manual. This pilot interview also enabled the interviewer to improve their interviewing skills and techniques. With this pilot study, it was decided that additional explanations and elaborations were necessary in order to benefit more from the subjective experiences of the participants (Ritchie and Lewis, 2013).

Twelve individuals participated in individual semi-structured interviews. There are no strict guidelines regarding the number of participants required to reach saturation in qualitative research (Robinson, 2014). O'Reilly and Parker (2013) suggested that the number of participants selected for qualitative interviews is less important than the selection of participants with experience aligned with the topic of study.

4.3. Data Collection and Process

In this thesis, semi-structured interview questions, one of the qualitative research data collection techniques, were utilized. As Edwards and Skinner (2010, p. 107) point out, semi-structured interviews allow participants to learn more where uncertainty exists and allow researchers to interview for more details as needed. After completing the conceptual framework for the creation of semi-structured interview questions, interview questions were prepared using the information in the literature according to the content. In order to determine the questions and experience the details of the game, the researcher who me is an active user of Google Local Guide program took the necessary notes about the application and I have full awareness of the how this program work. These experiences and notes also guided the interviews. All interview questions are given in Table 4.2. In the interviews, open-ended questions were asked and participants' feelings, thoughts and motivations about the Google Local Guide were collected. Due to the nature of semi-structured interviews, the researcher determines the questions depending on the research purpose and problem and can also direct the necessary questions to the interviewers when necessary during the interview.

The research was conducted with 12 participants from all around the world who are users of Google Local Guide and are above level 5. During the interview, the participants were assured that their personal data would only be used in this academic study, and their consent was obtained, and their approval is recorded. The participants were reached out through messages on social media and explained and asked to join the research, due to the nature of the study the users were from all around the world that's why the interviews were done over voice call. Although you can't capture the body language of the participants and their behaviors while doing the interview, but phone call was enough to get their thoughts because in face to face interviews the participants might get nervous. I have made sure that they get comfortable because one of the most important principles in interviews is that one feels comfortable during the interview. Based on these approaches, interviews were conducted using voice call feature on WhatsApp, Facebook Messenger, Skype and Hangout. Each interview lasted a minimum of 30 minutes and a maximum of 60 minutes. The interviews were done in two months (June and July 2019).even though they were only

12 people, but reaching people over the internet and gain their trust was a bit of a barrier and not easy to get, but I was glad that these people offered their help.

Table 4.2. *The interview questions*

Number	Questions
1	Can you tell me and explain the first time you have used Google Local Guide?
2	Explain the reasons that made you join Google Local Guide? Was its curiosity? And did you find it worth doing?
3	Explain your feelings when you first got a badge and points for contributing in Google Local Guide
4	Did you feel excited when got the first feedback on your progress that your contribution got many views? And did you start waiting for this kind of feedback coming early week and month?
5	Is your GPS being always on and do you let Google Follow your timeline?
6	How often do you use Google Local Guide and what mostly do you use it for?
7	Are you predetermined to contribute on Google Local Guide, or you just wait for Google to notify to share?
8	Does reading the other reviews make you change your change about going somewhere?
9	How much important to you to get to a higher level and did strive to get a badge and jump to a higher level?
10	Do you believe points and badges are a good strategy to make you contribute to the society?
11	If Google did not integrate this kind system would they have succeeded?
12	Have you ever got a monetary reward or have you ever heard of any of them?
13	How do you feel when you check other users profiles?
14	Do you enjoy doing the little tasks that Google ask from time to time about places?
15	Are active on the Forum, and how often do you use the forum?

16	Do you feel motivated when your thread does not get any “kudos”? and you do you feel happy when get badges and points on the forum?
17	Can you recap your experience with Google Local Guides, are you willing to continue your contribution on local guides, do you consider it positive experience or negative?

4.4. Transcription, Coding and Analysis

The process of qualitative research framework was explained by Miles and Huberman (1994, p. 44) and based on similar approaches provide a useful framework. There are five stages of this framework, which is widely used in qualitative research. Information about these stages and their characteristics are given below (Maksatbekova, 2019):

- Recognition - Plunge into raw data; listen to recordings, transcribe, read notes, be aware of data and reveal themes.

- Determination of a mathematical framework - The process of identifying all the main themes and concepts from which data can be coded and referenced. The results are a comprehensive coding index.

- Indexing - systematically applying the thematic framework to all transcripts; explain textual data with codes in the directory.

- Graphic Creation - The process of developing a matrix for each theme and entering the encoded text sections (plus identifiers) into the appropriate tables.

- Comment - Map the range and quality of responses, create typologies, define relationships between themes, and use charts to try explanations.

Data were analyzed using content and thematic coding method. Thematic analysis is a method for identifying, analyzing and reporting patterns within data. It organizes and explains in detail (rich) your minimally tuned data (Braun and Clarke, 2006, p. 79).

This framework approach, which is stated above, is also the basis for this thesis since it presents a comprehensive, systematic and reproducible analysis process. The result from

this framework-based approach increases the reliability of the findings and is particularly useful for qualitative marketing research.

In parallel with the above framework, in this study, in-depth interview technique, which is one of the qualitative research methods, was used for data analysis using “thematic coding” method. The aim of the thematic analysis is to identify the themes in the data that help explain the research phenomenon and answer the research question.

Comprehensive data has been tried to be obtained during the dialogue with seven main questions. All calls are recorded on the audio device. Then the audio recordings of the interviews were transferred to the computer as text (transcription) in approximately 195 pages.

4.5. Validity

In qualitative research methods, validity is one of the important issues that need to be emphasized as well as reliability. Although the models and methods used in qualitative research constitute an important basis for validity, they may not be sufficient for validity and with this structure, they may not be a guarantee of validity. Therefore, it is important to ensure validity especially in qualitative researches where interview and observation techniques are used. Maxwell (2005, pp. 109-114, as cited in Maksatbekova, 2019) identified eight strategies as validity threatening elements, indicating that validity problems can be overcome if these strategies are implemented. These eight strategies include: intensive and long-term relevance, rich data, responder reliability, intervention, research of different evidence and negative samples, method diversification, statistical-like methodology, and analogy and comparison. Each of these eight strategies for validity has its own distinctive character. In the following, a brief description of the eight validity strategies (Maxwell, 2005, pp. 109-114; Korkankorkmaz, 2006, 39-41, as cited in Maksatbekova, 2019) is given and additional explanations on how to use these strategies are given (Maxwell, 2005, pp. 109-114). Korkankorkmaz, 2006, pp. 39-41, as cited in Maksatbekova, 2019).

1. **Intensive and Long-Term Relevance** Ensuring accurate data about situation needs a long-term observation, it helps the researcher gain different kind of specified data about the studied events. With the repetition of interviews and the observation of the

studied events or phenomenon, it can help cast out some misunderstanding and let you apply the proper theories on your study, and this will lead to a proper hypothesis that fits to the study. This phenomenon has been observed for more than a year, due to my participation and contribution to the program.

2. **“Rich” Data:** The extensive participation of the researcher highlighted above and the background of the research can mediate the acquisition of rich data. Working with rich data, the researcher can provide a better definition of the whole picture in the research. The transcription (analysis) of the interview is enriched in the researches that the interview is used. In this context, observation forms, field notes, photographs (see Annex-4) and videos were used as an indicator of rich data. The researcher was observed by the researcher about the virtual reality gaming experience of the participants, observation and field notes were taken, permission was taken, and video of the experience was recorded, and interviews were recorded. Our data are rich due to the massive information in social media and the application itself, our data stemming from interviews and observations which are enough to give richness to the data that are being collected.

3. **Respondent Validation** Respondent validation is systematically soliciting feedback about your data and conclusion from the people you are studying. This is the single most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have on what is going on, as well as being an important way of identifying your own biases and misunderstanding of what you observed. However, participants’ feedback is no more inherently valid than their interview responses; both should be taken simply as evidence regarding the validity of your account. Therefore, our results were shown to our participants to review and add their own notes on the topics and if there is a need to change something.

4. **Intervention:** Although some qualitative researchers see experimental manipulation as inconsistent with qualitative approaches, informal intervention are often used within traditional qualitative studies that lack a formal “treatment”. Due to my participation in the program I have managed to do intervention and check if there are different results if we changed the factors.

5. **Searching for Discrepant Evidence and Negative Cases:** Positive cases are not enough to be analyzed to improve the validity of the study, negative cases should be studied and because they are fundamental in validity testing in qualitative research. Such as cases that cannot be interpreted, this way might highlight the errors in that study. By presenting marginal examples within the scope of qualitative research, it is possible to provide indirect evidence about the non-marginal general. Within the scope of this research, it has become possible to interpret the interviews by making use of the different evidence presented by the employees in the virtual reality game center. Therefore, our study didn't consider only the positive side of gamification as motivational ride, it also considered the downsides of it as well.

6. **Triangulation:** Collection information for various sources and different methods is a good strategy to reach validity. Triangulation help the researcher to get results that are generalizable, due to the low risk that we gain from collecting data in various ways. As mentioned, we have used observation and interviews to collect data which is enough for our study.

7. **Quasi-Statistics:** Qualitative methods are misunderstood of being dependable on qualitative data, their results have implicit quantitative part. No matter how unknown or rare the phenomenon in current settings, it needs quantitative support because of its quantitative claim of this kind. Our data were transformed into numbers, therefore it more convenient and comprehensible to interpret, we have added the frequency for every code that has been extracted from interviews.

8. **Comparison:** In qualitative researches comparison is essential to assess the validity of the study. It can be used in many ways, but its importance can be seen and used in multi-case studies.

4.6. Trustworthiness in Case Study Research

Qualitative methods are different from quantitative methods in terms of credibility, because in qualitative methods trustworthiness is what most researchers seek to assess credibility, and a lot of researches extensively were made to evaluate the accuracy and estimate the trustworthiness of qualitative data and strategies for demonstrating transferability, confirmability, credibility, and dependability (Baxter & Jack, 2008).

Researchers who are implementing case study project must take in consideration establishing trustworthiness to assess validity or credibility for other readers, Baxter & Jack (2008) has broken down the foundation to achieve trustworthiness:

1. the case study research question is clearly written, propositions (if appropriate to the case study type) are provided, and the question is substantiated.
2. case study design is appropriate for the research question
3. purposeful sampling strategies appropriate for case study have been applied.
4. data are collected and managed systematically
5. the data are analyzed correctly.

To reinforce the credibility or “truth value” in case study, researchers tend to use many strategies that help them to reach trustworthiness. One of the most used strategy is triangulation of data sources, data type, researchers use triangulation if the phenomena in case study can be viewed and explored from different perspectives and this support the quality of the data collected for comparison and analysis (Baxter & Jack, 2008). And for our research triangulation has been used to collect data and reinforce to raise the quality (in-depth interviews and observation).

The researcher must be exposed to the underlying phenomena, like in our study I am a user of the program and I know how it works, this means the data collected with the awareness of what the phenomena is. After the data is analyzed is favorable for the researcher to do member checking, share the results with the participants and have discussion about the results because they might have different ideas about the results, therefor two of participants were shared the analyzed data and gave us their opinion. Also taking field notes and peer examination of the data are additional strategies to establish credibility.

5. RESULTS

Telephone semi-structure interviews were conducted with 12 participants, and observation of social media channels and forum. 17 question were asked to obtain data extensively. The main themes were gotten from the motivation theory that has been applied in Füller (2010) work, and with comparison with his work and the transcripts we got from the interviews we found similar results about the motivations that drive the users to participate.

The main Categories and sub-categories and codes of motivations contained the following

- **Intrinsic motivations**
 1. **Intrinsic Play Task:** Hard Fun and blissful productivity/Fun of exploration
 2. **Curiosity exploration— arousal seeking** Volunteering to help others/Designing the system to trigger motivations/Curiosity to learn more
 3. **Addiction** Commitment to the program/Lifestyle
- **Internalized extrinsic motivation**
 1. **Achievements challenge—self efficacy:** Score and skill improvement/Encouragement to do better /Challenge oneself/Competitive personality
 2. **Recognition visibility** Sharing work and stories/Outstand among others
 3. **Relationships building and consciousness of kind** Idea sharing and interaction/Making friendship and going out on meetups
 4. **Escapism** Escape from real-life seeking relaxation
- **Extrinsic Motivations**
 1. **Monetary and non-monetary motivational drivers** Conference/ Point, Badges, Levels/Gifts

All these codes and themes are shown in the following table, the most important examples are put in the table 5.1

Table 5.1. *Examples of users' motivation in gamified crowdsourcing project (GLG)*

Category	Type of motivation (sub-category)	Fr	Undermining motivations (Codes)	Examples
Intrinsic Motivation	Intrinsic playful task	10	Hard Fun and blissful productivity	I post and make sure they're nice photographs, tell a story how good my community is, and I feel like having 12 million views it will also help change any negative narrative subconscious of any negative view that they've had in their subconscious about my community so I will say definitely it is worth it. (Bassey, Level 9)
		7	Fun of exploration	back in 2011 when it was in map maker we were only able to add places roads and other pieces in Google Maps but we couldn't add photos or reviews, who you are only able to add photos review only when the Google local guide introduced. (Saiful, Level 8)
	Curiosity exploration—arousal seeking	12	Volunteering	So Google made program and I look at it as Crowdsourcing platform, where Google uses the people who visit the places to fuse the platform, a platform for people to share pictures for a place that the people who visit the place next can know a little bit about the places before they visit, so that's why I got interested to start contributing, I think it is important for the people to know what they are getting to before they actually do, so when you think of someone who has to ride a wheel chair and visited a place that doesn't have facilities for people in wheelchairs, specifically if they find out they visit a place that they didn't know, I mean what to do in those places that not support their condition (Lingstone, Level 8)
		5	Designing the system to trigger motivations	I am using the maps and getting benefitted from the information other local Guides had provided so I feel an urge to contribute to the map so that others can get help like I am being help from the map (Saiful, Level 8)
		6	Curiosity to learn more	I think after this first upload there was possibly an email to my

				Google account from the local guides staff explaining a bit and that that may be quite curious specifically about and that's also where I tell people about it that had hardly anybody realizes that that's or the extent of the amount of information that anyone more or less or just if you're a local guide can change the information on Google Maps, this idea is very powerful to make people try this and for me the motivation was also so my age currently is 52 so I have to pay attention. (Jan, Level 10)
	Addiction	5	Commitment to the program	Looking at my contributions I have over 4,000 photographs that I have uploaded on Google Maps with about over 12 million views so that shows that people are looking at those photographs. (Bassey, Level 9)
		4	Lifestyle	I cannot live without a day without loading up at least one picture (Torben, Level 10)
Internalized extrinsic motivations	Achievements challenge—self efficacy	7	Score and skill improvement	I am going continue contributing in much bigger way, because I've using my phone to get a lot of pictures, and I am just new Camera with an HD quality, much professional, we have to take it to next level. Whatever you do whoever you are, just do it well. Because this points thing you don't know where it will lead you. (Charlie, Level6)
		5	Encouragement to do better	It's encouraging I mean it feels like an accomplishment that my pictures are getting views (Monica, Level 5)
		5	Challenge oneself	It became like a competition with myself at first, then recently I joined Facebook group, it was like a little bit of ohh some people level 10 and I am trying to make it up to there now. (Anabel, Level 8)
		3	Competitive personality	You know I am competitive person, I really like to succeed in life, I would like to get higher points, but you know the main thing is your part your way should be right, so you can achieve anything. (Faiza, Level 7)

	Recognition visibility	8	Sharing work and stories	yeah that's a really nice one afterwards you can show to people "hey this place is now on Google Maps I put it there!" that's always something where you can amaze people that are not aware of the local guides program. (Jan, Level 10)
		5	Outstand among others (Reputation)	I love taking pictures, and then knowing that someone else look at my pictures just me like woowow and when someone ask question regarding that location where I took the picture at, it makes you happy it makes proud (Erna, Level 8)
	Relationships building	7	Idea sharing and interaction	I wrote an article about I wrote an article about this on local guide connect one of my process to get received within one month's 1000 kudos, I'm fascinated when they select me for the Friday favorite posts so this is my it's not the Kudo as well but it's more like when they select and I've been I think five times I have my post has been selected for Friday's favorites, this is my point (Torben, Level 10)
		8	Making friendship and going out on meet-ups	as I told you my favorite aspect for me is making new people and see new interesting places (Antonella, Level 8)
	Escapism	4	Escape from real-life and relax	it's more like meditation or something I have I have a high I would say I have a high pressure blood pressure when I walking through a town and hunting pictures yes I call it hunting mm-hmm then I have a high pressure, but when I'm at home and I'm loading up some pictures it's like a joy(Torben, Level 10)
Extrinsic	Monetary motivational drivers	10	Conference	that's why last year after not getting selected I said okay now I really have to find some things where they it would be impossible for Google not to select me next time, hmm so that's what that's why I started doing meetups. (Jan, Level 10)
		7	Gifts	I was offered 1 year subscription to a magazine and went to get it I wasn't able to and there was

				another thing to and I've gotten many time coupons code for Christmas time shopping and for places I don't necessarily care, I didn't use those codes. (Anabel, Level 8)
	Non-monetary motivational drivers	6	Point, Badges, Levels	I try to make a review very detailed because I know that if you write 200 characters or more you'll receive more points (Ricardo, Level 7)

5.1. Intrinsic Motivations

Intrinsic motivation is our first main category, in the past researches, researchers have emphasized the role of intrinsic motivation, we have noticed that intrinsic motivations are triggered because of the nature of the program that offers to the users. Users are seeking to fulfill their needs through the activities itself, such as volunteering which is highlighted by the users. We will address every motive and explain about it and see how frequent the users are motivated by such.

Table 5.2. Intrinsic Motivation

Intrinsic Motivation		
Intrinsic playful task	Curiosity, Exploration-arousal seeking	Addiction
Hard fun and blissful productivity. Fun of exploration.	Volunteering. The systems design Curiosity to learn more.	Commitment to the program. Lifestyle.

5.1.1. Intrinsic playful task

The frequency of some words that related to intrinsic playful task has been high (interesting or fun) in the in-depth interviews that I held with the users, it reflects their enjoyment in contributing and giving back to the society.

“as a new local guide, it's really exciting to me that my pictures are getting views so it's encouraging me to post new pictures and reviews”

(Monica, Level 5)

“it was more fun for my family and me I did showed to my children I told “daddy is playing something” you know it wasn't the time where was the Pokémon the game yes and I told to my son oh look it's much better instead of Pokémon, you use office because then you can choose places and you have a record where you have been and so on and it's like this in this way it started”

(Torben, Level 10)

McGonigal (2011, as cited in Kavaliova, Virjee, Maehle & Kleppe, 2016) described the activities that are serious and fun at the same time as “hard fun”, we have analyzed this and around 10 users had the same experience, and we noticed by sharing reviews, stories and rating places, the users considered this as fun. GLG users are happy or they sense happiness by contributing to “Google Local Guide” rather than just relaxing (McGonigal, 2011, as cited in Kavaliova, Virjee, Maehle & Kleppe, 2016). This can be seen in local guide active users, they like surfing the program and participate on daily/weekly basis.

“I discovered that this local guide program is actually an excellent help there because you move through a city through an area - through wherever and you walk miles and miles while having fun”

(Jan, Level 10)

Such activities in Google Local Guides make the users feel a sense of accomplishment for their contribution, in engaging them in productive tasks “hard fun” will keep the users motivated to contribute more.

“but I want to reach in new level but it just for myself as an accomplishment is not going to be that important in my life to reach I don't know level 10 but it's just exciting to see how my progress goes and how close I get to the next level”

(Monica, Level 5)

Google Local Guide depends on visiting new places and exploring which considered to be as fun. 7 users have expressed their happiness when exploring. Therefore, exploring new areas and making contribution while exploring are the results of such fun, and it is represented by the users statements such as “I love contributing” “I enjoy” etc.

“the point is not contributing with the pictures reviews as I told I like taking part in the game I like gaining points but it's a game for me the most important part is meeting new people and after making new people contributing in that area we are very focused in volunteer in different areas”

(Antonella Level 8)

And it is worth mentioning that one of the users doesn't consider this experience as fun, because some of the users are very aware of the concept “crowdsourcing” and how it works, he considers Google Local Guide just a way to quantify your progress, so he stated the following:

“it is harmless but I wouldn't call fun, fun is what I do when I am in those places that I share about but the actual experience of sharing on Google Maps, I've never consider it as fun it's just fairness on my part.”

(Lingstone, Level 8)

5.1.2. Curiosity—Exploration—Arousal seeking.

Users in crowdsourcing projects search for a motive to inspire them to participate (Füller, 2010). It can be in many forms, such as helping other people, discovering new places, write new reviews, introducing new methods to take pictures, write decent reviews. The design of GLG has proven to work as an inspirational trigger to push people look deeper into gamification model of GLG, and this all happen by a simple notification that comes from Google Maps, many of the users aren't aware of their participation because Google tend to make them local guide by chance, and this really worked on users because it is overwhelming when they receive an email from Google that inform them that they are doing something valuable, so the curiosity starts and the desire for exploration arises and the arousal seeking is triggered. 5 users are triggered by the design of the program.

“okay I think I have found about the Google Map Maker in 2011 from blog post in our local language in Bangladesh okay so I searched there a bit more about Google Map Maker too, to know more How-to and how I can contribute then I started contributing”

(Saiful, Level 8)

All the users I have done interview with have highlighted this feature, about how much joy it brings them knowing that they are helping other people, it triggers the good will in human consciousness to do more for the society. And this considered to be an arousal for participants to do more.

“but really what gives more satisfaction is it's the knowledge that once you bring what you add to the map is helpful to other people”

(Jan, Level 10)

The curiosity factor plays a really good role in gamification especially on the onboarding stage where you are still a novice player who still learning the bits of the game, and Google made it very simple that users get surprised and get carried on using the program. 6 users showed their curiosity to learn more about the program, one of the statements is the following:

“I was surprised and curious, that's why I decided to find out, so it was through by the use of my Google Maps that I concluded that I got to know eventually about GLG”

(Bassey Level 9)

5.1.3. Flow

According to Csikszentmihalyi, Abuhamdeh, & Nakamura, (2014) the users can enter the state of flow by using game thinking and design, the users who are level 9 and above showed clearly that they are in the state of “Flow” as well as to some users in level 8. Local Guide has enabled the users to enter this state. Especially, users are given with the set of clear goals such as rating for a place, writing reviews, correct places, upload pictures and submitting them in order to get points, badges and even have enjoyment of helping others.

Users do not have to be professional to reach the “flow” state, other means are helpful to help users reach this state where they are happy to contribute. Such means are shown in

virtual community, like the forum, where moderators are their pick the best stories and best contribution. One of the users stated the following:

“Yeah when a moderator tells you that this is a good story, it feels great! And the kudos are coming it feels much better”

(Charlie, Level 6)

Accordingly, we presume that Google Local Guide community members can achieve the state of flow. Some motivational factors are hard to differentiate especially addiction, fun and flow.

“I am kind the guy start doing something I can get carried away and really go for it so then I can spend a lot of hours on it if it's fun and interesting.”

(Jan, Level 10)

5.1.4. Addiction

Some of the users has shown a state of engagements by rating and reviewing new places which is increasing by the years passing. Some of the users signified their will to participate in the community by the stating the following:

“it's my game because I need to travel a lot and it's like only, I can relax”

(Torben Level 10)

“I still contributed, even if there are no points or these kinds of gamification”

(Saiful Level 8).

5 users showed that the game dynamics and mechanics has been employed by Google local guide results to a high degree of commitment and engagement. Their employment made strong bond between the users and the community that triggered by the game mechanics. We were informed by the users and observed information in the forum and other social media that they consistently login at least once a week or even every day to be able to post new reviews, reply to other members, and give feedback to other community members that might as criticism or gratitude.

“it's been on daily basis or monthly basis or weekly basis depends on my schedules”

(Charlie, Level 6)

“I have to say so to admit I was extremely active in end of last year because then I was approaching level 10 and ever since right now I still contribute but it's definitely at a slower pace again well that's for sure”

(Jan, Level 10)

McGonigal (2011, as cited in Kavaliova, Virjee, Maehle & Kleppe, 2016) explained when users keep repeating the actions, 4 users showed how they shaped their life around the program and this have been seen in their behaviors in the frequency of reviewing, rating, sharing new stories with pictures, these are considered to be behavioral momentum game dynamics.

5.2. Internalized Extrinsic Motivations

In internalized extrinsic motivations, the users are fulfilling their needs that are coming from extrinsic stimulus and are transformed into internal regulation. Such motivations are highlighted and frequently noticed among users, its importance doesn't differ from intrinsic and external motivation. In internalized extrinsic motivation: achievements, challenge-self efficacy, Recognition, visibility, relationships building, and escapism were our sub-category, and have been analyzed and interpreted in detail with frequency of every code that are been taken from the interviews and observations.

Table 5.3. Internalized extrinsic motivations

Internalized Extrinsic Motivation			
Achievements, Challenge-Self efficacy	Recognition, visibility	Relationships building and consciousness of kind	Escapism
Score and skill improvement. Encouragement to do better. Challenge oneself Competitive personality.	Sharing work and stories. Outstand among others	Idea sharing and interaction Making friendship and going out on meetups.	Escape from real life and relax.

5.2.1. Achievements—Self efficacy

Google Local Guide is found to mine the support and contribution of the crowd; therefore, helping the community and be more worthy for the society is an ethical goal.

Number of views, number of contributions and submitted stories on the forum are shown and bragged about in Facebook group, Twitter and the forum to show amount of contributions they have made.

*“I saw that about 50 or 60 people have viewed my photographs, so I was impressed and that was what actually encouraged me to put more effort on contributing on Google maps
(Bassey, Level 9)*

This kind of crowdsourcing projects are a trigger for some users to develop their expertise, a reason to do better to show others that they are efficient. 7 users showed the will to get high views count and get better in writing reviews and posting better pictures. GLG local guide let anyone with any type of expertise to participate and help others and with these factors, it motivates the users to do more contribution that are driven from game dynamics (McGonigal, 2011, as cited in Kavaliova, Virjee, Maehle & Kleppe, 2016).

“now I am interested in contributing more than wanting to go the conference, trying to receive so of these, especially since I can join the group in Facebook, I am able to see the other ones that are, I was very surprised to see level 10, that’s still so far ahead, first I started competing on my own with myself and earn points and that it was personal growth and achievement”

(Anabel, Level 8)

It is highlighted by the users that being seen is very compelling and exciting, it makes them happy to know that their contribution has been noticed by huge numbers of other people around the world and their contribution is helping someone, and these have been seen as an encouragement to do better, 5 users have shown this:

“because for all you know when share it, it’s gonna help some else because if I want to go somewhere, I look at the reviews of the Local Guides”

(Charlie Level 6)

“I love taking pictures and then knowing that someone else look at my pictures just me like Wooow”

(Erna Level8)

GLG let the users feel a sense of control that is driven by ownership game dynamics by letting them post, edit, add etc. The contributions are evaluated by the community member by receiving kudos, replies, not only the Google staff and moderators. These dynamics are expressed by liking others’ posts that makes it feel like an achievement that is considered a motivational factor for users to engage more.

“I wrote an article about this on local guide connect one of my process to get received within one month’s 1000 kudos”

(Torben, Level 10).

In Google Local Guide challenge oneself and competitive personality has been seen less, this program is not dependent on competition between others, because of its friendly atmosphere, only 3 users showed competitive personality, 5 users are seen to have GLG made them challenge themselves to do better, the examples are in Table 5-5. Some of the users showed friendly competition between each other only for fun because they became friends and it became fun when they challenge each other to get more points or receive a new badge.

“they have about five guys more, two from France I know and from India too, and from France they have the same , and we are hunting each other so we checking how many views we have and how many points and we write to each other or we call to each other yeah it's like it's nice it's only if you know it's like it's not real competition is more like we are happy that we have each other that we understand each other”

(Torben, Level 10)

5.2.2. Recognition—Visibility

The users of GLG show the desire to get recognized by posting their achievement in social media pages and the forum. Being noticed and being looked at in Google Local

Guide is something that 8 users have confirmed, they feel happy when they see how many people looked at their pictures and reviews.

“I got so much recognition mm-hmm in my community I got so much exposure everywhere and the local guides seemed they also there contacted me a lot of times to ask for permission to use my pictures on Google Maps”

(Bassey Level 9)

Outstand among others (reputation) has been shown by 5 users, they like showing their progress to other users. Gaining recognition and admiration from members' community and even outside the virtual community especially for those who reaches level 10. This has been seen in social media like Twitter, they post every month a milestone post to see and congrats users for reaching certain amount of views and badges, this is as well happening in the forum and Facebook.

“I don't like to play when I am forced to something but then suddenly when I got recognized to this local guide crew then I suddenly started to check the points because I was I did like to be in the in the black flag 10 local guide.”

(Torben, Level 10)

5.2.3. Relationship building

Google Local Guide community is intimate, warm. It has been noticed the strong relationships between users in the forum, app and social media. They act and behave politely and show respect to each other especially those has strong relationship with the program and its users.

They also involve in ongoing meetings that are scheduled from community members, and these meetups are mostly held in Europe and Asia. Just like in Brabham's research (2010) in motivation to participate in innovation crowdsourcing projects which resembles our research, he ensured the importance of the community to be a motivational factor for the users to commit and participate. Around 8 users have joined meetings, and they meet other local guides in real life, Jan (level 10) is one of the users who plans for meeting, he planned the big European meetup while I held this interview with him:

“the big European Meetup whereas I said 25 people from 10 different countries will be joining”

(Jan, Level 10)

The Google Local Guide community especially the forum represents a place to share ideas, telling stories about their experience and where to go and where not, teach other users, give free tutorial on how to write a good review, how to take good shots and talk about private matters like their own personal trips, which stimulates and encourage members to contribute more. 7 users have signified the importance of the community and how they share ideas and stories on the forum:

“I do share posts on the forum I share post I join in into discussions especially if the discussions that have to do with my passion which is photography, the food styling and things like that landscape photography I contributes on other posts”

(Bassey, Level 9).

With Google Local Guide being on the web for few years, the nature of Google Local Guide and its friendly environment made many users have friendship with the other members and not only on virtual life, in real life as well.

“I love it because I meet a lot of people and I talk to people you know it's not I taking pictures and running through the town I as well meet people and talk to them what they think and so on, so it's more like relation hmm for me”

(Torben, Level 10)

5.2.4. Escapism

Some Google Local Guide users get involved with Google Local Guide community to escape the current reality and avoid their problems that they have whether from work or home. The events and activities that presented by GLG community help them entertain themselves by posting new photos, writing stories, going on meetups, visit new places etc. The atmosphere that GLG provide is an attractive escape environment especially for those who are committed to the program and the app. Not many of the users has shown a feeling

of escapism, only 4 members and they are with highest level in Google Guide, this can be interpreted that high level users (9 and 10 level) are most likely to have this motivation.

“I paid money to contribute on Google Maps my wife was totally upset but it's like it's my game it's my game it's like it's not I don't feel must I died it's my game like I need to relax.”
(Torben, Level 10)

5.3. Extrinsic Motivations

According to the literature, extrinsic motivations has been wrongly thought to be the main motive for users to participate, With the results we got it was noticed that they have been emphasized by the participants. The conference for instance has been a major motive for users to participate, which we will see in the following interpretation.

Table 5.4. Extrinsic motivations

Extrinsic Motivation	
Monetary	Non-monetary
Conference. Gifts.	Badges. Points. Levels.

5.3.1. Monetary rewards

Google Local Guides tends to stimulate more contribution by material awards for participants. But we need to state clear that these rewards are not applied in all countries. For example, the users who participate in America or in some parts in Asia receive monetary rewards (discount on cinema tickets) and free storage on Google Drive, and other normal gifts. Only 7 users mentioned that they received gifts or got an offer.

“Yes I think I have benefited, yes I think I have benefited I got an offer for Google Drive”
(Lingstone, Level 8)

“I think is people let's say that I wouldn't contribute to Google maps just to get a 30% off on an Uber ride I am only a local guide these perks definitely interest me, this offers and points and badges are not for the people who are not Local Guides, this is for the people

who already local guide and to encourage them to contribute more and this gamification and this offer definitely help them to”

(Saiful, Level 8)

Those who are level two or higher get early access to new Google product features, and sometimes they get by mail socks that has the Local Guide logo on it and stickers. Members who are level 4 and above can redeem their points to get a 75 percent off a rental in the Google Play Movie store or a three-month Google Play Music subscription.

Although these perks are tempting for some users but the most important perk in Google Local Guide is the conference, a remarkable comment from one of the interviewees said the following:

“there's only one real perk and that's connect life, all the rest of marketing is marketing, also from the terabyte if you if you read the terms and conditions it's only for one year you get it, then you have to decide okay then you have to pay for if you want to keep it”

(Jan, Level 10)

Every year Google Local Guide organize a conference for its users, they send 200 invitation for members to join the conference that is held in California, the winners receive a fully paid trip that consist of free plane ticket, staying at the hotel, posters, t-shirts and of course the chance to meet all Google Guide team and users from all around the world. 10 users showed how much important for them to win the chance to go to the conference. And likewise we realized how much disappointed and overwhelmed some users are for not winning the chance to visit the conference and how much difficult for being picked amongst millions of users, being picked between millions of users is a very difficult task, but this motivation kept the users contribute to be noticed the Google team.

“But I really got disappointed when I applied for connect live and got rejected, I really got disappointed”

(Erna, Level 6)

“I think I read there the requirements or the steps to apply but just that I didn’t apply in their last year for that because I feel that it's like too hard to be selective I would like to be in that kind of conference because I think that you can learn a lot but I didn't do the application process other friends of mine actually did it they apply but they weren't selected”

(Ricardo, Level 7)

This kind of monetary rewards especially the invitation to the conference are a motivational drivers for most of the users I have done with them the interview, they admit that they participate in Google Local Guide community because they want to attend the conference, and it is a very strong motivation that one of the interviewees stated that they will stop contributing the same way if they don’t get the invitation

“I'm active now because I want to participate in a Google summit or this event that's going to take place in November but if I'm if I'm not going to be invited I'm not sure if I'm going to post as frequently as I do now but I will stay a member of the Google local guide platform but I might not post as regularly because it takes time and we are not getting paid for it it's just out of our own goodwill”

(Monica, Level 5).

5.3.2. Non-monetary rewards

Moving from a level to another, earning points, winning badges, and having more views on your contributions are a goal for many Google Local Guide users. Besides the sense of accomplishment that accompany your achievement when you get these sorts of non-monetary rewards.

“If you're posting on connects it shows with these colored icons it shows your level, people are respectful to level 10 of course”

(Jan, Level 10).

“I want to get it you know, it's not like you want to get to that point where somebody will also send a message and say wow! You are you are level 10 how did you do it this is amazing.”

(Charlie, Level 6)

Google Local Guide uses badges, points and levels, their importance varies between users, only 6 users said that they are important and they look for it and work for it and some of them admit that they strived to get and earn these badges:

"I do have 3 masteries between master and one expert and the only is the video, I am working on mastering a badge for travel laser, is a badge for you know new business new location, rating and reviewing for a place that doesn't have any reviews or photos, so I am also working towards that"

(Anabel Level 8)

"It's what drags you in"

(Jan, Level 10)

Nevertheless, there are also who do not consider it as a purpose as much it a way to achieve what they want, like helping others and building reputation or having the chance to get the invitation. There is consensus from all the interviewees that these types of non-monetary rewards triggered their motivation to contribute.

"It didn't mean much to me but I guess it made me want to contribute more, I just look at it as a way majoring your contribution and as way of appreciation the efforts that local guides redeem, it is just to keep track of how many contributions people are making and trying to quantify all these things"

(Lingstone Level 8)

"It drove me in the beginning but now that I have some it it's not really important, but I think there are some people who are really motivated by these badges"

(Monica, Level 5)

"I don't know I'm not very interested in badges and points, I might feel appreciated yes but I'm not interested in badges"

(Antonella, Level 8)

We also have realized how much these badges have effect on the users as a mean of appreciation toward their efforts and contribution.

“I feel it's a good way to appreciate the work of local guys now the local guide we all know, let me speak for myself when I say I do know that it is a voluntary service, right? and I do not do it to get any reward, but the fact that with my phone my effort get to get points badges and all that it actually encourages me to keep on, right? Even though with no badges and points I would do the same thing, but having points and badges, I feel it is proof recognition I have by Google the effort has been put into contributing on Google Maps”

(Bassey, Level 9)

Although monetary rewards for being picked for the conference are in place, but the users appreciate GLG non-monetary rewards. Google has done great job with consistent and fast feedback, you get weekly updates about your progress and given new task to earn the next badge for your accomplishment.

“Me personally, it is ok, but I think it is reward for some people, anyway Google go to the right direction, they know what they are doing”

(Erna, Level 8)

All the users I did interview with have agreed that without these game mechanics Google wouldn't have succeeded and it is a good strategy to make people contribute more.

“I don't think they have they could have succeed if they don't have that kind of rewards it helps a lot because for people to contribute”

(Ricardo, Level 7)

“Yes!! It helps, it is not the main reason... but it helps and it keeps the motivation level up, even in games or anything if you start winning then there are rewards for you, so obviously it is like an addiction”

(Faiza, Level 7)

In addition, they told us about the misuse of these game mechanics in the game, and how people are only contributing to gain these badges and points. These behaviors are very clear in Facebook groups or Twitter, one of the interviewees summarized it in this sentence:

“if there's something to be earned yeah that people will be tempted to misuse it and especially there's a phenomenon that I call a level fever whenever you approach the next level then you see that people are tempted to do things that they should not do”

(Jan, Level 10)

6. DISCUSSION, CONCLUSION AND RECOMMENDATIONS

6.1. Discussion

Our research has studied and analyzed the motivation why the users of Google Local Guide participate and engage in such platform which is a representative of gamified crowdsourcing project which is our main topic for this thesis. We have used Google Local Guide as our research case, because of its success to attract many users into participating into the program. Therefore, it was convenient to study the effects of game dynamics and mechanics (levels, points, badges) on Google Local Guide users' motivation to participate and contribute to the development of Google Maps. Local Guide implemented number of game elements whether in Google Maps or the forum including achievements, badges, rewards, points and status. Once the users are aware of their participation in Google Local Guide or when they realized they became a local guide, it becomes easier for them to know how to win points or in other words they enter the state of flow. The weekly and monthly emails, beside the feedbacks that the users get from the forum are feedback of game mechanics that triggers the users into contributing, sharing and discussion.

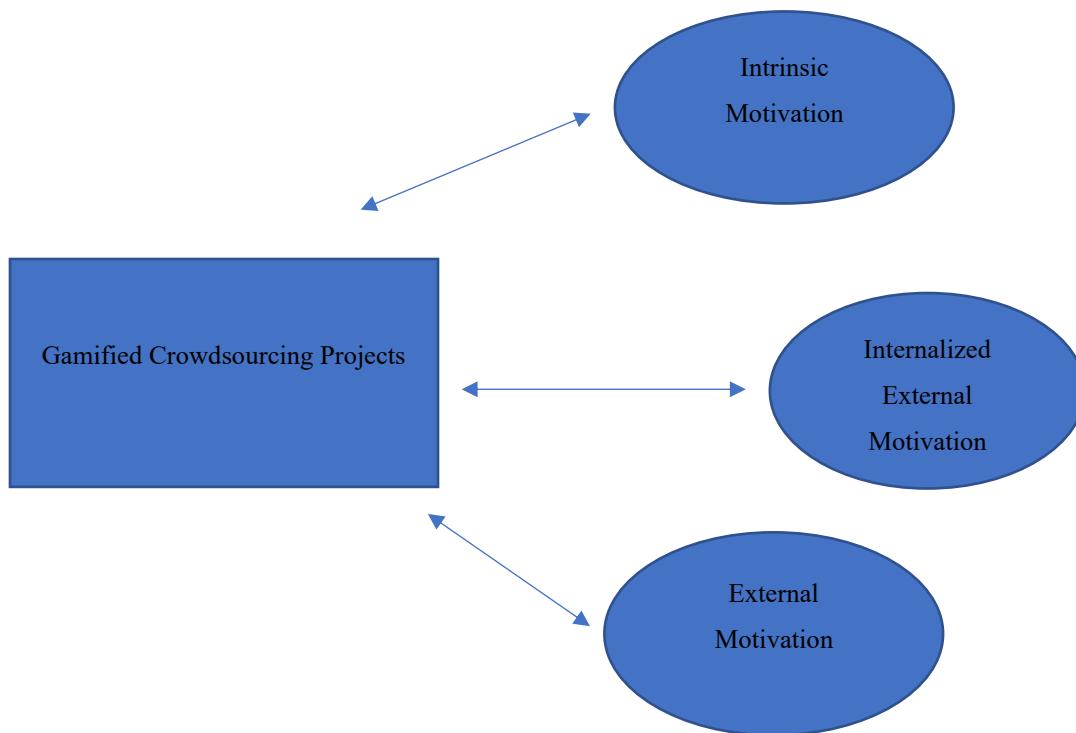


Figure 6.1. The motivation effects on gamified crowdsourcing projects

We have managed to analyze the results and come up with the results that all different motivation types do matter for the participant. The personality of each individual differs from one another in perceiving the effects of these motivational triggers. Age played a big role as well; older people tend to spend more time on such program due to what it offers to them from social life and activities that they would enjoy in their leisure time. Gender also has been recognized to affect the users' behavior, females are more likely to enjoy the social life itself rather than enjoying the program, male showed high comprehensive to what the program offers to them. We have been able to observe and analyze the gamification success in such program in three outcomes which are 1) active member engagement in the application and forum; 2) number of contributions; and 3) quality of contributions. In-depth interviews and observation are qualitative research method that let us analyze the gathered data from Google Local Guide, our analysis showed that Google Local Guide is working fine in the three main outcomes that has been introduced before. Google Local Guide receives about thousands of contributions a day, whether this happening in the application or the forum. The results that we got didn't prove that only the contribution numbers are high, but also the users are contributing in high quality volumes by their dedicated users. In our study, we analyzed users' response to the Google Local Guide gamification initiatives by extracting their motivations through in-depth interviews that was held on the phone and studying their statements. Users of GLG are highly motivated and engaged to participate, and their participation is related to the implementation game mechanics and dynamics into the crowdsourcing program.

The results showed that we can measure the contribution of the users through the level game mechanics. Every user is provided with personal page that shows their amount of contribution which mean the contribution that has been done by sharing reviews, pictures, editing, adding etc. The higher the level the more the user is valued in the community, beside it lets them enjoy the perks that Google offer to its participants.

Intrinsic motivation has been signified for its role for positively motivating users to participate, such as playful task, curiosity and addiction. Users are more likely to participate due to their personal desire to do volunteering. Volunteering is a motivational drive for the users to engage them into the program in its early stages in onboarding stage.

The users whose curiosity driven are more likely to be motivated by intrinsic motives, and they have been seen to be social and have high level of commitment. Internalized external motivation are also has been seen as a positive motive for users to do more while they are engaged with the program and its activities, such motives as skills development, challenge oneself, sharing ideas and stories are great motive for those who are goal-oriented, they are most likely to be skilled users and tend to have the desire to achieve their goals. Users who are embedded to the program (high level) and mostly males are affected positively by these motives, they participate in high volumes and quality, they are driven by self-efficacy. Users with low levels are not driven by self-efficacy, they are more likely to be driven by rewards and volunteering acts. External motivations are seen less, non-monetary rewards are effective and essential but alone they cannot get the users to remain loyal as they are behavioral trigger in the beginning in the introduction stages. On contrast the monetary rewards are exceptionally noticed to be a motivation for everyone. We believe monetary rewards are good for long-term loyalty.

Our study of users' interactions reveals that users' contribution motivations comes from both the gamification elements employed by Google and crowdsourcing process itself which made combination of both. In previous researches on crowdsourcing projects, Füller (2010) studied the motivations for the participating in co-creation crowdsourcing projects, he differentiated the motivation types according to the characteristics of the users, there are four types of characteristics that he distinguished (Reward-Oriented participant, Curiosity-Driven participant, Intrinsically interested participant, Need-Driven participant) and these has been noticed in our research, but their emphasis is different because the nature of research he made is different. McGonigal (2011, as cited in Kavaliova, Virjee, Maehle & Kleppe, 2016) defined what is called "hard fun" as to a way to describe joy in such projects for intrinsic motivations. By projecting the work of the previous researchers and few others on our research (GLG as a gamified crowdsourcing project), we have concluded that not only non-monetary and monetary rewards drive users to participate, but also the intrinsic and internalized external motivations play a critical motive for the users to contribute, such as helping others, hard fun and volunteering. The success of such of project depends on achieving the state of flow which Google Local Guide has managed to make their users reach, the state where the participate are feeling happy while contributing

(Csikszentmihalyi, Abuhamdeh, & Nakamura, 2014). The previous researches failed to separate the difference between fun, addiction, flow as motivational driver, and this is what we realized in our study, we could not tell the difference between them. But addiction is recognized to be motivational driver in gamified crowdsourcing projects (Kavaliova, Virjee, Machle & Kleppe, 2016). As in Brabham's research (2010) on online crowdsourcing projects, we compared it to our research on Google Local Guide, we found that users are consistently surfing the internet and application, write/answer posts, comment, writing reviews, and edit places. Some dedicated users are noticed to have addiction effects of GLG in their life. Their life center on this program and it seems to be a way for them to get the day by, from meetings, writing, sharing and discussions. These behaviors are interpreted as a mean to escape real life and avoid problems, and making their lifestyle shaped around the program.

With all the positive sides of GLG we discovered some drawbacks in the design. The simplification of the game mechanics have been noticed to damage the platform, users are complaining about this problem in the forum, that a lot of users are only contributing for the sake of gaining points and leveling up, also Google Local Guide has witnessed some scam and abuse on the internet over a phenomenon called "Stop crap on the map" a hashtag was published on Twitter, a kind of spam that happened in UK and the US where companies create local business point on Google Maps and when you try to call the number behind the small business it will lead you to an marketing agency. As it mentioned in one of the interviewees mentioned that there is something what he calls "badge hunting" where users try to get all the badges, and "level fever" where users try to the unethical way to get more points by sharing very bad quality or sharing the same picture to gain points. And we should mention that some people get paid to do reviews on Google Local Guide, because there are a lot of people read the reviews before going to a place. Moreover, we noticed that these game mechanics do not affect the users after reaching the highest level and getting all the badges, the enthusiasm get less and less by the time.

6.2. Recommendation

According to the valuable results we got from this research, we think that the companies who are going to outsource their tasks to the crowd and gamify their system can

benefit from this thesis and other researchers that resembles our work. All the interviewees assured me that without gamification they wouldn't have contributed to the program, and they all agreed gamified crowdsourcing projects are good strategy to be applied to mine data from crowds, as it was proven that the motivations that are triggered by the former motives explained before have positively increased their participation and managed to keep them loyal. We must mention that if any corporate wants to take Google's lead or any other company applying the same strategy should bear in mind that the users are searching for something fun, as they are fun seekers. They must design their application in a way that can make them reach the flow state which means being happy for contributing without waiting anything in return except for receiving fun. Social norms are proved to be very important, as human beings always searching for recognition and being praised for their efforts. Google successfully has done that with their constant feedback with mails, points, levels, badges, relationship in the forum. Recognition, friendship building can reinforce their engagement and loyalty. By designing a game-like application that utilize virtual reward systems, challenges and not only depending on external motivation such as monetary rewards and non-monetary rewards we can grant the success of the application, because if we focus on the external motivation, it might grant success in the short run but in the long run it would end as a huge fail for the company. Intrinsic and externalized motivation are very important such as volunteering. Therefore, applying game mechanics that trigger these motivations are very crucial for its help the company to maintain contribution and participation from users as we have seen in Google Local Guide.

For every study there are limitation worth mentioning. This study was conducted by in-depth interviews with 12 users from all around the world, I believe this study can be held with more users to get more data, but the difficulties for reaching people to speak over the phone was a very difficult process since it is not very pleasant and trustworthy for people to share their information over the phone. There are rich data to gain and harvest in Google Local Guide, there are dozens of data you can get from YouTube, Twitter and Facebook but due to the short time and the lack for expertise in this field we did not go further. We believe also the demographical aspects are very important for this research, the people from the US acts very differently from people in Europe and this as well in Africa, the behavior also affected by age factor, older people showed more interest in the program,

where youngster were not interested that much, this is why our research contained people from all around the world to make our conclusion and results more generalizable. Exchange theory and social interaction theory are applicable as well, we only applied self-determination theory which can be extended to other theories. Social media engagement is good approach for this type of studies, we can get more comprehensive information about this phenomenon, we can understand the engagement behavior through social media. Zombification should be taken into consideration, studying the downside of gamification can help us understanding the motives more in details, how such crowdsourcing projects fails to keep users motivated because of gamification are poorly applied or after long-term the users are no longer motivated of gamification.

6.3. Conclusion

Gamification is a very important field now in education, marketing and outsourcing tasks. Gamified crowdsourcing projects are not dependent on one type of motive, they are dependent on the combination of three types of main motives (Intrinsic motivations, internalized external motivations and external motivation) and the undermining motives that are stemming from these motives are differently perceived from the individuals due to their different characteristics of these users. We cannot say that a motive is more preferable than the other, the variety of game mechanics and dynamics are successfully implemented and managed to fulfill every need according to the characteristics of every user. Game mechanics should be applied according to the nature of the project, some elements have been seen to be dropped such as leaderboard in our study because Google Local Guide is intrinsic oriented program, meaning volunteering is signified. Well respected companies like Google are investing in this field and they are very successful in their implementation. Google has developed Google Maps without paying anything to the users, and people seem to love it. All the users I did interview with and the users we observed on social media have all one thing in common which is the love of giving back to the society. Everyone loves to be part of something, everyone loves to be praised and recognized for something, everyone wants to build friendship with the others. Google Local Guide as a successful gamified crowdsourcing project proved that gamification really help in outsourcing their tasks and make the experience of writing reviews, sharing pictures, add new places, edit new places and becoming part of the forum more fun and worth doing so. This means not only extrinsic

motivations are important, internal and internalized motivations are important as well, they showed their significance in our study, and without them being triggered by game mechanics the project would fail.

I would like to finish my research with one of the quotes that I got from one of the users which was very impressive to hear, and I guess it summarizes everything we studied in this thesis.

“because at the end of the day one thing we should realize that Google is the future and I love companies that are making preparations for the next future you know so when you make contributions on such a company you are part of a future.”

Charlie

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