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ABSTRACT

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Abstract

This study aimed at ensuring the customer engagement in games development for the interests of both parties involved; customers and companies. Nowadays, engaging customers in product and service development has become a common practice for its importance. It is obvious that there are bi-modal motives behind it. While trying to fulfil their motives, both customers and companies encounter some unavoidable challenges during the engagement process. This research set a main research question which demonstrates how to engage customers in games development followed by three sub-research questions which include motives, challenges and solutions to the challenges for customer engagement. In this research, a semi-structured qualitative study was followed where data was collected from different sources; taking interviews of different responsible persons from various firms, attending multiple community gatherings of the industry, relevant internet pages and reports etc. The findings of this study suggested that mobile games companies give considerable importance on customer engagement for various reasons including getting continuous feedback, marketing tool and feasibility analysis. Whereas, primary motives of customers have been identified as recognition, opportunity to play reputed studios games early and opportunity to be a part of developers. There have been several challenges identified notably biased opinions due to the relationship they hold, finding the right comments and difficulty in managing the community. The major problems customers encounter during engagement are lack of appropriate preparation and lack of interest. Thus the study recommended that companies take effective measures for ensuring customers participation, such as building strong community around the brand, motivating customers by offering various rewards, providing necessary trainings, adopting the most advanced technology for filtering the feedbacks from customers as well as appreciating them for their efforts towards the games development. Like the companies, customers should be sincere enough to solve their problems. For example, besides training provided by the companies, customers must take appropriate preparation prior to giving any feedback for new games development. Moreover, they also ought to engage themselves voluntarily as they are the ultimate people for whom games are developed. Therefore, customer engagement in games development has multiple aspects; both the customers and the companies are beneficiaries of making it happen, thus both parties should be cooperative to each other. Further research can be done with a suitable method to come up with strong and efficient solutions for existing and potential obstacles.

Key words	Customer engagement, product development, games industry, motives, challenges, solutions
Further information	

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HOW TO ENGAGE CUSTOMERS IN GAME DEVELOPMENT?

A qualitative research on mobile games industry

Master´s Thesis
in International Business

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1   INTRODUCTION

1.1   Customer Engagement as Research Field

Customer participation has for quite some time been viewed as basic for creating compelling product and service (Alam 2006; Cooper 2001). It has been concluded by several review studies that a firm should secure a top to bottom comprehension of client needs (e.g., Cui & Wu 2016; Katherine & Peter 2016; Alam 2002; Brown & Eisenhardt 1995; Craig & Hart 1992; Montoya-Weiss & Calantone 1994), that entails the customers engagement in the product development. Engaging customers in the New Product Development (NPD) has long been argued that it might be helpful in reducing the unreliability arisen from technological changes. Rather than taking them granted as uninvolved purchasers, numerous organizations are currently including customers in the development (Chesbrough & Euchner 2011, 21). But there are some continuous progress in the motives behind the subject matter, as well as several different ways to engage them (Antikainen, Mäkipää & Ahonen 2010). Keeping pace with the technological development, changes in services are dynamic and participants learn and change roles in a dynamic service system (Edvardsson, Tronvoll and Gruber 2010, 329). To the extent that customer involvement is a critical issue for new service development (Alam 2006; Matthing, Sanden and Edvardson 2004), there is a demand for immediate attention to investigate the more extensive execution benefits related with customer engagement in the new service development.

There have been many researches (see von Hippel 1976, 1988 & 2005; Wind & Mohajan 1997; Alam 2002; Dahan and Hauser 2002; Bowden 2009; Van Doorn et al. 2010; Brodie et al. 2011; Paasi et al. 2014; Enkel, Gassmann & Chesbrough 2009 & 2011; Sigala 2012a; Coviello & Joseph 2012; Piligrimiene, Dovaliene and Virvilaite 2015, Kunz 2012, Kunz et al. 2017) regarding customer engagement in the product and service development process over time. The concept of "customer engagement" has been defined and studied by the researchers in prior studies on the basis of three main perspectives: Psychological process (Bowden 2009), motivational psychology perspective (Brodie et al. 2011), and behavioral manifestation (Van Doorn et al. 2010). Customers are different in their tacit knowledge what is gained from the previous experiences. Yet there is an argumentative viewpoints among researchers about the

impact of technological vulnerability on customer involvement in innovation activities (Li and Calantone 1998). Customers involvement in service innovation denotes which service providers cooperate with current (or potential) agents of at least one clients at different phase of the new service development process (Alam 2006; Matthing et. al. 2004). Services oriented business models are way different from the product-based ones, e.g. most of the product-based companies treat their services as something that must be provided which doesn't make any difference in the market success or failure. Also, the role of customers in product development is quite different than that of in services development. As it is easier for customers to compare the specs between the products in market to give their suggestions or specs of certain products, whereas it's much harder to do the same thing about services and harder as well to verify the claimed and delivered ones (Chesbourgh 2011), because, it needs more explanations in service specifications than in products.

Whatever it is a product or service, engaging customers in any phase of the development or innovation could bring huge success in terms of its turnover. For example, LEGO, headquartered in Denmark, have achieved great success by engaging customers in their product design process (Hatch & Schultz 2010, 596). Although, it was all started as a consequence of an unexpected hacking into their software by someone who illegally modified it by including motors which let the customers customize their products. Prior to observing the customers response to the change, Lego thought to take legal actions against the hackers, but they did not do that rather decided to keep it and let the customers design the product that they would like Lego to produce. It brought a huge new customer group, the adult, as there has been an opportunity to make their own design of the product.

There has been a rapid change in business world regarding the customer engagement in product and/services development. Depending on the type of product/services, the platforms for engaging customers vary although the motives are more or less same; achieving the target of profit maximization through customer satisfaction. For example, Netflix proactively adopted on demand technology, whereas Blockbuster remained unchanged in terms of their customer needs and technologies (Friedman 2010). Some organizations may ask the customers for a suggestion regarding their services while seeking feedback in the form of questionnaire or by building an open forum for customers (Celuch, Robinson & Walsh 2015, 287).

Customer innovations or collaborations with users are ever more significant for the growth of new products and services (Greer & Lei 2011, 69). The customer's commitment to product development is a mental state that arises with an interactive customer experience and tools / objects of focus such as a company or brand. By integrating customers and resources to develop products / services, companies can adapt their products to better fit the needs, circumstances and contexts of customers (Jaakkola & Alexander 2014, 250). When combined with company resources, these customer resources can affect the product value potential of the focus customers and other stakeholders of the company.

However, the reasons behind customers' engagement could be more or less similar, although there could be some exceptions e.g. newly established companies usually focus on the survival first (CEO of LunarByte, a mobile game company based in Helsinki), on the other hand, comparatively older and well established companies try to get onto the top position through excellent business performance by giving importance to the customers voices. For example, in hospitality industry, customer preferences have contributed significantly to service innovation (Gustafsson, Kristensson & Witell 2012, 322). Although, there have been huge arguments regarding the level of importance of user involvement in the innovation process, but an original examinations by Von Hippel (1976, 1978) found that clients could assume a predominant job in a few mechanical product development, which produced some enthusiasm for customer involvement. Following these original examinations, new product researchers and professionals have proposed a scope of effective procedures for acquiring client contribution to product development process, such lead user analysis (Von Hippel, Thomke & Sonnack 1999), information acceleration (Urban et. al. 1997), beta testing (Dolan & Mathews 1993), and consumer idealized design (Cinciantelli & Magdison 1993). Although, most of these methods are engineering driven (Alam 2002), which are basically related to customer engagement in the design and manufacturing stage of the product development process those are applicable to some particular industries such as construction, engineering and computer systems. However, the techniques in service oriented business could relate some of them with their service design. For example, the director of neogames, hub of the Finnish gaming industry, said in an interview that video games companies, more specifically mobile games companies, are engaging users in their game development process in different

phases in order to keep their customers satisfied. He added that, more than 60% of the mobile games development is done by engaging customers.

1.2   Gaming Industry as a Research Topic

The game industry has been the fastest growing in entertainment business during last two decades, with over $108.4bn worldwide sales in 2017. Mobile games remains the biggest sector, generating $59.2bn, followed by PC $33bn, Consoles $8.3bn (gamesindustry.biz 2018). According to a forecasting report by newzoo, game industry is expected to earn $137.9bn in 2018 and mobile games industry would remain on top, generating $70.3bn. Smartphones will account for 80% of this, with the rest 20% from tablets (newzoo 2018). Console game would remain in the second (2nd) position generating $34.6bn, subsequently PC will generate $32.9bn in 2018. It is said to be the bigger industry than the recorded music and is rapidly catching up the movie industry.

   The video games industry was previously considered to be the medium of passing leisure moments as a source of entertainment. But nowadays it is playing diversified roles as means of teaching, researching, educating and expedition. Customers can move from one brand to another unless they are motivated and committed enough with the innovative features of the games. Presuming the customer's foresight and loyal to give efficient feedback, customer can play an important role by engaging in product development process. Due to its high growth and rapid innovation, video games industry is day by day becoming a hot topic to be studied. "*Recently, researchers have begun to explore the concept of customer engagement in the online environment*" (Cheung, Shen, Lee & Chan 2015, 243). And recent example of its continuous expansion is "gamification", a terminology used for improving customer experience and their commitment in non-game services by using video game elements which is not a full-fledged game (Deterding, Sicart, Nacke, O'Hara & Dixon 2011, 2). Cheung et al. (2015) further noticed that most of the studies are conducted in the social networking and online forums or brand communities hosted by the companies. (e.g. Brodie et al. 2013; Calder et al. 2009; Hollebeek et al. 2014; Tsai and Men 2013). Patterson et al. (2006) worked on dimensions (vigor, absorption and dedication) of customer's psychological engagement in online game where he clarified customer's level of energy, willingness to play, concentration, enthusiasm, and sense of significance etc. while playing a game.

There are several Finnish games those have achieved tremendous popularity around the world such as Angry Birds, Clash of Clans, Quantum Break, and Cities: Skylines. More than 1 billion people have been playing games made in Finland. In recent years, games industry has become the most significant part of Finland's culture exports. The small domestic market size and its global nature indicate that the games industry is the key component of Finland's exports and its economy, with more than 90% of production exported (Neogames Report 2016).

Furthermore, Finnish gaming industry is much bigger than it seems to be, while taking into consideration of its core industries e.g. game development and services. According to the annual report of games industry by Neogames, these industries reached a turnover of €2500 million in 2016 (Neogames Report 2017). At present, there are approximately 260 game development companies in Finland. Although, there are several platforms for video games including mobile, PCs, Xbox, PlayStation etc., but the major competition is among the mobile phone games industry itself (Neogames Report 2018).

Although there has been an ongoing debate about whether video game is a product or a service. According to the publishers, online video game is considered a service (IGN 2012). Having no rigid definition what refers to a product or a service, game is considered how it is promoted. According to a games lawyer at Osborne-Clarke, a UK based law firm, boxed games has reasonable argument to be claimed as a product although it is unclear if it has a software on it. A generalized concept regarding goods that something which is transferable in terms of ownership. But for gamers, buying a game does not ensure their ownership. As Jas (2012) explained "Services are essentially just a benefit provided on certain terms and don't involve you owning anything". Rather they buy a license by which they get permission to use that program provided they consent to and conform to the terms composed under End User License Agreement (EULA) (IGN 2012). But from the gamers view point, it is rational to disagree that publisher's claim of their games as service is unjust whereas charging the consumer as if it was a good, Jas suggested (2012).

Therefore, considering the nature and treatment of the publishers regarding game, it can be considered as a service. This particular study will focus on customer engagement in video games development. More specifically the study will be conducted focusing on how customers are engaged by overcoming the identified challenges in games development.

1.3   Research Question

In the thesis, the author would explore different motives, challenges and ways of engaging customers in product development focusing the customer engagement in mobile games industry based on findings. Customer management research has been developed and has had a great impact on marketing disciplines in last two decades (Verhoef, Reinartz and Krafft 2010). To have better knowledge regarding the motives behind the customer participation in product development, there have been several studies conducted (Antikainen et al. 2010). Recognizing the high growth and importance of video games industry from above discussion, the phenomenon of customer engagement in games development would be in the focus of the study.

Taking the existing literatures on the phenomenon into consideration, this study will identify the challenges and how to overcome those identified challenges to engage the customers in mobile games development. The research will help to understand how and which stages customers are engaged in developing a virtual product; video games, which is considered as a service business though. With the continuous development in technology adoption, platforms for customer interaction is changing (Moreno-Munoz, Bellido-Outeirino, Siano & Gomez-Nieto 2016). Games and gamification, according to the theory of expectations, are award-winning, goal-oriented systems, such as points, ranks or badges, which can prompt changes in convictions or endeavors to win rewards or bonuses. Therefore, the reward system can influence users to change their minds and ideas while engaged in gamification process (Yang, Asaad & Dwivedi 2017). Thus, how these challenges are overcome by the gaming companies would also be studied in the thesis.

The thesis aims at looking into the customer engagement process in product development by the video games companies. To achieve the goal of this, the main research question to answer is:

How to engage customers in Game Development?

To answer this question appropriately, it has been divided into three sub-research questions meaning when answers of the all sub research questions are readily available together, they will be able to answer the main research question.

- *Why customers are engaged in game development process?*
- *What are the challenges to engage customers in game development?*
- *How to overcome those challenges to engage customers in game development?*

The first sub-research question aims at identifying the motives behind customer engagement in games development. Then the second sub-research question will investigate the challenges in customer engagement in games development. The last sub question aims at finding out the ways of overcoming those challenges to engage customer. All the sub-research questions can be answered by analyzing the theoretical and empirical data gain through primary and secondary data collection.

1.4   Thesis Scope and Limitations

This thesis is intended to focus on the customer engagement in gaming industry. Console manufacturers, mobile game producers have different business models as of their differences in platforms and target groups as well. To have accurate understanding on a specific field, this particular study will look into the mobile games industry.

Like all other researches, this thesis has some boundaries and limitations which could impact the quality of the research findings and the recommendations by answering the proposed research questions followed by the data collection and analysis. "*The most common limitation to all research, especially qualitative research are set by the values, knowledge and experience of the researcher, as the outcome of the research is always based on the researcher's assumptions* (Bacharach 1989, 498)." For example, the way the researcher sets the boundaries, approaches to the population (target group), thinks of the fact, collects and analyzes the data might be different from others, which might have some comprehensive issues. Unlike quantitative one, qualitative research is flexible and open which can dispense in-depth information that is generated from free flow of discussion, and it adopts more unstructured strategy than in quantitative research (Zaneta, Aiste & Regina 2015). In this paper, multiple case companies have been selected to collect the data in respect of answering the research questions.

This study has also some geographical limitations as the case companies are only from Finland due to collecting primary data of the industry. The other limitations are getting the internal information regarding the innovation process from the companies as the managers might not want to share everything regarding the customer engagement in new product or service development process treating it as sensitive and confidential information.

2 CUSTOMER ENGAGEMENT FOR PRODUCT DEVELOPMENT IN GAMING INDUSTRY

2.1 Customer Engagement

2.1.1 Concept of Customer Engagement

The participation of the customer is a situation where interactive customer experience is focused on the relationship with the brand or underlying service (Piligrimiene et al. 2015, 452). At the same time, other explanations in the theory focus on the multi-dimensions of the hypothesis. For instance, customer participation refers to the level of customer perception, the emotional and behavioral investment to a particular brand or company. Kunz et al. (2017, 163) stated *"There is no consensus in the current literature about the conceptualization and definition of customer engagement."* The participation of the actors is defined as activities that occur during the interaction of the integration of resources and the reduction of resources in the ecosystem of services (Storbacka et al. 2016, 3017). Yi and Gong (2013, 1285) stated that Information seeking behavior of customer during participation, information exchange, responsible behavior and personal interactions, diverse opinions of customers promote the behavioral aspects of product development and encourage support and tolerance. The interactions can be direct or indirect (Grönroos & Voima 2012, 140).

Table 1   Conceptualization of Customer Engagement in Prior Literature (Cheung et al. (2015)

Authors	Operational Definitions
Algesheimer et al. (2005)	The consumer's intrinsic motivation to interact and cooperate with community members.
Baldus et al. (2014)	The compelling, intrinsic motivations to continue interacting with an online brans community.
Bowden (2009)	A psychological process that leads to consumer loyalty to the service brand.
Brodie et al. (2011)	A psychological state, which occurs by virtue of interactive customer experiences with a focal agent/object within specific

	service relationships.
Calder et al. (2009)	A collection of experiences with the site, and they defined experience as a consumer's beliefs about how a site fits into his/her life.
Chan et al. (2014)	The level of a person's cognitive, emotional and behavioral presence in brand interactions with an online community.
Cheung et al. (2011)	The level of a customer's physical, cognitive and emotional presence in connections with a particular online social platforms.
Hollebeek (2011)	The level of customer's motivational, brand-related and context dependent state of mind characterizes by specific levels of cognitive, emotional and behavioral activity in brand interactions.
Hollebeek et al. (2014)	A consumer's positively valenced cognitive, emotional and behavioral brand related activity during, or related to, specific consumer/brand interactions.
Mollen and Wilson (2010)	The cognitive and effective commitment to an active relationship with the brand as personified by the website or other computer-mediated entities designed to communicate brand value.
Patterson et al. (2006)	The level of customer's physical, cognitive and emotional presence in their relationship with a service organization.
Sprott et al. (2009)	Individual difference representing consumers' propensity to include important brands as part of how they view themselves.
Van Doorn et al. (2010)	The customer's behavioral manifestation toward the brand or firm, beyond purchase, resulting from motivational drivers.

According to the Table 1, customer engagement can be defined and used as multifaceted concept due to continuous development of business and technology. Brands (Sprott et al. 2009), brand communities (Patterson et al. 2006), products and organizations (Algesheimer et al. 2005) are the focal points in the above table.

Cheung et al. (2015) mentioned that the concept of customer engagement may vary according to different interpretations. Some common ways of interpreting concepts: a) as a psychological process that leads to the formation of loyalty; b) by the behavior of a brand or company that exceeds the customer's purchasing behavior; c) by the characteristic psychological condition with vitality, self-sacrifice, absorption and interaction. In any case, consumer participation plays a central role in the process of creating value. Brodie et al. (2011, 257) stated *"Engagement, unlike traditional relational concepts, including "participation" and "involvement," is based on the existence of focal interactive customer experiences with specific engagement objects (e.g., a brand)."* Engaging the customers in innovation has become a familiar tool for product and service development. By engaging them, companies can bring the uniqueness to the market in its industry that could co-create value for the both parties; companies and customers. It allows customers to become co-consultants to develop new products and services (Zhang, Kandampully & Bilgihan 2015, 315) actor engagement in NPD process is common (Coviello & Joseph 2012; Enkel, Gassmann & Chesbrough 2009) and the process is less unilateral than generally assumed. With the increase of digital technologies and therefore the dissemination of social media, several firms try to use express ways to foster client engagement (Javornik & Mandelli 2012).

Customer engagement, however as a sub-concept of engagement, has been studied under marketing literature (Cheung et al. 2015, 243). In the last decade, customer engagement has been used in a variety of disciplines, such as political science and in psychology, organizational behavior (Brodie et al. 2011, 261). It came from marketing concepts in the academic literature, before 2005, various academic studies used it as "consumer participation", "customer loyalty" and / or "commitment to the brand". Some literatures (Calder et al. 2009; Hollebeek et al. 2014; Solis 2010) suggested that customer participation is necessary for the betterment of marketing activities. But Cheung et al. (2015) argued that this concept has lack of agreement in terms of definition, dimensionality and operationalization. On the other hand, some authors argued that customer contribution to the product development may not be necessary due to their constrained ability to contribute to development process (Christensen &

Bower 1996; Hamel & Prahalad 1994; Leonard-Barton 1992; Martin 1995). But Nicolajsen and Scupola (2011, 373) suggested that user could identify a problem as well as providing a solution hence it could play different roles e.g. a customer, co-creator, user and a resource. Deszca, Munro and Noori (1999) emphasized that it is more difficult, in case of radical innovations, to know about customers and their demands due to firms limited ability to foresee their potential customers for their upcoming products, even if they know the customers might not know explain their demands about the product. Subsequently, the existing strategies concerning customer participation in NSD be prone in incremental innovation instead of disrupting one due to customers' inconvenience envisioning and inputting into something they have no practical experience (Matthing et al. 2004). However, Wind and Mohajan (1997), Mckenna (1995) have argued that users cannot be disregarded as they may provide significant intuition into a new product development project.

2.1.2 Phases of Customer Engagement

There have been a very few research regarding the impact of customer engagement on operational stages and market stages. Pelham and Wilson (1996) argued, from the theory of market orientation, that firms underlining exercises that look to comprehend client needs and fulfill those necessities should deliver products with lower imperfection levels. Cooper (2001) and Voss (1992) suggested that failure to comprehend the customer needs creates technical issues frequently. Alam (2002) further referred that researches conducted in NSD and NPD suggest that multiple benefits are associated with the customer engagement such as increasingly precise and complete evaluation of clients' needs and wants, reducing unsatisfactory or irrelevant highlights, and improvement of clients' comprehension about the new service which, in return, would help to develop a predominant service. To have a better result, manager can encourage employees to positively deal with the customers as Celuch et al. (2015, 288) stated "*Having a deeper understanding of how employee behavior and company strategy influences customer feedback could aid managers in developing systematic and responsive approaches to learn from customers.*" Accessible observational proof proposes that customers' engagement in product development increases market performance, whereas another study shows that customer involvement does not predict the market performance of new service projects (Pilar et al. 2009), meaning that there

is no direct connection between customers' involvement and market performance of the product, rather it has indirect effect. Direct customers engagement in NSD, according to the customer active paradigm (CAP), recommended the customer be more dynamic in the process of NSD which is an opposite idea of manufacturing active paradigm (MAP) where manufacturers themselves engender concepts and solves all the problems. The CAP's expansion to a connection point of view pushed the need to interface with lead clients' defined as the clients who face needs that will be common in a commercial place (von Hippel 1988).

On the other hand, there have been a lot of argument among the researchers about the customers engagement in the design stage, engaging customers in the early stage of new product development may be an impediment (MacDonald 1995; von Hippel 2006) which may reduce firms' innovativeness (Christensen 1997) because customers usually seek what they have idea about. But in contrary, another study shows that engaging customers in the early design stage is positively correlated with the performance of new product performance (Bulent, Seigyoung & Peter 2014), provided that a significant increase in the performance of new product occurs when there is a consistency between customer and supplier engagement in early product design and innovation capability.

Paasi, Lappalainen, Rantala and Pikkarainen (2014) mentioned that depending on the participation of service providers and customers in innovation, customers clearly define four different types of open innovation. Expressed in terms of increasing customer participation in innovation, the first type for consumers is that suppliers provide relatively standardized products and services. These products and services are limited to clients that offer personalized services. The second type is to create genuine co-creation with clients in the process of innovative specification and conceptualization, but clients may not be active in the innovation development phase (Paasi et al. 2014). In the third category, suppliers and customers share information among themselves in the innovation process, and customers can participate in any stage of the innovation. In the fourth open innovation, customers are the main actors in innovation, and suppliers are essentially those that support innovation as a whole. In this model, suppliers often offer platforms and collaborative innovation processes to achieve customer satisfaction.

However, communication with the customer is crucial for successful participation. In addition, these initiatives should be relevant to the success of the customer. Companies only pay attention to the customer's needs in the design process and really

emphasize their relationship with the customer (Vivek, Beatty & Morgan 2012, 132). This relationship only occurs when the company understands the customer's business or the customer's needs in a good way.

From the beginning of this century, customer management research has been developed and has had a great impact on marketing disciplines. In a society of more and more customer networks, social networks and other new media communicates with other customers and businesses through and can easily contact customer management with the participation of customers is considered an important innovation (Verhoef et al. 2010, 230). The commitment of the customer is seen as a performance of the brand or company that transgresses the transaction.

By accepting the specific benefits of brand relationships, customers must react positively to emotions and behaviors. For this reason, it is necessary without taking responsibility for social change, which on the one hand helps the other and motivation is the objective of future improvements (Hollebeek 2011, 565). A concept based on trust in fair operations for the future of the customer-company relationship is an asset to the future. In particular, the proposals offered by the interaction have exceeded the expected performance and the objective will improve the relationship.

The increase in cooperation with customers is a phenomenon that covers all industries. In the innovation management literature, there are two basic concepts that define customer innovation: the concept of user innovation and the concept of open innovation (Paasi et al. 2014, 4). The concept of user innovation is based on real-life conditions in which high-level products are integrated into the design to obtain products that fully meet the needs of individual consumers. The concept of open innovation arises from the discovery of the B2B market, which tries to develop external forms and innovations to commercialize its own ideas and technologies through external ideas and technologies.

2.2 Motives of Customer Engagement

2.2.1 Company's Motives behind Customer Engagement

Customer engagement in product design helps achieve new product performance with a wide range of products, but the performance of new products is greatly reduced with positive innovations (Menguc, Auh & Yannopoulos 2013, 320). On the contrary, the

participation of the supplier in the design contributes to the performance of new products with broader and more radical innovation capabilities. Moreover, it encourages the value given to businesses and customers, and allows companies to stimulate business models at a lower cost, which increases revenue sources (Wu, Guo & Shi 2013, 360).

Companies that want to use the knowledge of users and customers in an innovative environment must design an appropriate internal organization to support it (Foss, Laursen & Pedersen 2011, 985). This can be achieved through the use of new organizational practices, particularly through intensive vertical and horizontal communication, staff assignments for the exchange of information and access, and the centralization of high-level decisions. Customer engagement additionally necessitates the companies reevaluate their ways of managing the communities around their brands, the processes of creating value, the design and utilization of technology, the scope and focus of interactions and the customer insights (Kunz et al. 2017, 168). To offer a new service successfully, identify market opportunities, create new services and evaluation concepts to describe the expected benefits of the possible services and functions and of products and to test the companies of the market on a large scale, the design and development of product should help customers to provide feedback (Melton & Hartline 2010, 415). The productivity of frontline employees is lower than the new service concept. Instead, companies should focus on bringing these people to the full stage in order to promote and present new services effectively.

Customers who participate in the development of the new product and the research phase, can increase the financial results of new products, by increasing the period of direct and indirect marketing, can be incorporated into the customer development process, the market will shorten production time and reduce the financial performance of new products (Chang & Taylor 2016, 51). In addition, low-tech industries in developing countries, turbulent projects in business and small businesses including NPD are already receiving performance benefits of customer participation. It analyzes various theoretical and administrative results at the moment in which the customers have joined the innovation process.

However, customers are contributing too many companies outside the direct sector. Company focuses on establishing current two-way personal relationships with customers, encourage interaction according to current needs (Kumar et al. 2010, 300). Customers and companies, these interactions, encourage and attract the active potential

customers and other customers. An operation or transaction can only be defined as a commitment of the customer.

2.2.2 Customer's Motives behind Engagement

The sustainability of working with clients is an important issue because some believe that such efforts can only be completed in a limited time and that incentives are needed to ensure that the change continues. In fact, it was discovered that the perceived benefits predict a continuous participation in the innovation based on the individual participation of the client (Greer & Lei 2011, 68). Payments can be based on various incentives, such as expectations of future services. When it comes to a solid and continuous partnership, customers or users can share information and expect a more valuable service process in the future. Consumer participation in the virtual branding community means a special interaction between the consumer and the other members of the brand and / or community. This is a mental state based on the context of consumer participation, characterized by changes in the level of intensity that occurs during dynamic and recursive participation (Brodie et al. 2013, 108). A program in the centre, multidimensional environmental, cognitive, emotional concept and / or consumer participation in the dimensions of behavior and other relationships is a repetitive process and the concept of facilities and / or in relation to the community of the brand is the relationship between the impacts of change in the process.

One of the most important points to explore about the customers is how they can be motivated to engage and collaborate. Most of the recent researches focusing the customer engagement are conducted in the online such as social networking sites and online community forums (see Brodie et al. 2013; Calder et al. 2009; Hollebeek et al. 2014; Tsai & Men 2013). Researchers of online communities, one of the platforms to participate to discuss and feedbacks, have studied the reasons why customers come and engage themselves in online communities in general (summarized in Table2). Wasko and Faraj (2000) explored in their study that the main reason behind customer participation is giving back in return for help. Since people want recognition for their contributions, one of the most considerable motivations is reputation (Hargadon & Bechky 2006; Kollock 1999).

Table 2   Users' motives for participating in online communities (Antikainen, Mäkipää and Ahonen (2010)

Motivations to participate in online communities	Authors
Altruism	Zeityln (2003)
Care for community and attachment to the group	Kollock (1999)
Enjoyment and Fun	von Hippel and von Krogh (2003), Nov (2007); Torvalds and Diamond (2001)
Firm recognition	Jeppesen and Frederiksen (2006)
Friendships, relationship and social support	Hagel and Armstrong (1997); Ridings and Gefen (2004) Ideology Nov (2007)
Interesting objectives and intellectual stimulations	Ridings and Gefen (2004); Wasko and Faraj (2000)
Knowledge exchange, personal learning and social capital	Antikainen (2007), von Hippel and von Krogh (2003), Wasko and Faraj (2000); Wiertz and Ruyter (2007)
Monetary rewards	Antikainen and Väätäjä (2008a, b); Wasko and Faraj (2000)
Need, software improvements and technical reasons	Ridings and Gefen (2004), Jeppesen and Frederiksen (2006); Kollock (1999)
Peer recognition	Lerner and Tirole (2002); Hargadon and Bechky (2006); Wasko and Faraj (2000)
Recreation	Ridings and Gefen (2004)
Reputation and enhancement of professional status	Bagozzi and Dholakia (2002), Hargadon and Bechky (2006), Lakhani and Wolf (2005); Wasko and Faraj (2005)
Sense of Efficacy, influencing	Bandura (1995), Constant et al. (1994); Kollock (1999)
Sense of obligation to contribute	Bryant et al. (2005); Lakhani and Wolf (2005)

Contributors have their own profiles, thus the community measure their contributions, and their reputation would increase (Antikainen, Mäkipää & Ahonen 2010, 106). Frederiksen (2006) argued that community members give more importance to firm's recognition than their peer's recognition. Antikainen (2007) supported this argument. Frederiksen (2006) further suggested that firm recognition could lead to peer's recognition. When it comes to the motivation, monetary rewards should also be taken into consideration (Antikainen & Väätäjä (2008a, b).

The innovation of the user, also known as the producer of the active paradigm, is a challenge for consumers as the traditional concepts of innovation and innovative passengers of consumers and users, innovation will be the only source of innovation. The academic community always cares about the innovation of the user that does not come from the producers and employees of the company, but the users worry about the innovation and the links (Schweisfurth & Herstatt 2013, 6). Innovative users work first in industrial and scientific environments, but then the end user comes back. There are many studies that show that end users have been updated outside the organization. Users have shown that product innovation is particularly effective in the field of sports equipment, but there are other examples of consumer products.

2.3   Customer Engagement in Product Development

Product innovation is often conceptualized as a new five-stage process of new product development (NPD) such as concept, concept development, product design, product testing and product promotion (Sawhney et al. 2005). The company uses a variety of technologies to solicit feedback from customers for better new products. At the beginning of the process of developing new products, companies use market research techniques such as focus groups, customer surveys and joint analyzes to build, test and develop new product concepts. In the next stages of the new product development process, companies use the distribution of quality functions, prototyping, product testing and test marketing to design and develop products and marketing strategies for new products (Urban & Hauser 1993). Sawhney et al. (2005) stated that companies can interact with a large number of clients through customer surveys, but such interaction does not allow for enriching conversations. However, the virtual environment based on the Internet allows companies to attract more customers without having a significant impact on the richness of the interaction.

For various reasons, consumer participation as a co-creator is an attractive method for companies, especially those created through cooperation, closer to the needs of consumers. It is clearly believed that successful NPDs deeply understand consumer needs and product development efforts to meet these needs (Hoyer et al. 2010). However, this process is often difficult because these requirements are often complicated and not always determined by traditional market research methods. Not adequately assessing and satisfying consumer demand is often an important reason for the failure of new products. Nevertheless, new product idea can be generated by engaging customers in the early development stage that increase the likelihood that the consumer will appreciate and obtain a new product. For this reason, the companies that effectively manage this process will eventually achieve a sustainable competitive advantage in a competitive environment. In addition, the participation of consumers in the NPD process can increase product quality, reduce risk and increase market acceptance Hoyer et al. (2010). Hoyer et al. (2010) further stated that this is unsurprising that the Marketing Research Institute, as one of the most important research priorities for 2008-2010, includes consumers in the innovation process.

The mediums for engaging customers in NPD/NSD process have been continuously updated with the pace of time and technological advancement. There have been some studies focusing the mediums for customers' involvement in various stages in NPD/NSD process. Some researchers have studied the practice of online community forums for obtaining and utilizing customer knowledge with the target of getting better performance from the product and services (see Erat et al. 2006), and the benefits of community forums for ensuring lead users participation in the stages of new service development such as idea generation and screening, service piloting, product design, delivery preferences and price testing (Pitta & Fowler (2005). They particularly recommended that it be very useful to have lead users engaged in online communities as they have great credibility among the community members, they can substantially influence the peers over their buying habits (Sigala 2012, 553).

The entire process of developing new products (NPD) begins with the customer, that is, begins with the determination of the customer's requirements and ends with the cost and characteristics of the products delivered on time for the customer (Carbonell et al. 2009). However, even in a synchronous engineering company, customers tend to limit the NPD process only to join these two peripheral phases. This can lead to the loss of customer comments or at least intermittent dilution. Like the distribution of quality

functions, technology has shown that it issues "customer voice" throughout the process of developing new products and provides real benefits (Carbonell et al. 2009). At each stage of the process, the client's needs are reinterpreted as the ideal design results for the specific task in question.

The development of new services is often modelled as a process consisting of three broad and structured phases: the planning stage (creative production and detection, pre-market evaluation and technology, market research, business and conceptual analysis and evaluation) and development (service design and process development, prototype testing) and market launch (customer training on marketing and new products) (Campbell et al. 2007). The development process is also defined as a process of creation of information and learning in which different forms of information are transformed into new services (Hargadon 1998). The customer and market information is the basic knowledge of the development to reduce market conditions, the expectations and needs of the client and the uncertainties and risks of other competing problems. Piller, Ihl and Vossen (2010, 285) stated that the development of new products (NPD) is an important driving force for business development and profitability. By engaging customers, companies understand the (potential) needs of customers, which help reduce market uncertainty and guarantees the adoption of new services.

Sigala (2012) stated that in dynamic and uncertain environments, a company can no longer complete the development and production of new products. Companies must look for opportunities outside the organization and its partners to create value together to ensure that the supply chain meets the needs of customers. Previous literature has underestimated the significant role of external customers and suppliers in the use of resources and information related to their customers and suppliers (Sigala 2012). For this reason, external participation provides opportunities to accelerate product development reduce development costs, acquire additional resources and increase performance and competitive advantage over time.

The ability of market researchers to observe and understand clients with a detailed view of the legal combination of customer value and value as co-creators is a challenging task (Maklan et al. 2007). Increasingly, organizations try to work collaboratively with their clients to obtain mutual benefits. Traditionally, market research researchers, in general, customers can not fully exploit the potential value of these new facts, but must adopt common research methods that may derive from the products and services of suppliers; the valuation process is, therefore, a recurrent

process between the company and the client. Among all methods of participatory research, the need for iterative learning and development leads to a particularly appropriate action research (Maklan et al. 2007).

In addition to adopting special methods, companies need to develop their commercial capabilities. However, it is emphasized the importance of developing new services, and most of the work that has been done so far is only going forward (Rapaccini et al. 2013). The company does not provide concrete support to the commercial strategy for this process. On the other hand, development applications are still in the tracking stage, especially with respect to the product services of the tracking companies. As part of this pressure, companies test a variety of online channels to connect and interact with users. An increasing number of online forums and self-service technologies support this vision (Jespersen 2011). By the combination of several advanced technologies, a franchise of online facilties can be offered by the firms to ease the user participation in the development of new products (NPD) (Dahan & Hauser 2002; Nambisan 2002; Jespersen & Buck 2009). These online channels have great potential to implement open innovation (Jespersen 2011).

The users evaluate the products and services when consume those (Kristensson & Magnusson 2010, 154-155). In this sense, it is a rational consequence that to develop a good service or product, it must be understood in terms of use. Many companies are in the process of integrated development with potential users from the beginning. However, there is little guidance available for managers involved in the introduction of new products effectively to users during their reflection. With the knowledge that users have been created to help companies with a little effort, that is, innovation, to know how to behave to obtain this benefit. As a consequence of inevitable structural changes in the service sector due to the needs of users, it is considered that many service managers constantly develop new services that are time consuming (Kristensson & Magnusson 2010, 156). Therefore, participation and the user's contribution in the development of new services are an important is a significant territory of research. In spite of the fact that there is a continuation of scholastic and expert enthusiasm for the advancement of new services (Alam 2002), research on how users are involved in the development of new services is quite limited. For this reason, information collected from clients is becoming an important source of help for service companies to develop their own knowledge-based distinctiveness and discover unique and new service concepts (Mahr et al. 2014).

The area of new product development (NPD) created by consumers becomes increasingly important. Consumers may be willing to offer ideas for new products or services that meet unmet market needs or develop existing products (Hoyer et al. 2010, 289). In addition, these ideas can now be easily transferred to Internet sites, email and social networks. Involving customers in the NPD process is essential to understand emerging needs and ensure a sustainable competitive advantage. Due to the complexity of the product, the quantity and quality of intellectual capital needed to develop new products have increased (Filieri 2013, 48). The role of the customer is dissimilar from the relationship facts until it is made active. The NPD process can be seen as a common process to attract sales people and customers.

An adequate tool to foster the success rate of NPD process is the virtual integration of the customer and the open innovation (Füller et al. 2012, 248). However, the qualified and spurred customers can add significant value to the manufacturer's innovation process by giving feasible ideas and significant encounters (Fuller, Matzler, Hutter & Hautz 2012). The use of the focus group at the beginning of the design process allows developers of new products to optimize the design and features of the new product by providing direct information to the target user of the product. It reduces the scope of the product development process and reassembles the same end user to observe the functional prototype of the preproduction of product (Leahy 2013, 56). An effective way to develop new products or products will allow consumers to identify the needs and expectations of the "new consumer products" and define the "product designers" and how they meet these needs and requirements.

The traditional new product development model is a model where the company is particularly responsible for launching new product ideas and deciding which products to market is questioned by experts and specialists in innovation management (Fuchs & Schreier 2010, 21). However, the customer's authority not only affects the internal NPD process of the company, but also reflects the final product. On the other hand, it also affects the perceptions of the company in the market when observing the customers that explain the approval of the corporate customers in NPD.

Customers are directly involved in the process of combining demand information and technology to produce product solutions (Bogers & Host 2014; Jeppesen 2005). As a member of the NPD team, they work closely with NPD staff to solve problems (Cui & Wu 2015, 520). Not only demand information is kept available, but it also provides solutions that best meet these needs. NPD remains intrinsic, but it is a collaborative

process and NPD works with it to share product and employee development responsibilities with customers. Companies must show great interest and work closely with customers. In this case, the company is closely related to its customers and the NPD process is extended due to the merger of the customers in the process (Hoyer et al. 2010).

NPD's work is usually done in the project management style and the NPD team is at the heart of the organization. The innovation performance needed by the NPD team is based on the communication structure of the equipment. The NPD team processes information by encrypting, storing and retrieving information, such as computer units, people and devices (Leenders & Dolfsma 2015, 6). Through effective communication, based on the knowledge of others, team members exchange information and create new knowledge and understanding. The companies are thankful to proper coordination among team members, the team's ability to innovate increases enormously.

The virtual environment is an effective way to interact with users and motivate companies and users to participate in collaborative NPD. Increasing online interaction is an important source of NPD thinking for users, especially in the business-to-consumer (B2C) market. In particular, it examines how user interactions created by online channels affect the user's authorization model, the types of users actually involved and the stages of the development process in which they participate (Jespersen 2011, 1142). This is important because the core of the mode is open innovation and how the NPD uses ideas and information from external sources.

Not only is demand information kept available, but it also provides solutions that best meet these needs (Cui & Wu 2015, 528). NPD remains intrinsic, but it is a collaborative process and NPD works with it to share product and employee development responsibilities with customers. Companies must show great interest and work closely with customers. In this case, the company is in direct contact with the client and the NPD process is extended due to the merger of the client in the process (Hoyer et al. 2010). When the client's needs are very heterogeneous, determining the differences between the clients requires an in-depth knowledge of the client's information (von Hippel & Katz 2002). Cui and Wu (2015) further stated that a lot of useful information can be obtained by the companies through which they can learn different aspects of the product. Consumers who actively participate in product development are more likely to adopt new product of the respective company and are less likely to embrace rival products (Thompson & Sinha 2008).

2.4   Customer Engagement in Games Development

More and more companies are starting to use online customer platforms to attract their customers and companies, and each other. The so-called virtual customer environments (VCE), which are defined as electronic platforms hosted by the company that facilitate digital communication between customers and employees of the company, are defined as effective, reliable and profitable digital platforms to protect customers (Verhagen et al. 2015, 341). Previous research has confirmed this VCE potential by demonstrating successful applications in the automotive, e-commerce, sports equipment and software sectors.

Although the online gaming industry has enormous market potential, competition in the sector is severe due to many product alternatives. With the popularity and increasing demand for global online games, hundreds of companies compete to offer a wide range of online games based on multiplayer games (Cheung et al. 2015, 241). Almost all online games have many options in the field. In order to dominate the online gaming industry, Cheung et al. (2015) further stated, online game companies offer the best gaming experience for players, and players are looking for new ways to spend money on subscriptions and virtual objects.

It can be analyzed from diverse perspective that the degree of customer participation in video games is affected by distinctive variables. Banyte and Gadeikiene, (2015) analyzed the motivation of the customer for the game as a two-dimensional structure that consists of internal and external motivations. There are reasons to believe that customer motivation works as a pioneer in customer participation in video games (Banyte & Gadeikiene 2015, 505). Customer participation is defined as the social interaction created by the continuous participation process. Consumer participation in games is considered a structure that reflects the behavior of the task-oriented consumer in a gaming environment. It is characterized by cognition, emotion and behavior, in three dimensions.

The adoption of new technologies is changing the global business model. Today, customers can do whatever they want, wherever they are, on whatever device they use. The continued development and use of mobile applications will only help achieve this (Moreno-Munoz et al. 2016, 1613). Consumer devices in the domestic environment are

becoming easily accessible. Due to rapid expansion of these technologies, functional and customized applications will be added to consumer devices.

People can get motivated by positive emotions to play games. Enjoyment is an important support for online games. Even though a non-game element, gamification uses the application of game elements, hence it can be a factor in the game environment of social factors or entertainment (Yang et al. 2017, 461). Gamification can also affect the behavior of people. The game has a notable influence over the behaviors and thoughts of the player. In the same way, it is thought that gamification used in different contexts has a positive effect on behavior and attitudes in practice.

The experience can increase the familiarity of the product and a better knowledge structure can facilitate the learning of the customers which helps customers to be independent from the external forces (Jang, Kitchen & Kim 2018, 253). On the contrary, less experienced or familiar customers have more confidence in facilitation conditions: the customer supports the perceptions and behaviors of the customers. Therefore, inexperienced beginners respond positively to the game characteristics of participatory practice activities compared to experienced experts.

Consumer participation is considered a strategy to promote sales growth, competitive advantage and profitability. The concept of consumer participation to the content of stakeholders is expended and examined the determinants of digital participation of multiple stakeholders (Viglia, Pera & Bigné 2018, 404). All social media posts on the Facebook page limit the stakeholders involved in the event. Vigila et al. (2018) have primarily found that the presence of the transformation is a powerful estimate of adaptation and interactive participation in the integration of creative resources in the activation pillar. The diffuse quantitative comparison analysis shows the configuration demonstrates the arrangement of the subjective and passionate qualities that help to adapt and interact. Recently, the market research agenda that involves stakeholders comes mainly from the introduction of digital media. The dissemination of content production by stakeholders in social networks is not easy in the multi-stakeholder ecosystem paradigm. In fact, corporate information is often compared to a pinball game, bouncing randomly in a network environment. None can force participation. It can be promoted through a platform that provides additional value and helps analyze issues related to stakeholders (Halim 2018, 2). Stakeholder participation is an interactive experience process based on the interaction of the

participating organizations with the participating organizations, but with other members of the stakeholder community.

Dramatization in commercial entities with increasing customer loyalty and increasing sales and customers as a legitimate method of providing value-added services is seen as a benefit. As a result, gamification has quickly become a big marketing trend. Gamification is a new type of marketing thinking, and providing a complete game is seen as a way to increase the value of a product's website (Hsu & Chen 2018, 119). In addition, when the objective of the service provider is training, a more serious game can be implemented for this purpose. A loyalty program that combines game mechanics can provide significant benefits to customers and customers can respond to customer loyalty.

There are two main points about gamification: designers and customers. According to widely accepted definition, role-playing games, such as the game they use to influence customers' behavioral designers mechanism, objectives and consists of structures. On the contrary, the customer's perspective defines gamification as the service development process, including support for the gaming experience to support the creation of total customer value (Leclercq, Hammedi & Poncin 2018, 85). This point of view points to an attempt to demonstrate that gamification is not always done with specific elements, but with the customer's applications. For organizations that receive this vision, the primary test of gamification is to discover approaches to improve the client experience by offering clients the chance to create collaborations like those of recreations.

2.5   Challenges of Customer Engagement

There have been many studies conducted focusing the customer roles and challenges to engage them in product and service development process (Nambisan 2002; Alam & Perry 2002; Jeppesen & Molin 2003). While much of the literatures suggest numerous opportunities and benefits customer groups provide, in the beginning of customer engagement process, company faces a number of challenges to its brand (Wirtz et al. 2013, 236). For example, an online community could become a weapon of anti-brand comment and discussion while it is used as a discussion forum and a platform of customer engagement. As Matthing et al. (2004) mentioned that customers cannot give feedback about something they did not go through due to their limited envisioning

capability. Nambisan (2002) stated that the most important challenge in customer involvement as a resource is to get into them by selecting appropriate customers and making ties with them in a cost effective manner. He further added that motivation to have control over outcome or self-esteem as a factor to be engaged in development process. Whereas Antikainen et al. (2010, 113) argued that interacting with community and experiencing entertainment can be a notable influential factors. Nambisan (2002) further stated that using customer as a co-developer in product development might increase uncertainty of the mission itself as it requires further controlling and evaluation. Antikainen et al. (2010, 112) added that customers might suddenly withdraw themselves from the engagement. Therefore, it is difficult for organizations to recognize the role of CE in their innovation process. For example, how can they encourage the customers to be engaged with new brands for value co-creation and brand equity? This is challenging as digital media takes less time than traditional media (Bolton 2011, 273).

To emphasize the biggest challenge that companies are facing in this digital marketing world, Leeflang, Verhoef, Dahlström and Freundt (2014, 5) stated *"The most important challenge in a digital marketing world is the ability to generate and leverage deep customer insights."* Although it also includes capture, curation, search, transfer, sharing, analysis, storage and visualization (Snijders, Matzat & Reips 2012). To understand the customer insights, the customer journey from awareness to purchasing the product should be followed (Leeflang et al. 2014), e.g. digital marketing agencies are technically analyzing the customer journeys. McGonigal (2011) stated that, the way the businesses used to function have changes substantially and will surely change more in the upcoming days. One of such ideas that has taken a strong hold is gamification. This is the way of incorporating the basic design and techniques into our everyday work, such as solving the non-business problem or social challenges (Jang et al. 2018). This idea taps into our natural desires and motivation of competition, and in turn helps businesses to communicate with their consumers. Gamification brings a lot of advantages as well as some unique challenges to engage the consumers in the development process (Morschheuser et al. 2017).

To mention the most important challenge in customer engagement by the non-gaming businesses is overuse of gamification (Deterding 2015), added that some of the apps that is based on gamification doesn't provide enough motivation for the consumers to engage in them (Deterding 2015). Leeflang et al. (2014, 4) said that service

automation and efforts to engage customer in online media could make customer dissatisfied and destroy value. Instead of developing apps for different users, Morschheuser et al. (2017) suggested, most of the time developers try to engage all level of consumers with the same level of products which in turn, ends up being a failure for the developer.

2.6 Strategies to Engage Customers

Customers have innovative thoughts to contribute to the early stage of the new product development (Crawford & Di Benedetto 2011). It was suggested that customers could share their thoughts on product designs, features and prototype analysis. Industrial designers often prefer rigid models to the moderate models (von Hippel 1988). These models are often applied to acquire further comments from clients in the focus group (Menguc, Auh & Yannopoulos 2013, 315). Companies also rely more and more on suppliers to provide initial designs, new products and process technologies and other types of support. The company uses supplier knowledge and specialized aptitudes to help make prevalent esteem and increase upper hand in product plan and different parts of new items. The participation of the supplier in the design process is the responsibility of all the components, systems and designs of the design information process.

There are several aspects of special innovations including processes of service development, capacity development, learning, organizational alignment and culture. Companies that want to take advantage of the complexity of service innovation and benefit from the potential benefits of service innovation must include a wide range of components (Kindström, Kowalkowski & Sandberg 2013, 5). However, many of the practical service innovation frameworks focus on changes in the understanding of the company's service or in the process of providing services. For that reason it is important to be an indispensable concept.

For the companies, social networks are also a forum to reshape their social relationships online into a forum they call Social Relationship Management (SCRM) (Hidayanti, Herman & Farida 2018, 18). Companies with a valuable service philosophy want to define a marketing professional, not only the presence in real time of customer lies, how they can manage points of communication with customers, how they can generate more value when the company is well administered, that is, not the final

product. The result of interacting with customers is creating value through common activities.

Faced with dynamic and uncertain environments, individual companies cannot develop and produce new products. Companies must go beyond their organizations and look into the opportunities for value creation with their partners to ensure that supply chains meet the needs of customers (Cao & Zhang 2011). The previous literature has played an important role in the knowledge and resources of external customers and suppliers. As a result, external engagement offers opportunities to accelerate product development, reduce development costs, and provide additional resources and increase performance and competitive advantage.

The creation of partners is considered an important manifestation of the Client Engagement Behavior (CEB) and is defined as *"the performance of the client driven by the buyer, the brand or the suppliers of external motivation"*. When a client encounters self-directed and self-managed behavior, co-creation occurs, except the default option (Fernandes & Remelhe 2015, 312). In addition to the actions initiated by the company, the CEB includes voluntary actions and additional roles, as well as guiding its collective objectives and external clients. Cooperative production and customer participation involve the production of core products.

Companies can benefit from the ideas of the internal client based on the interests of the institution. First of all, inviting Virtual Information Community (VIC) to organize face-to-face seminars is not complicated. When VIC is installed, the company can continue to return to the customer's knowledge base (Bretschneider, Leimeister Mathiassen 2015, 128). In addition, by an IT-based concept management system, companies can get help to analyze and choose the most feasible ideas for customers. Second, companies can get assistance by VIC to acquire a broader customer base and customer base from large user seminars and focus groups. This greatly increases the likelihood of defining some promising ideas for product development.

Concentric alliances involve a different procedure in light of the fact that the accomplices include distinctive products / services, yet have comparative passage or leave factors. These organizations can participate in cutting edge utilitarian exercises, for example, R&D and manufacturing, or in sub-exercises, for example, promoting or circulation. By entering the present business region, accomplices can utilize their remarkable assets and abilities to create reciprocal collaborations and increase an upper hand (Bustinza et al. 2017). This is especially true for partnerships with Knowledge

Intensive Businesses (KIB) for information intensive use, where they can work with service companies to obtain innovation in product service. While the KIBS Association diversifies and differentiates its products by offering complementary and innovative services, by which producers can manage the conundrum of centering fundamental production activities.

Gaming companies and their customers can engender better efficiency and higher efficacy by performing their individual roles and responsibilities congruously. Those augmented accomplishments comes about in predominant esteem for the client. Hence when the clients take part within the item advancement handle and anticipated esteem is produced, the companies moreover gets to be useful. From this study's viewpoint, customer engagement in game development can bring supplemental expertise, resource and prospects which avail the firms to develop game that could result in high performance once implemented. Additionally, customer engagement in game development process avails to ensure loyal customer base for gaming companies which lasts longer. This alliance of high performing customers and long term relationship could eventually become a competitive advantage for the gaming companies (cf. Tax et al. 2006).

However, even though it is evident that the customer participation in product development has significance, customers are often seen failed to engage in the overall development process (Bettencourt et al. 2002). Their bad and little participation could lead to a poor performing product and customer dissatisfaction, which eventually results in unfavorable situation for the company. Companies should take proper measurements to overcome those challenges.

Framework (figure 1) in this section is developed from the earlier discussion which illustrates the motives behind customer engagement, challenges and the ways of engaging customer by overcoming those challenges. The first stage in customer engagement is *Motives* that refers to the understanding the reasons behind engaging the customers in product development. The second stage denotes the *Challenges* in customer engagement where the problems to participate in game development process are diagnosed. Challenges section focuses on the company perspectives meaning the problems faced by the company while engaging customers in the product development process. And in the third stage, probable solutions are suggested for the company so that customer can be engaged effectively.

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│  Customer Engagement in │◄──────────────┐
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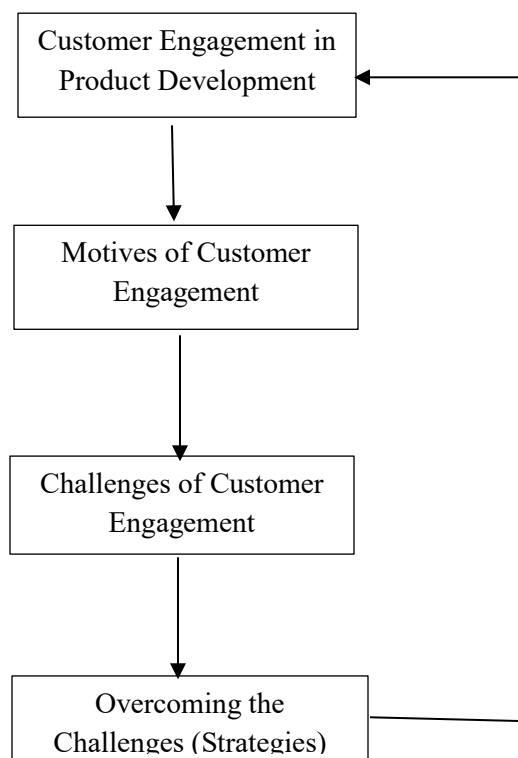
Figure 1   Customer Engagement Framework

Customer engagement can be better understood by a process perspective. When the customer engagement process starts, in the initial stage, customer engagement requirements should be developed. Both the customer and the company can apparently observe these requirements for customer engagement. First task for the company is to acknowledge that customer engagement is important for them. Once the requirements for customer engagement is acknowledged by the firm, they can go to help and encourage customers to contribute to their product development. Some additional endeavors are also needed in the form of knowledge sharing, company-customer conflict resolution by giving importance to the customer opinions and guidelines to ease the customer engagement.

In the initial stage of customer engagement framework, company motives and customer motives should be clarified. From the literature reviews and theoretical discussion, it is learned that both companies and customers have reasonable motives behind customer engagement in product development. In the second stage, several challenges are identified e.g. selecting the appropriate customers in a cost effective way, risk of sudden withdrawal from the process, risk of becoming an anti-brand in terms of online community, unsure about the customer knowledge thus customer have lack of technical knowledge on the subject matter, difficult to understand the customer insight,

clarifying the role of the customer and, changes of technological platforms with the passage of time. In the last stage, from the theoretical discussion, there are several solutions suggested to overcome the challenges. Companies can use social network platform to reach the customers to select the appropriate contributors. They can also invite Virtual Information Community (VIC) in a seminar to have heard from them as well as educate and train them about their tasks. Moreover, understanding the customer insight could be an effective element to select the right customers. Furthermore, companies can build social relationship with the customers in the form of motivation by offering monetary rewards as a facilitation towards customer engagement.

3   RESEARCH DESIGN

3.1   Research Approach and Method

Customer engagement has been extensively studied in the field of marketing literatures and it became clear during the era of developing conceptual understanding of customer involvement in product and service development. But the concept of customer engagement has been continuously updating due to its applications in multidimensional aspects with the passage of time. For this reason, the objective was to design a study that could disclose some more interesting features of customer engagement. Hence, the researcher adopted research methods to have in-depth understanding the problems and then find the solutions of those problems.

Conceptually, qualitative research aims at searching the answer of a research question, systematically uses a predefined set of actions to answer the questions, and accumulating proof and producing the answers that were not determined before which is applicable beyond the boundaries and limitations (Mack, Woodsong, MacQueen, Guest & Namey 2005, 1). According to Poovey (1995, 84) *"There are limits to what the rationalizing knowledge epitomized by statistics can do. No matter how precise, quantification cannot inspire action, especially in a society whose bond are forged by sympathy, not more calculation"*.

Qualitative research strategies are considered as an important mode of enquiry in the area of social sciences and applied fields like education, social duties, community building and management. Its categories live in nice multiplicity and lots of wonderful texts function leads to their conjectures and viewpoints (Marshall & Rossman 2010). The role of qualitative research, compared to quantitative one, is different to some extent, as theoretical understanding and analytical expertise of the researcher are not usually sufficient to advance the research. Besides those qualities, a qualitative researcher is required to have a fair imaginative capabilities. This specific technique helps to comprehend thought, indication, action as well as cultural concept of a phenomenon, as shown in figure 2.

By enforcing qualitative research, multiple aspects can happen such as the solid consideration in detail, the competency to encompassing both oral and written communication, for entering the fronts, uncovering indications and discovering the delicacy and challenges (Pratt 2006). Qualitative research helps the activities be

contextualized inside circumstances and momentum, and theory evolves from the observational data, appropriately there is 'closeness of fit' between theory and data (Woods 2006).

Qualitative Research

Human knowledge and understanding

Opinion

Cultural forces and meaning systems

Culture

Denotation

Emotional drivers, both conscious and

Act

Action and Behavio
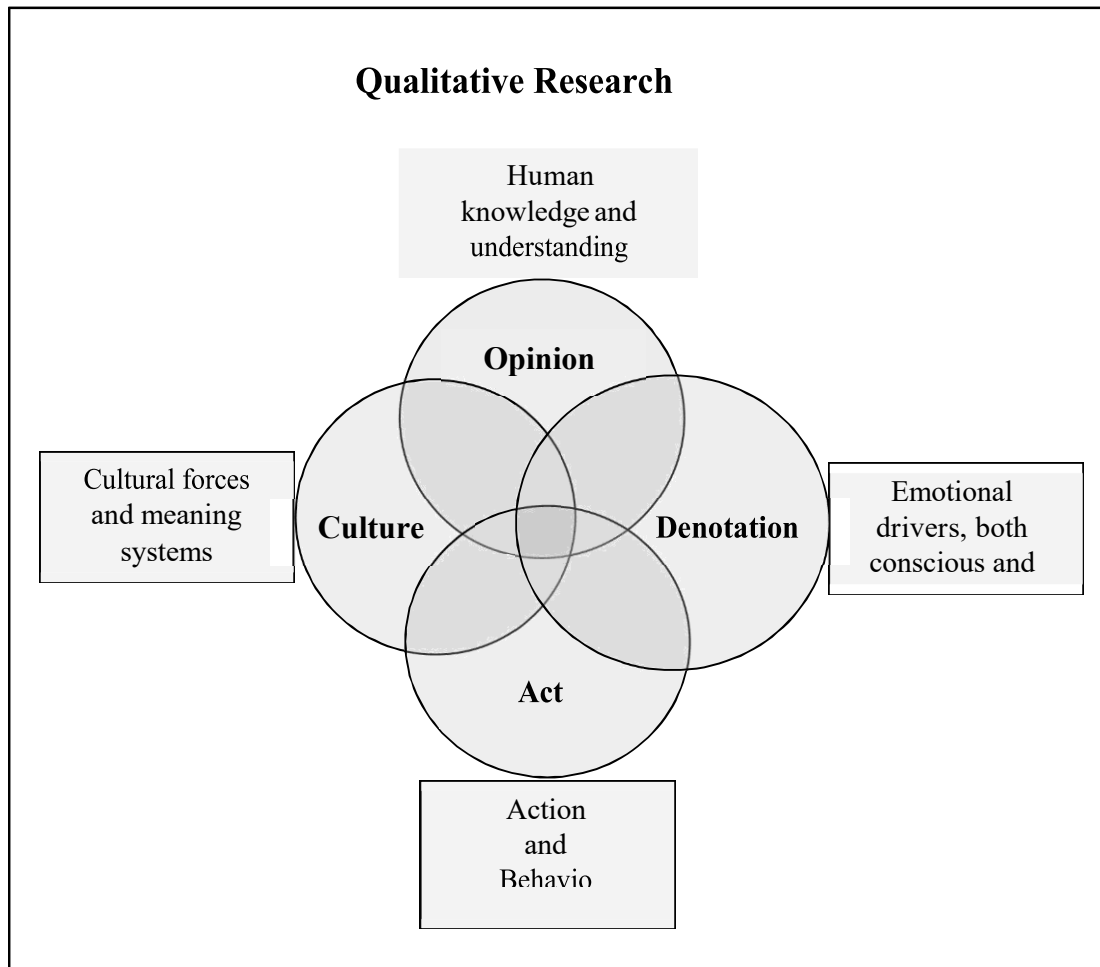
Figure 2   Multiple focal points of Qualitative Research (edited from QSRinternational.com)

The target of qualitative research is not to make factual speculation, yet to absolutely get it and depict an activity and deliver speculative doable examination and course of action (Yin 2003, 10). As the figure illustrates, recognizing the perspective of the subject include realizing and control of associate by the subject and examining their ponder consideration. Meaning indicates to cognizant and in-cognizant passionate drivers of the individuals and mindful actions taken by the subject and their self-actualization on it. Culture is inside which the exhibitions is molded and envelops shared denotations, standards and codes. As this study was carried on genuine events, understanding the opinions and actions and considering behavioral propels molded the

theories for this learning, and this is often how qualitative research conveyed a significance of understanding within the exhibitions (Woods 2006).

The empirical study of this research can additionally be considered as semi-structured *qualitative multiple case studies.* The case study is a research methodology which concentrates on the comprehension of the dynamics present in numerous settings. Data collection methods in case studies comprise archives, interviews, questionnaires and observations (Eisenhardt 1989, 534). For this research, semi-structured case study was chosen as a research approach which allowed the collection of appropriate information on product/service provider-customer relationships and its reliant variables (cf. Hirsijarvi, Pirkko & Sajavaara 2001, 123).

Furthermore multiple case studies allowed investigation of all the important conditions within the environmental context of the case institutions from a comprehensive angle. The usage of qualitative research appeared as a nicely-ideal research approach, as the purpose was to find out the answer to the questions concerning 'how'. Moreover, multiple case studies regarded as most suitable strategy in respect to analyzing inter-organizational, social and multifaceted processual phenomena, which performed an indispensable part in the preliminary framework of this study (cf. Yin 2003, 13 – 14). In this research, those issues were particularly compatible as the preliminary framework has interdependencies which have been sophisticated in essence. Therefore it seemed more practical to try to apprehend a particular number of cases accurately as opposed to trying to seize aggregate outputs from a large variety of choices (cf. Nieminen 2003, 58 – 59).

However, to do this research, the researcher chose the natural events rather than artificial experimentation as the natural events are the real life business situations. The scholars and the business society have widely recognized the importance of product development and the significance of customer contribution to the product development. Nevertheless, to observe the interaction between service provider and the customer, pursuing the 'natural experiment' technique should provide more profound knowledge into the problems and their solutions as challenges sustain there (Nielsen 2010). Angrist and Krueger (2001, 74) termed 'natural experiment' as a signature technique in qualitative research.

Questions can be answered else by applying the method of induction or by the method of deduction or integration of the both can also be applied. In *induction method,* researcher, after observing the certain phenomena, reaches conclusion by

acknowledging the design and testing speculation. On the other hand, *deduction* refers to a method where researcher achieves contemplated affirmation of existing theories (Burney 2008). An integration of the both methods has been used in figure 3 below.
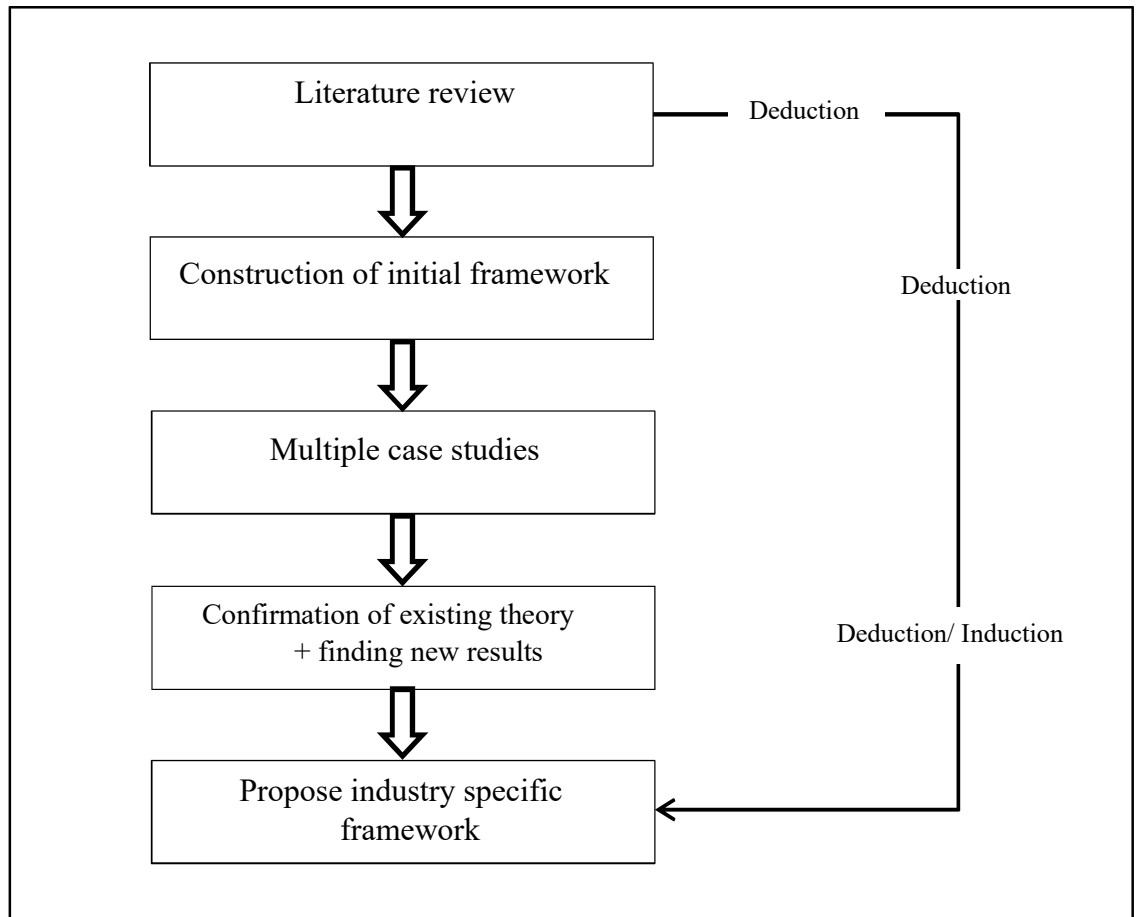
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┌─────────────────────────────────────────────────────────────────────┐
│                                                                       │
│      ┌──────────────────────────────┐                                 │
│      │      Literature review       │──── Deduction ────┐             │
│      └──────────────────────────────┘                   │             │
│                    ⇓                                     │             │
│      ┌──────────────────────────────┐                   │             │
│      │ Construction of initial framework │        Deduction           │
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│                    ⇓                                     │             │
│      ┌──────────────────────────────┐                   │             │
│      │     Multiple case studies    │                   │             │
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│                    ⇓                                     │             │
│      ┌──────────────────────────────┐         Deduction/ Induction    │
│      │  Confirmation of existing theory │               │             │
│      │     + finding new results    │                   │             │
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│                    ⇓                                     │             │
│      ┌──────────────────────────────┐                   │             │
│      │    Propose industry specific │◄──────────────────┘             │
│      │           framework          │                                 │
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Figure 3   Research methods applied in this study (Akpinar 2009)

The first step in this process was to review the existing literatures. Literature review made a difference to create more profound understanding on the concept of customer engagement. Existing literatures also helped to know more about the games related business and its importance in the society and in the world economy as whole (Akpinar 2009, 24).

The learning and the experiences achieved from the analysis of literature review was at that point connected to create the preliminary framework. In the framework, it was attempted to cover the plausible customer engagement challenges and their possible solutions in gaming business context. The preliminary framework helped to functionalize the research question.

The third stage of the research was the empirical study, aimed at examining the preliminary framework in response to reality. Observing the patterns of customer engagement challenges and its feasible solutions by the gaming companies was another objective of the empirical study.

In the fourth stage, the basic concept of the current theories were affirmed to a high note, which is acknowledged as deducting reasoning yield. Within the same stage, the existing theories of customer engagement challenges and their possible solutions were reshaped in respect to gaming industry. Besides, few updated challenges were too recognized and their solutions were set up rendering which reflects the thinking of inductive reasoning method.

The final stage of this research was to establish a more accurate industry oriented framework for helping customer engagement in gaming industry. The framework recognizes customer engagement from a direct point of view and comes up with a strategic solutions to engage customers. Here in this last stage, inductive reasoning was designated.

3.2   Conducting the Qualitative Study

3.2.1   Selection of the Industry

This research is looking into the gaming industry to find out the answers of the research questions. Although the gaming industry covers a wide range of categories, it was unwise to focus on all of them at time, thus this research is only intending to focus on something that is familiar to the all, ideally accessible by the mobile and almost all the benefits of advanced gaming excitement.

A number of factors influenced the choice of the sector. Due to the location of the research conducted, Finnish mobile games industry was selected as it plays a vital role in Finnish cultural export thus to the Finnish economy. The mobile games industry keeps growing rapidly world-wide since last two decades. In terms of its expansion and the competitiveness towards attracting the higher number of people, games industry is undoubtedly outperforming the film industry within the entertainment market. And, mobile games itself is generating the highest portion of turnover in the combined games industry.

However, it is well understood from the research question that the study is focusing on the gaming industry. To find out the answers of the questions, data can be collected from various sources e.g. primary source, secondary sources. For this particular thesis, the researcher has decided to take Finnish mobile games industry first for collecting the primary data which seems more accurate than one is from open source. Secondly, to understand the users' motives behind their participation in games development, the researcher has also chosen community platform. The online community forums are created based on the user generated contents where everyone can share their experiences, thus users can interact with each other. The gaming companies can observe the interactions among the users regarding any particular game or brand.

3.2.2   Selection of the Case Companies

While selecting the companies to be participated in the qualitative study, their field, nature and, interests that the gaming companies are based on were taken into consideration which were suitable for this thesis.

The primary selection of the population, fitted for the thesis, has been done by some ground-work starting with a discussion with the director of neogames and, attending the several gatherings organized by IGDA Finland[1]. The author preliminarily selected 15 (fifteen) gaming companies which were suitable for the thesis. But only ten companies (most of those are based in Helsinki, Espoo region and some are from Turku, Jyvaskyla where Helsinki and Turku are the current and former capital city of Finland) were contacted by the researcher after further analysis focusing on their areas of work. The communication was started with meeting them in person during IGDA gatherings in Helsinki, later by email and phone calls. Despite agreeing to participate in interview, some of them declined and some were even unresponsive while contacted by email. However, five companies eventually agreed to participate in the research. Among them, three are from Helsinki region, one is based in Turku and another one is based in Jyvaskyla. A list of the case companies participated in the research is given below.

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[1] IGDA Finland is the Finnish chapter of International Game Developers Association, a non-profit professional society that is committed to advancing the careers and enhancing the lives of game developers by connecting members with their peers, promoting professional development, and advocating on issues that affect the developer community. <https://www.igda.fi/about-us/>

Table 3   List of case companies participated in this research

Company	Value Offering	Official Website	Interviewee	Date	Duration	Interview type
Add Inspiration	Add Inspiration develops free to play mobile games.	https://addinspiration.com/	Co-founder	11.12.2018	22m 13s	Phone Call
LunarByte	LunarByte develops puzzled games which can be played from both mobile and PC.	http://www.lunarbyte.com/	CEO	06.11.2018	23m 15s And email script	Recording, phone call and email
Lupo World	Started with Board games, targeting the multidimensional areas based on ideas generated by the customers.	https://www.lupoworld.com	CEO	19.11.2018	13m 44s	Phone call
Snowfall	Snowfall develops Moomin mobile games inspired from Moomin story targeting the whole family including children, teenagers, moms, dads and grandparents.	http://www.snowfall.fi/	CEO	24.11.2018	17m 49s And email script	Email And Phone conversation

Surrogate Games	Surrogate Games develops games which offer experience of real world physics and consequence by blurring the lines between reality and a game.	https://www.surrogategames.com/	Chief of Games	29.10.2018	Email scripts	Emails

These Finnish gaming studios (except LupoWorld, which started with board game, but they are working on diversified categories of games to develop by collaborating) develop video games for different classes of customers. Although almost all the case companies are not so old in the industry, but their practice is almost similar to the older ones in terms of product development and customer engagement. Almost all of their game developers somewhat have previous experiences of working in leading gaming companies e.g. in Rovio and Supercell. So, while developing games through customer engagement, they use their own expertise and insights gain throughout their professional experiences.

3.2.3 Data Collection

In case of qualitative research, data can be collected from several sources including press-releases, online community forum, company websites, interviews, statistics and newspaper articles. Nevertheless, data collection method should be clearly analyzed in accordance with the need of the research type. If the interviews are adopted as one of the data collection methods, then the detailed process should be clearly explained as an imperative part of such research work (Eriksson & Koistinen 2014, 30-31). Collecting data from multiple sources shows the extensive picture of the research project (Eskola & Suoranta 1998, 69). In this thesis, Interview was selected as the major source of data, then the personal observation was also used for some additional but necessary information. Personal observation was basically done by attending several gatherings of community and companies' websites, their social media activities etc.

Interviews were done as open ended discussion by which wider data collection is possible. And to collect primary data, interviews were performed through emails and phone call conversations. The preliminary stage was meeting with the people from different companies in several community gatherings where game developers and players meet together. Then the Emails were sent to the interviewees with an overview of the topics to be discussed so that they can get prepared beforehand. The documentation of the interviews was maintained by email and phone call recordings according to the circumstances, as it is recommended to keep the recordings of the interviews for further in depth analysis (Cohen & Crabtree 2006, 1).

To have thorough knowledge about the gaming industry, press releases, annual reports and articles were studied as well as an open discussion was done with the director of neogames, the hub of Finnish gaming industry. Information about the case companies was collected from the 'neogames' website and, companies' own websites and from their social media platforms. After having an overall picture of the video games industry and knowing their common practices regarding customer engagement from the discussion with the director of neogames, the author started surfing several community forums and their social media platforms more intensively. Then decided to collect primary data through interview as it is easier to have concrete data for an effective research. Interviewees were selected by personally meeting them in community gatherings and from the list in neogames websites. The table of operationalization, generated from the research question and theoretical framework, is presented below with the operationalized concept.

Table 4   Operationalization of the Research Problem

The research question	The sub-research questions	The operational equivalents	The operationalized concepts
How to engage customers in game development?	Why customers are engaged in game development process?	What is customer engagement in game development?	Phases of customer engagement
			Platforms for customer engagement

		What are the motives behind engaging customers?	Company motives
			Customer motives
	What are the challenges to engage customers in game development?	What are the Problems from customer's side?	What kind of knowledge and skills customers lack in?
			What negative effect can product have due to shortage of knowledge and skills?
			What problems can inadequate groundwork and insufficient communication can be created by the customers?
		What are the deficiencies from company's side?	How challenging is to identify the appropriate customers for engagement?
			What is the problem in choosing the right comments?

			What is the communication problem that company has?
	How to overcome those challenges to engage customers in game development?	What customers can do?	How customers can gather and share their specific knowledge to work together with you?
			How communication openness from the customers helps to develop a game?
			How the customer engagement helps to develop games?
		What companies can do?	How you can select the super performing customers?
			How can you motivate the customers to engage effectively?
			How can you provide the customers education and training to engage in your games development?

The researcher intended to do face to face interview first, only one preliminary interview with neogames' director for the overview of the practices in video games industry and another one with a respondent from a case company was done face to face. But later, author understood that it's better to take the interviews over the phone and recorded it according to the circumstances (due to tight schedules of the interviewees). But one interview was done by email as per the interviewee's interest. After getting first reply to the questions sent to the interviewee, other subsequent questions were also asked when it was needed. The researcher attempted to assure the interviewees and was humble enough not to influence them personally, and tried to win their hearts with a view to having in depth knowledge about the phenomenon (cf. Wood 2006). Not all the interviews were fully identical due to the respondents' way of dealing with the questions they were asked. As the interviews were open ended discussion type, interviewer tried to keep the sessions within the framework. Thus the interviewer avoided asking leading questions and any type of suggesting results (Yin 2003). Although most of the interviewees' mother tongue is Finnish, but the interviews were conducted in English as of researcher's own choice as he does not speak Finnish. However, it was performed very well as the interviewees speak fluent English. Besides the email replies, recorded interviews were transcribed and summarized. Then the data analysis part was initiated.

3.2.4 Data Analysis

The empirical data collected for this thesis from interviews and other sources mentioned earlier was in raw form which was unclear. So, in order to find out the solutions of the research problems, collected data must be organized to ease the analysis, as Fieldmann (1995, 1) indicated the researcher's work was to "*Create an interpretation of the setting or some feature of it to allow people who have not directly observed the phenomenon to have a deeper understanding of it*".

Gummesson (2005) stated that the qualitative research is not as orderly as the quantitative one. He also mentioned that data collection gets more emphasis than data analysis in qualitative research and the pattern of analysis and interpretation of the data is not as orderly as of quantitative research. Thus, he recommended researcher should put more focus on analysis and interpretation.

However, after the collection, data was extensively read several times to have a complete view of the whole outline. When data took the shape of information in the researcher's mind, they were recommended to be classified in accordance with the pre-existing theoretical framework (Eskola & Suoranta 1998, Eriksson & Koistinen 2014, 33). Thus the accumulated data were classified against the sub-research questions to help ease the process of analyzing them individually according to their categories (Forsström 2005).

According to the order of the sub-research questions, data can be arranged which helps ease the examination of the theories, such as motives of customer engagement. If the researcher fears of distorting the appropriateness of the context, quotations can be reproduced from the record and/or it can be revised in researcher's own words (Eskola & Suoranta 1998). The organized data was examined against the preliminary framework. While examining them, a significant part of the preliminary framework was found confirmed. However, some new challenges and solutions of customer engagement were also identified and suggested.

3.3 Evaluation and Limitation

One of the practical challenges a researcher faces throughout the complete qualitative research progression is the way to convince the audiences of the scientific essence of the research, in respect of its prominence and responsibility (Hägerström 2010). Every research should aspire in collaboration of the outcome and phenomenon (Hirsjärvi et al. 1991). Enforcing completely diverse evaluation bases increase the lucidity of analysis and create prospects to spot its strengths and limitations. The hypothesis of a qualitative paragon is reflected by the four theories: (a) credibility, (b) transferability, (c) dependability and (d) confirmability (Lincoln & Guba 1985).

This thesis formed the *credibility* by indicating that the research was performed with the clinching scope that the topic was unambiguously known and delineate (cf. Lemmetyinen 2010, 65). The case companies for this thesis were carefully selected and their respondents were ready to participate in the interviews. The respondents position in their firms and the experiences they have had were sufficient enough to conduct this research.

The *transferability* denotes the power to use the findings to different phenomenon or population (Shenton 2004, 69). Shenton (2004) further added that it can be

challenging to apply the transferability to other phenomenon as qualitative case studies usually follows the comprehensive analyses of particular phenomenon. In this research, the *transferability* was established by collecting empirical data from the selected case companies that are distinct in their product offerings but similar in their nature of business as all are from knowledge intensive business. Hence, the findings of this research can be worthwhile to other knowledge intensive businesses.

The third theory to evaluate a research is *dependability* which refers to the flexibility of alternative researchers to reiterate the investigation with the same interview questions with a view to having same conclusion. So it is closely related to the reiteration. Shenton (2004) and Meyer (2001) suggested that the research design and findings should be explained thoroughly to permit such *dependability*. In this thesis, dependability was reinforced by providing necessary data regarding the interviews along with the research approach, interview concepts. The experience and expertise of the respondents from the case companies should also be taken into consideration for the *dependability* of the study. Accordingly, it may be proclaimed that alternative researchers have got ample data for the reiteration of the study.

The final theory to evaluate a qualitative research is *confirmability* which usually refers to sound judgement. Concluding the findings that symbolizes the studied state of affairs properly is the purpose of the research and, that does not come out of researcher's own impression. The probable connection between above discussed dependability and confirmability thus has scope to be argued. Shenton (2004, 73) suggested that such confirmability could be expedited by pertaining triangulation, describing the research approach applied, and conjointly by acknowledging the researcher's personal presumptions, if there is any. Nevertheless, Eskola and Suoranta (1998) have recommended that judgement cannot be fully excluded when it comes to qualitative research. Eskola and Suoranta (1998) further stated that the readers should be allowed to gauge the study's fairness by the rationale of data assortment and analysis. According to the Meyer's (2001) recommendation, during interview, although it is important to have association between the respondent and the researcher, but also risky for judgement. Meyer (2001) has further recommended that excluding the presumptions and prior expectations throughout the analysis is a way to scale back judgement, as performed in this research.

Like many other qualitative research, this research has some unavoidable limitations. Among its several limitations, considering the one particular sector (mobile

games) of the industry (games industry) is one limitation as the results cannot be generalized for the whole gaming industry. Then, data collection period was shorter (2018). The longer time frame for data collection would produce better result and make it easier to understand the phenomena, as the technology and platform for customer engagement change over time. Another limitation is that all the participating companies are from Finland, so it might be difficult to generalize the results with the firms from other countries due to the cultural diversities. However, despite having some limitations, this thesis has determined, by several means, the rationality and the trait of the research to produce reliable findings.

4 CUSTOMER ENGAGEMENT MOTIVES, CHALLENGES AND SOLUTIONS IN GAMING COMPANIES

4.1 Customer Engagement by Gaming Companies

The companies participated in the qualitative study have one prevailing attribute which is developing games independently, meaning they do not rely on other publishers where there is a risk of conflict of interest regarding the development procedure and/or about the type of games they prefer to develop. All of these companies engage external parties while developing their games regardless of their size, market share, target group, type of games, platforms etc. Table 5 below provides basic details of the companies participated in this case study.

Table 5   Details of the Participating Companies

Company	Location	Value Offering
Add Inspiration	Jyväskylä, Finland	Add Inspiration develops free to play mobile games.
LunarByte	Helsinki, Finland	LunarByte develops puzzled games which can be played from both mobile and PC.
Lupo World	Helsinki, Finland	Started with Board games, targeting the multidimensional areas based on ideas generated by the customers.
Snowfall	Turku, Finland	Snowfall develops Moomin mobile games inspired from Moomin story targeting the people from all classes including children, teenagers, moms, dads and grandparents. They develop free to play mobile games.
Surrogate Games	Helsinki, Finland	Surrogate Games develops games which offer experience of real world physics and consequence by blurring the lines between reality and a game.

The companies listed above develop their games by engaging customers and other related parties in the early stage of their games. Among those, *Snowfall*, for Moomin games they collaborate with the original Moomin brand owner targeting their existing fan base, but they engage customers for their other games. All of these five companies encourage customers to participate in their game development in the early stage first emphasizing on customer insights. By acknowledging the need for customer engagement, the respondent from *Add Inspiration* stated that

> *"They spend more time with the game than the actual*
> *developers spend time on making the game"*

So, it's not unusual for the players to know something different but useful things compared to the actual developers- he further added. In case of *LunarByte*, they are using their social media platform e.g. Facebook page, to engage customer in design stage of the game development, and community gatherings (e.g. IGDA Finland Helsinki hub gatherings) for testing it out by the community members to have feedback. Two others gaming companies (*LupoWorld* and *Surrogate Games*) also admitted the practice of customer engagement in games development in earliest possible stage. Although they have mentioned two common points such as creating their own community platform and seeking feedback from the players about the current games continuously.

As the independent gaming studios, all of these participating companies significantly value the customer demands and their knowledge while developing the games. Thus the companies need to know what customers want from the game. Agreeing on this, the respondent from *Snowfall* (who has multi-dimensional experiences of working with game developers and the community) suggested that:

> *"If you work on something you want to sell well, then you*
> *should really listen to the community and players what*
> *they want to see out of that game."*

In addition to the customer engagement, *LunarByte* recommended a strategy for the start-ups that friends, social circles and family members those are more close can be engaged to test the game out before final launch, as newly established indie gaming studios do not have strong customer base to make them interested to be engaged for testing phase. They further have acknowledged their idea of integrating the customers in whole development process.

While it comes to the research and development stage for a game before starting to develop it, cost factor comes as well. Admitting the benefits of customer engagement, respondent from *Luopworld* stated that:

> "*It creates new games, reduces risks of throwing lots of*
> *money in development, releasing a game and then, sales*
> *of being behind the expectations.*"

All of the five companies participated in the qualitative study have the similar thoughts behind engaging customers in game development before the final launch.

4.2 Motives of Customer Engagement

This research studied the companies participated in the interviews and the mobile games industry as a whole in terms of their current and potential measures for customer engagement. From the literature, it is learnt that there must be some motives behind the customer engagement. The term "Motives" denotes the reasons of customer engagement from both parties- companies and customers.

4.2.1 Company's Motives behind Customer Engagement

After analyzing the companies participated in this study, the reasons behind customer engagement in games development were clearly learnt. All the case companies mentioned their own motives that why they prefer customer engagement in their games development. Though the identified motives are similar to some extent and have some variations too, the major motives of companies in customer engagement are discussed below:

4.2.1.1 Getting Continuous Feedback

The most common motive for customer engagement from companies' side is *Getting Continuous Feedback*. The empirical data collected from the companies participated in this research shows that all of the five companies have agreed on the matter that one of the reasons why they engage customers in their games development is for solving their problems inside the games on continuous basis. Suggesting about customer engagement

as integration in the whole development process, the respondent from *LunarByte* further stated that,

"The more feedback we have, then more information we have
to work with what works and what doesn't in the game."

He further mentioned that basically at every stage, after launching the game, game developers need to have feedback on it. The respondent from *Surrogate Games* also has suggested that customer engagement allows to correct issues where players get hung up or lose engagement, and also stated that the feedback is used in aggregate. Agreeing with the preceding interviewees, the respondent from *Lupoworld* has opined regarding their motive behind customer engagement in games development that after launching the games, they engage customers in the way of receiving their feedback by sending emails to super fans.

The interviewee from *Snowfall* shared her views on customer engagement motive by stating that the community or the players are not just for one time game rather they will be in touch with the game developers to have resolved their problems. So, in concrete meaning, firms will be benefitted by keeping contact with the customers in the long run. The respondents from *Neogames* and *Add Inspiration* have also suggested that getting feedback from the customers on continuous basis makes the sustainability of the games smoother.

4.2.1.2 Feasibility Analysis

All the five participating companies stated that, they have to keep some necessary things in their minds while developing the games, e.g. would it be a successful games? Can it be playable? Is there any point to making it? Would there be money in it? What is the retention number? If the customers would like it? Because, if there is a risk of failing it to attract the expected number of customers or to satisfy the customers, then there is no meaning of making it- according to *LunarByte* and *Add Inspiration.* The collected data shows that the other three companies have also similar opinion regarding the customer engagement games development. While talking about the reasons of customer engagement in development, the respondent from *LunarByte* stated that,

"Engaging customers into the development process is
helpful because we are doing it for them, … we can figure

> *out things earlier that helps us to make the games much*
> *better."*

Though engaging customers in early stage does not necessarily mean it as the only phase customers are engaged in. There continuous development goes on by getting feedback or suggestions once the game is launched - all of the five companies suggested. In the case of *Snowfall,* for their *Moomin* game they collaborate with the original Moomin brand in the early stage. They engage customers once the game is launched, in the form of solving problems. However, for other games, they engage customers from the early stage of development. Indicating the necessity of customer engagement in the early stage, the respondent from *Snowfall* says that,

> *"Testing the game as soon as possible, even if it's in the*
> *prototype phase, so what you want to see what people actually*
> *think about it. Because, soft launch is one thing, but you have to*
> *test and think about it - does it make any sense to continue?...*
> *because indie has very limited resources, you don't want to*
> *spend your time on making some games that not necessarily will*
> *work unless you do it as a special project."*

Surrogate Games and *Lupoworld* have the similar objective regarding the customer engagement in the early stage, particularly emphasizing on the testing phase by which it can be determined whether the game is viable to launch or not. However, getting useful feedback can solve many more problems from early stage to after launch stage- the empirical data suggested.

4.2.1.3 Promotional Tool

The second most significant motive identified behind customer engagement from companies' side is using it as a *Promotional Tool.* All of the five participating companies have directly or indirectly opined the customer engagement to be used as an alternative to traditional advertisements. Following the examination of viability process, another important reason *Surrogate Games* suggested about customer engagement is being used as a promotional tool, especially for the start-ups who have limited funds compared to the established ones.

According to the respondent from *LunarByte*, customer engagement in early stage could play the role of advertisement, thus seeking feedback from the customers in the

form of ideas and suggestions could help reach the target group which otherwise might not be possible by an advertisement. He further stated the reason why that,

> *"They might not watch or like the advertisement or they don't*
> *seem to play your games."*

Agreeing on the current literature, the interviewee from *Snowfall* clearly recommended, the building up the strong community who will play an important role in promoting the game to other wider community forums. While talking about the campaign for fundraising through customer engagement, she further added that this could be used as a marketing tool to promote the product. According to the personal experience of a respondent from one of the participating companies, inviting players in the testing phase brings them closer to the people who would become more dedicated to develop the game, and later promote it to their social circles.

4.2.1.4 Financial Factor

To engage customers in games development has some influential factors those are related to financial matter. All the five companies have clearly mentioned that customer engagement in game development reduces the cost of advertisement to a great extent. *LunarByte* suggested that this is one of the cheapest ways to make good games which meets customers' expectation. On the other hand, adding some more financial benefits, the interviewee from the *Lupoworld* recommended that,

> *"It creates new games, reduces risks of throwing lots of money in*
> *development, releasing a game and then, sales of being behind the*
> *expectations."*

Besides this, engaging customers in the very early stage plays an integral part of product development. According to *Add Inspiration* and *Snowfall*, engaging customers in the games development (from design stage to testing stage) reduces the development cost, particularly for independent gaming studios as they have limited resources (mentioned in previous point). However, from the empirical data, it is learnt that engaging customers in any form (e.g. building community and keeping them around) for games development helps reduce the development cost as the customers thoughts about the particular product can be known earlier, and it also helps reduce the advertisement cost as the customers will know what is coming next, thus they will play a role in promoting that product.

4.2.1.5 Validating Ideas / Getting Sponsor Equity

Another notable point about customer engagement mentioned by one of the interviewees is getting *sponsor equity*. This motive was not mentioned in the theoretical frameworks.

The interpretation of the data collected from the interviews shows that the case company has reasonable ground to be interested in engaging customers in their product development as early as possible. By doing so, they can get the innovative ideas of the customers that might be a significant factor in the game eventually. The community or the customers can even be a part of the development by providing their valuable ideas and also by being a financier in case. From the practical data given by *Lupoworld*, it shows that they encourage customers to collaborate with them by sharing their ideas. To support the point of early engagement, the respondent from *Lupoworld* stated that,

> *"If you can engage community in early stage, you can get their*
> *sponsor equity, their ideas."*

Data collected from one of the companies suggested that, they seek suggestion from the customers and reply promptly for their response in a positive way in their social media platform while designing the game.

4.2.2   Customer Motives

Like the customer engagement motives from the company perspective, the qualitative study shows that there are some notable motivating factors for the customers to be engaged in the games development. Empirical data shows that customers can be engaged in games development by their own interest and/or being motivated by the companies. The participating companies have uttered some reasons why customers tend to be engaged in games development, those are described below according to the findings:

4.2.2.1 Recognition

One of the significant points for customer motives behind their engagement identified from the empirical data is *getting recognition* for their performance in playing games and giving continuous feedback about the games. The data also shows that the players

like to get tagged based on their performances. It could be of different types such as, getting special *Hat* in the community, seeing their opinions are valued positively etc.

Three of the five companies (except *Surrogate Games* and *Add Inspiration*) have mentioned about one of the customer motives; *recognition.* The *Lupoworld* has shared their opinion based on their experience from dealing with the players that customers like to get importance based on their performances and the relationship with the firms, for example their superfans are engaged in product developed in the form of co-creation, the respondent said. Getting a special hat or crown as their recognition of performance in the community works as a motivating factor for the players, the respondent from *Lupoworld* further added.

On the other hand, the interviewee from *LunarByte* has different view on it, he recommended that the least point customers would like to see the game is being updated based on their feedback. According to the respondent from *Snowfall*, customers get recognition of their interest and their demands as well. She stated that,

> *"Making customers feel that they get what they want, they are happy with this sort of value out of the game or out of the achievement."*

4.2.2.2 Early Birds Opportunity

Another interesting motive for the customers to be engaged in games development is *Early Birds Opportunity*. Getting invited to play a completely new game is quite exciting matter for the game freak people who think they are prioritized to experience an upcoming special game. The empirical data shows that most of the gaming companies prefer inviting the existing and/or potential customers to test the game out before launching it which works as a motivating factor for customers to participate in the game development process. Although only two of the participating companies directly mentioned this opportunity, but what they stated it as a strong motivating factor common for all. Referring to the customer motives in early stage, the interviewee from *Lupoworld* stated that,

> *"They can test the games very early stage having access to that before launching it."*

On the other hand, agreeing with the *Lupoworld*, the respondent from *LunarByte* opined that it largely depends on the relationship between the company and the

customers; whether customers play their current games or not. He believes that if the customers are already playing the respective company's game, then there is a high possibility from customer side to be excited to take the opportunity of testing the new game before it is launched. Here, regarding the reason for customer engagement in the new games development, the director from *Neogames* further added that,

> *"The game is developed for them, so they should try and suggest*
> *what they want out of the game."*

4.2.2.3 Monetary Rewards

Monetary rewards based on contribution towards the games development could be another motivating factor for the customers to be engaged. The empirical data also shows that the customers feel more concentrated and dedicated in giving effective feedback if there is any monetary reward system available. Three of the case companies (except *Add Inspiration* and *Snowfall*) have directly recommended the monetary rewards as one of the common influential factors for customer engagement in games development. Although, the respondents from *Snowfall* and *Neogames* stated that the big firms usually do not announce any monetary benefits for customer feedback regarding games development.

While speaking about the reward system for the customers to be engaged in product development, both the interviewees from *LunarByte* and *Lupoworld* have had almost similar opinions. The interviewee from *Lupoworld* mentioned their own experience and perceptions regarding how customers are motivated, he stated that, *"having some special offers on the current game and potential discounts on upcoming games, customers get motivated to participate in the product development process."*

On the other hand, the respondent from *LunarByte* suggested that monetary benefit could be in different forms such as Gift cards, discounts for games, virtual currency, some kind of unique cosmetics inside the game etc. Although the *Surrogate Games* has recommended the monetary rewards as a temperament for the customers to be engaged in product development, but unlike others, they did not mention any specific monetary reward which works or is in practice as a motivating factor. The theoretical framework has almost similar suggestion regarding the monetary rewards as a customer motive behind their engagement in product development.

4.2.2.4 Opportunity to be a Part of Developers

Having an opportunity to be a part of developers in new games development is another influential factor for the customers to be engaged. The empirical data of this research shows that customers have a feeling of being part of game developers. Four of the five (except *Surrogate Games*) companies have clearly mentioned about the motive of getting opportunity to be a part in games development. According to the respondent from *Add Inspiration,*

> *"Being engaged in games development, they feel like a part of developers, so they have more commitment towards the game, and it brings self-satisfaction."*

While talking about the customer participation in the new product development, the respondent from *Snowfall*, from her diversified experiences in gaming industry, recommended that customers would first think of what they get out of it. Agreeing with the interviewee from *Add Inspiration*, she further added that the participants of the community have a feeling of being part of the team (developers) for games development. Two other companies, *LunarByte* and *Lupoworld*, have similar opinion regarding customer motives behind their engagement. The respondent from *Lupoworld* has stated that,

> *"By taking them (customers) into the development process, we treat them as a part of it."*

Therefore, like the common human beings, customers like to get importance in product and/or service development process by the companies. The interviewee from *LunarByte* has suggested that the customers tend to feel special, thus they want to be part of the development process as the games are made for them.

4.2.2.5 To Play Reputed Studio's Games

Besides the motivation of being part of developers, another interesting motive was identified from the empirical data that is getting opportunity *to Play Reputed Studio's Games* which was not mentioned in the theoretical framework. One of the five participating companies has mentioned this customer motive behind engagement in the new game development process. Acknowledging their current position in the industry and players' feelings towards participating in the game development process, the

respondent from *LunarByte* has mentioned about one interesting fact that players would be motivated in, that is reputation of the company. He has stated that,

> *"Customers would be highly interested to play reputed studio's games."*

For an example, he further stated, if *Blizzard* says that hey we want to people test this game out, there would be probably people line up testing coz they know *Blizzard* does good games, they haven't done a bad game pretty much if we look at the numbers. An anonymous hardcore fan of video games has also given his opinion in a gathering sponsored by Nextgames (a Helsinki based international video game company) that he would look forward to having an opportunity to play the games of reputed studios before it launches, that means the player gets motivated to test the games as the companies want.

4.3   Customer Engagement Challenges in Games Development

In this section, various *customer engagement challenges in games development* are described based on empirical data. The chosen companies are from game industry, and they know their own challenges and the challenges from customer side after long-term experience of working with them. Thus, they have shared their knowledge regarding the challenges from the companies' side and challenges from customers' side. So, data collected from the participating companies about challenges faced by both sides are described in this research.

4.3.1   Challenges from Companies' Side

Although natures of the identified challenges and their extent were heterogeneous, some homogeneities were also found in the challenges, thus they have been classified accordingly. In this section, notable challenges faced by the companies due to several reasons have been discussed. As customer engagement is presented thoroughly in this research, so the findings are also described in the same manner.

4.3.1.1 Biased Opinions

One interesting problem identified from the empirical data collected from the companies is *biased opinion,* which was not mentioned in the theoretical framework. Empirical data shows that feedback provided by the players has uncertainty in terms of its honesty. Thus players will probably tend to give feedback based on their own perceptions and the relations they hold with the companies. This type of biased feedback affects the company image and playing styles of other players. The respondent from Surrogate Games has stated that,

> *"The biggest challenge is that customers will tend to make comments and suggestions from their own play perspective and not that of the game as a whole. Players will often seek changes that improve their existing playstyle, sometimes to the detriment of others."*

According to the interviewee from LunarByte, besides customer engagement in games development, the start-ups can take the advantage of engaging their friends and family circles as their network is primarily not as strong as the older ones. But this one also has high possibility of being biased due to the relationships. He further mentioned that,

> *"... the problem with that of course the opinion might be biased. They might not disclose the real draw backs they find because they don't want to bash your product and they might not give honest feedback due to the relationship they hold with you."*

Although the interviewees from other participating companies did not mention anything about the biased opinions of the players, but from the above mentioned companies it is learnt that this can be a serious problem for the companies unless they are able to identify it.

4.3.1.2 Difficult to Find Out the Useful Information

Another problem for the companies in customer engagement is *finding out the useful information* from the feedbacks they receive from the customers. During the games development through customer engagement, particularly in the early stage engagement, game developers receive enormous feedbacks from the participating customers. Hence

it is difficult to choose the right ones among the massive data. The data collected from the companies participated in the interviews shows that all of the participating companies have mentioned about this problem which supports the theoretical framework.

The interviewee from *LunarByte* has stated to describe the problem that, it is confusing to choose the right comment if lots of people comment on the same thing which generally seems true. But getting comment from few people about that particular thing does not necessarily mean it is less valuable, because not the many have the same knowledge. He further added that it is difficult to find out which comment is useful by scratching it from the boundless data. Thus it is difficult for companies to choose the right comment based on the number of customers reported it.

The respondent from Surrogate Games has stated that, the useful comments will often get drowned out or be difficult to find. The empirical data also suggests that there is a cause and effect relationship between the customer biases and choosing the right comment. Concerning this, he has stated that,

> *"Companies will sometimes look to focus groups to get initial gameplay impressions but these are often so biased and so small that useful data is impossible to acquire."*

One of the respondent has further added that focusing on the wrong things leads to wrong conclusion.

4.3.1.3 Trust Issues

One of the most significant challenges that four of the five companies (except *Lupoworld*), participated in the interviews, mentioned about is *trust issues* they have concerning the customers. In this research, the empirical data collected through the interviews regarding this problem supports the theoretical framework to a great extent regardless of the industry whether it is of game or any other industry. The interviewee from *LunarByte* has stated that,

> *"I think the hardest part is how you would know is the customer speaking the truth or does he actually know what he is talking about, or is he just talking about something he has not thought through?"*

The respondent from *Add Inspiration* has suggested that there is an uncertainty of the continuity players engagement in the games development, because players can drop from playing the game once they find their issues are not resolved. He further added that while reading the feedbacks from the players, there might be a question like; *can they even play it*? Hence the companies might have trust issues on the players whether they would continue giving feedback in the testing phase.

According to the respondent from *Snowfall*, although developers know the best about the context of their games, there might be some players who would suggest to change some features which might be crucial for the game. The respondent from *Surrogate Games* has mentioned that clearer and more granular feedback from customers might seem like a possible solution but it seldom works out as most will comment at either positive or negative extremes and with their personal gameplay biases.

4.3.1.4 Difficult to Choose the Right Person

Like the problem of choosing the right comments, finding the right persons to engage, especially for early stage or testing stage, is also one of the toughest tasks for companies. Three of the five interviewees have mentioned about this problem. According to the empirical data collected from the interviews, although customers are engaged in games development in different stages from design stage to after launch stage, but it is difficult to find the right persons for early engagement due to lack of knowledge regarding the customers. The interviewee from *LunarByte* has stated that,

> *"Finding the right person is hard. The more you know the person might bring the less valuable feedback because they might not give the honest feedback."*

This statement can be considered for two challenges simultaneously; *biased opinions* and *choosing the right person*. Another thing, the respondent from *Lupoworld*, like some other interviewees, has suggested building the community around to engage in product development in the early stage. The researcher's own experience of participating in community gatherings suggested that choosing the right person found too difficult, particularly for the startup gaming companies, while they tried reach the community members randomly which could have led to choose a wrong person for testing their new game.

4.3.1.5 Risk of Trolling

With the progress of using social media platforms, *community-forums* around brands or industries are on the rise. The empirical data collected from the interviews shows that one of the challenges that companies face while engaging community in games development is *risk of trolling* which has been mentioned in the theoretical framework. Two of the five companies participated in the study have mentioned this challenge. According to the interviewee from *Snowfall*, there will be always some people who make trolls on the serious events without considering the real purpose of the event (customer engagement). She suggests that,

> *"There can be a lot of trolling as usually, because internet is full of trolls."*

The respondent from *Add Inspiration* has also similar thought regarding this as saying *some players/angry men might make poisonous comments in the name of review or feedback*. Hence, from their opinions, it is learnt that due to easy access to the internet, players can be dangerous ones while engaged in product development activities.

Although three of the five participating companies did not mention anything regarding this problem, but the opinions provided by two interviewees stated above, as per their long term experiences of dealing with the players, it could be a challenge for most of the companies those practice customer engagement in their games development.

4.3.1.6 Difficult to Manage the Community

Another interesting problem with the community engagement in product development is *Difficult to Manage the Community*. Although all of the five participating companies have mentioned about the community building around the brands and/or games, but only three of those (except *LunarByte* and *Lupoworld*, they did not mention anything about the challenge of community management) mentioned about its challenge. This challenge was not mentioned in the theoretical framework of this research.

Despite having numerous advantages, community is a tough to manage thing as there are various players with different attitude and way of approaching others while commenting. As the interviewee from Snowfall stated that, *"Community building and*

managing is really a tough job." She further mentioned that even though the developers know best about the games, but there might be someone who gives negative feedback that could turn things into a dispute among the community. Hence it would be difficult to manage that type of situation.

On the other hand, the respondent from Add Inspiration has described this challenge in two ways; if the target group or size of the community is too big, and if there is anyone who hampers the community environment. He stated that,

> *"Some players/angry men might make poisonous comments in the name of review or feedback."*

Notwithstanding the advantages of building a community for product development purpose, the respondent from Surrogate Games has suggested to be aware of the risks of it as well. By agreeing on the matter of difficulty in community management, he has suggested about the imbalance in ensuring maximum participation from within the community and outside the community. He stated how it would be a challenge for the company that,

> *"....there is a risk that it may become insular and reduce engagement from outside the community."*

4.3.2 Problems from the Customers' Side

Like the challenges from companies' side, there are some obvious problems from the customers' side too. In this chapter, the problems of customer engagement in games development from the customers' side are discussed according to the empirical data collected. The empirical data shows that the companies have implicitly described about the challenges from customers' side behind engaging them in games development. Similar to the challenges from companies' side, the challenges from customers' side are not also described in order.

4.3.2.1 Lack of Appropriate Knowledge of the Subject

The most common challenge the customers have while giving feedback on a product development regardless of the type is that customers' *lack of appropriate knowledge of the subject*. The empirical data supports the theoretical framework as it was mentioned in the theory chapter also. The empirical data collected from the participating

companies shows that four of the five companies (except *Lupoworld*) directly mentioned this problem for customer engagement in games development.

According to the interviewee from *LunarByte*, players might sometimes make comments on something about which they do not have any proper idea, or they can also refrain from giving feedback due to lack of appropriate knowledge about the subject. Interestingly, one common statement comes from the three of the four interviewees (except the one from *Surrogate Games*, he suggested about the limitations of customers thinking about the features to be developed in a new games) is that *players don't even know what to say*. Although the respondent from *Add Inspiration* first stated that the players know more than the developers as they spend more time on playing than the latter, but he later, while talking about the problems from customers' side, stated that the players do not know what to say as mentioned above. In contrast to the first statement of the respondent from *Add Inspiration* regarding the players' knowledge, the respondent from *Snowfall* has stated that,

> *"Developers know the best about the game, like you know the best what you are planning with it, you know what you want to achieve with the game."*

4.3.2.2 Lack of Interest in Engagement

Another problem for customers identified from the empirical data about the customer engagement in new games development is *Lack of Interest in Engagement,* in other words *Lack of Motivation*. According to the theory, it is a common problem for customer engagement regardless of the types of games. Three of the five interviewees along with the interviewee from *Neogames* have mentioned about this challenge; while it comes to the engagement, customers might feel less interested to engage themselves in providing feedback or suggestions in early stage of new games development.

One of the interviewees has described that customers are usually expected to give feedback during post launch period, but they might be unwilling to engage in the early stage of the games development due to having little knowledge about the subject. According to the respondent from *Surrogate Games*, customers from outside the community might feel less interested in giving feedback on new games development while they find the more emphasis on the community engagement. The respondent from *LunarByte* has suggested nother reason of customers' being less interested in new

product development is due to reputation of the respective company; less familiar in the industry. Another interviewee has mentioned that the players would be interested if there is any reward system for their engagement which seems to be also a challenge from their side.

This qualitative study shows that one of the most significant challenges from customer side is that they could be less interested to participate in new games development for different various reasons including the insufficient knowledge of the subject, the priority that company gives to the community over customers from outside the community, the reputation that company holds- is it a new company or older one with good reputation? Etc. Although customers usually give feedback about the issues they face while playing the games after final launch, but when it comes to the early engagement, they find the visible reasons why they would engage themselves in the process.

4.3.2.3 Cultural and Communication Challenge

Another problem from the customers' side identified from empirical data is *Cultural and Communication Problem*. This qualitative study has investigated the problems from customers' side through interviews where two of the five interviewees have mentioned about the communication problem due to cultural differences among the community members. This problem was not specifically mentioned in theoretical framework of this study.

The empirical data suggested that players, after final launch, can usually contact with the developers once they have any issues while playing the game. But they can counter different problems due to cultural diversities in the community forum of a brand or company made by the company with a view to getting effective feedback. The respondent from *Add Inspiration* here suggests that companies should consider the cultural diversities while building and monitoring the community. He stated that,

> *"Players could face backlash from the peers due to cultural differences when they give any (negative) review about a particular brand in the community."*

To avoid this problem which can possibly create negative impact on the customers motivation, he further recommended customers send feedback to the specific channels. According to the interviewee from *LunarByte*, *if the customer doesn't communicate the*

problem right, it might be very hard to identify what the problem is, and you might be end up fixing something which doesn't need fixing, thus communication problem between customer and the developer might bring a wrong solution.

4.4   Solutions to the Challenges

According to the empirical data, possible solutions to overcome the challenges in customer engagement are described in this section. As the way of customer engagement challenges described earlier, the solutions to overcome those challenges are also depicted in the same manner; *solutions for the companies*, and *solutions for the customers*.

4.4.1   Solutions for the Companies

4.4.1.1 Building and Monitoring the Strong Community

The empirical data collected from the companies participated in this qualitative study shows that building a strong tie with the customers plays an important role in product development. Four of the five (except *LunarByte,* despite having their facebook page where they ask their fans and the follower for feedback) participating companies have directly mentioned the term *building community* for having an effective support from them while developing games. *Importantly, you have followers or the community not just for one game, rather they will follow and want to know from you as a team what you gonna do next.* Emphasizing on the merits of the community building, the interviewee from *Surrogate Games* stated that,

> *"Getting a community invested in a game while it's being developed is a good way to get them involved and keep them around."*

The *Lupoworld* have, according to the statement of their respondent, their own closed facebook group where the so-called superfans are part of, and there they can communicate daily with them. The respondent mentioned that they get valuable feedback from the community which help them develop their games regardless of the stages. The respondent from *Snowfall* has suggested about the community building and its monitoring as well. She mentioned that,

> *"...have to have a community available that dedicate time to actually discuss about, may be technical development if someone has any question for not just game but also some technical support... Setting up the rules (checking up what most common practices are) for the community like every social media group."*

Agreeing with her, the respondent from *Add Inspiration* has expressed a bit more specific where the community can be opened; he mentioned that *opening community in social media platforms to open up the discussions e.g. facebook or reddit.* He further suggested to study the community how it works to keep the customers.

When it comes to the spoiler or internet trolls, two of the participating companies have recommended to remove those spoilers. According to the interviewee from Snowfall, removing the spoiler is related to help build the community which ultimately help to get efficient feedback. She recommended that it is clearly understable that whether someone is giving bad feedback or poisoning the conversation within the community. She stated that,

> *"If someone is attacking or somehow rude, and you can moderate that like to remove them after giving them warning, if they don't respond to the warning."*

The respondent from Add Inspiration suggested that if there is something negative, that needs to be fixed. But he also recommended, agreeing with the Snowfall Interviewee, that poisonous comments should not be overlooked rather they should be carefully handled in order to ensure the healthy environment for the community as a whole. For that, he recommended to take strong initiative by saying that *Kick out those who spoil the community environment.*

4.4.1.2 Giving Rewards

One of the most common and interesting strategies for customer engagement in games development is *giving rewards*, according to the empirical data. This idea was mentioned in the conceptual framework as an effective strategy for engaging customers in product development regardless of the nature of the products or services. Four of the five (except Add Inspiration) participating companies have suggested this one as one of the solutions to the challenges that companies face while trying to engage customers in new product development.

The empirical data shows that the rewards can be given in several ways. According to the respondent from *Surrogate Games*, one of the ways of motivating customers to participate in games development is giving rewards in games. On the other hand the interviewee from *LunarByte* has been a bit more specific in terms of what types of rewards can be given. He stated that,

> *"Rewards can be of several types; gift cards, discounts for games, virtual currency, some kind of unique cosmetics inside the game."*

The respondent from *Lupoworld* has also agreed with the past two respondents; recommended that to encourage customers to be engaged in games development, they can be offered some monetary rewards in the games. The interviewee from Snowfall mentioned that when it comes to the community, sharing some rewards would be an effective strategy for customer engagement in games development process, especially in the case of new games development. For *Add Inspiration*, they did not mention anything about giving rewards to the customers for their engagement in games development.

4.4.1.3 Using Advanced Tools

From the empirical data collected through interviews, another significant solution was identified as *Using Advanced Tools* to scavenge useful data from the feedbacks received from customers. This solution was not clearly mentioned in the theoretical framework. Two of the interviewees as well as the director of *Neogames* have recommended this strategy to counter one of the toughest challenges for finding the right information during customer engagement.

Although three other interviewees did not mention this strategy, but according to the respondent from Neogames, it can be generalized to a great extent as he stated that *gaming companies usually use some analytical tools, such as data analytics to find out the useful information from the customer comments*. The interviewee from *Surrogate Games* has described what Data analytics used for,

> *"Data analytics are the primary form of engagement and allow us to correct issues where players get hung up or lose engagement. Feedback is used in aggregate and trends correlated with analytics data. If players are complaining that*

something is too difficult or not fun then the analytics can reveal why."

The respondent from Add Inspiration has also agreed with the preceding respondent regarding the usage of different tools for finding out the useful information. He has recommended what more tools available in the market to select the right comment. For example, Data analytics, game analytics or unity analytics or google analytics are being used by the companies according to their necessity.

4.4.1.4 Providing Proper Training

Another solution for companies to resolve the knowledge constraint of the customers for giving efficient feedback is *providing proper training*. The empirical data collected from the interviews and the personal observation by the researcher in several community gatherings suggest this solution that companies can use before engaging customers in their new games development. Only company that directly mentioned about this solution is *Lupoworld*, but the others did not suggest anything regarding this.

While talking about the customers' own preparations beforehand, the respondent from *Lupoworld* recommended that it's *company's responsibility to train the customers prior to the engagement.* This is especially for early stage engagement before launching the product. Despite not directly mentioned the solution, the respondent from *LunarByte* has also suggested that the companies should guide the answers with the right questions so that customers can understand what they are talking about. The empirical data collected from the researcher's own observation suggests that one of the top performing gaming companies in Finland arranged and sponsored an event for the players regarding their upcoming game. The purpose of that event was to provide the existing and potential players with necessary instructions how they should give feedback and/or suggestions about the features of the game while it is in the prototype stage yet.

However, the solution seems quite convincing to the researcher in case of bigger companies and the ones having budget to do so. Because, newly established and/or indie gaming studios do not have that much budget for arranging such events. What they can do is using the social media platforms and their community where they can give their guidelines to the community prior to asking for the feedbacks.

4.4.1.5 Appreciating the Participants' Efforts

In this qualitative study, another important solution to the problem of wider gap between the customers and companies identified was *Appreciation of the Participants' Efforts*. The empirical data collected from the interviews shows that customers might lose engagement in games development process once they find their suggestions or feedbacks were not considered in the process. So to tackle that problem, the interviewees recommended the aforementioned solution.

The data shows that the customers can deserve an appreciation at the least for their efforts in the games development. Even though the customers' comments are considered in aggregate while evaluating them, but customers should be sincerely known that the game is developed for them. Regarding this, the respondent from *Surrogate Games* opined that,

> *"It is always best to temper involvement, but always keep a game improving and so even if the customers don't see their ideas implemented, they will still see it developing in a positive way."*

According to the respondent from LunarByte, the gap arisen between the developers and the players can be alleviated by letting them know that their (customers') efforts are sincerely evaluated, and showing them gratefulness for their feedbacks. Another interviewee has also agreed upon that by suggesting that every input they give cannot be taken for analysis but the customers should be appreciated by the companies. Although it was not mentioned in the theoretical framework, but the empirical data suggests that appreciating the customers for their efforts in games development would be an effective tool to ensure better feedback in future.

4.4.2 Solutions for Customers

4.4.2.1 Taking Appropriate Preparation

The most important solution, according to the empirical data, for customer engagement challenge from their side is taking appropriate *preparation* beforehand. Three of the five (except *Lupoworld*, they think that it is company's responsibility to train them, they do not need to take any preparation, and *Surrogate Games*, they did not mention anything about it) participating companies have mentioned that the preparation for

customer engagement in product development is necessary which supports the previous literature. The empirical data collected from the participating companies suggests that to overcome the challenge of customer knowledge, they should prepare themselves before giving feedback.

By acknowledging the fact of customers having lack of appropriate knowledge about the subject, the respondent from *Add Insipiration* has mentioned about the need for customers preparation before they are about to give feedback. He stated that,

> *"Players need to prepare themselves before discussion. They should know what they are talking about."*

The interviewee from *Snowfall* has also recommended that there is always a need for preparation beforehand. On the other hand, the respondent from *LunarByte* has suggested customers should know about the subject they are giving feedback on and, companies could help them with this. He further stated that,

> *"Customers should think about it first, what's their problem. They shouldn't think what comes to our minds if they say this kind of things."*

Although the respondent from *Lupoworld* disagreed with the respondents from other companies, it could be because of their nature of target group and product is different from other games. Thus, according to the majority of the respondents from participating companies, it could be concluded that the customers should take preparation before they make any comments regarding games development.

4.4.2.2 Effective Communication

The *Effective Communication* demonstrates an interpersonal skill that customers should have for the betterment of their interest in engagement activities of games development. This approach is usually for the post launch period, thus once game is ready to play where there might some issues arise due to play or for any other technical reasons. Empirical data shows that customers could follow effective communication approach while responding to a problem they encounter during playing the games. Although only two of the five case companies have mentioned this approach, but all of them implicitly agreed on the reporting of problem faced by the customers.

When it comes to the way how they should contact with the company, one common method available in every video game is having specific section in the game for

feedback or reporting problems. The respondent from *LunarByte* has suggested how players should deal with any problem inside the game stating that,

> *"Trying to contact with them via email and/or commenting on*
> *store pages of the company."*

Agreeing with the respondent from LunarByte, the interviewee from *Add Inspiration* has also recommended that *players can send message directly to us (companies) what is hard or their views about it*. As for early engagement, especially in the testing phase, developers are personally present before the customers and/or communicate with the customers via particular emails, so this approach is more relevant for the post launch period.

4.4.2.3 Voluntary Engagement

The last solution identified for the customers from empirical data collected through interviews is *voluntary engagement*. This solution is applicable for the whole development period whatsoever it is in the early stage or after the final launch of the game. According to the data collected through the researcher's own observation throughout the research work and from the interviews, customers are recommended to participate in the product development for own interest. Four participating companies (except Surrogate Games) along with the respondent from *Neogames* have explicitly mentioned this as a solution for the customers to have played a game of their own choices.

While talking about the reasons why customers should engage in the games development, the respondents from *LunarByte, Lupoworld,* and *Neogames* had the identical statement, that is *"we are making it for them, so they should participate…"*. Agreeing with the preceding statement, the interviewee from *Snowfall* suggested that customers should be very much active in providing feedback irrespective of the types.

Even though the respondent from Add Inspiration agreed with the previous interviewees about the reasons of voluntary engagement, he further added one interesting and valid point that, customers should appreciate the *free to play* game makers and give feedback for their own. Thus when it is a free to play game, customers should not look for other monetary benefits for their engagement in the game development.

4.5   Cross Examination of Findings against Theoretical Framework

While analysing the empirical data, it was found that all of the participating companies agreed that engaging customers in games development is important. However, the degree and the stage of customer engagement in games development vary in respect of time (whether in the early stage of NPD or in the post launch stage) and type of games. There are some similarities and dissimilarities among the opinions of the interviewees as some of the interviewees emphasized on engagement in the early stage of new games development and some of them weighted on continuous engagement after launching the games. The most important thing about the data collected through interviews is that the interviewees gave their opinions in terms of what they practice and what the whole industry practices. This chapter shows the major similarities and dissimilarities between the participating interviewees' opinions regarding the customer motives, challenges and solutions to identified challenges of customer engagement in games development.

The empirical data collected through interviews suggested that customer engagement motives demonstrate - motives from companies' perspective and motives from customers' perspective. The motives from companies' perspective include *feasibility analysis, promotional tool, financial factors, validating ideas / getting sponsor equity* and *getting continuous feedback* for solving the problems on regular basis. The customer motives behind their engagement comprise of *recognition, monetary rewards, early birds opportunity, opportunity to play reputed studio's game* and *opportunity to be a part of developers.*

Cross examination between the qualitative study findings and the theoretical framework has brought an important thought about the phenomena. When analysing each of the motives, challenges and solutions to overcome those challenges for customer engagement, one compelling thing was apprehended that a major part of the results from this study explicitly supports the existing customer engagement theories and framework. Nonetheless, some findings could not be linked with the current theories, therefore, those should be contemplated as unique findings from this qualitative study.

Motives from company's side behind customer engagement starts with *feasibility analysis*. The study shows that the companies try to know by engaging customers in product development that if the product is viable enough to achieve the target. If the product is not player friendly and fails to attract the customers then there is no way to

launch the product in the market. This motive is linked with *identifying market opportunities* from the preliminary framework which indicates if the product would be able to attract and satisfy the customers.

Another important motive for customer engagement from the company side is *promotional tool* which demonstrates the companies use the customer engagement as part of their promotional activities. This qualitative study shows that, by engaging customers in early stage of new game development, the company lets the customers know that they are coming with a new exciting game which which would satisfy them and companies, especially the indie gaming companies use this as a major part of their advertisement. This motive supports the idea of *promotion through direct marketing* from theoretical framework.

Financial factor is also an entrancing motive for customer engagement from company perspective which includes multiple interests such as reducing development cost and advertisement cost. The findings of this research suggest that companies would focus on ensuring customer engagement as they would be able to save a notable amount of money as a part of their research and development activities. This company motive for customer engagement is related with the financial performance by *shortening the production time* and *contributing to the research and development phase* from the theoretical framework which allows company to make a business model at a lower cost.

Another interesting motive from company side has been identified as *validating ideas*. The study has found that company wants to validate the customer's ideas by engaging them in the design stage of new product development. Hence company tries to ensure optimal participation from customer group in early stage of product development to have maximum output from them as customers might probably come up with genius ideas that would benefit the company to make a great product. This motive is a reflection of *using the knowledge of users and customers* from the initial framework.

The last but the most common motive irrespective of the product and industry type for customer engagement in new product development is *getting continuous feedback* for solving the issues that customers face while using the product. The results show that the companies try to get feedback from the customers in every stage, wherever customers encounter any problem during playing the games. They try to solve the issues with full priority with a view to ensuring best customer service to keep them around. This motive supports the concept of customer engagement in post launch stage from

the theoretical framework where companies try to improve their product performance by resolving the issues that customers report.

When it comes to the customers' motives behind their engagement in games development, the findings of the research suggest most of the motivations and their variations are in the customer engagement for new product development. The *recognition* for their performance and the relation they hold with the companies is one interesting motive that drive customers to engage in new product development, findings suggest. This motive was explicitly mentioned in the preliminary framework of the study.

Another common motive for engagement in games development from customer perspective is *monetary rewards*. The findings suggest that offering rewards for contribution to the product development motivates customers to be more active in the activities. The rewards system includes several things such as monetary rewards (discounts, gift vouchers, virtual currency, and complimentary movie tickets), some kind of unique cosmetics inside the package in case the game is sold as boxed package. This motive explicitly supports the motive of *monetary rewards* to a great extent from the theoretical framework.

The next interesting motivating factor for the customers to be engaged in new product development activities is *early birds opportunity*. This qualitative study has found that customers tend to get the opportunity to test a game before its final launch which makes them feel special by experiencing a product in its first phase. This motive was not mentioned in the preliminary framework.

Opportunity to be a part of developers is another influential factor for the customers to feel committed towards the games development. The results show that customers feel motivated to be engaged in new games development when they are treated as a part of developers team. This customer motive can be linked, to some extent, with the strategy of *partnering with the clients* from the preliminary framework of the qualitative study.

Another compelling motive for customers to participate in new product development is *opportunity to play a reputed studio's game*. The results of this study suggest that playing a reputed studio's game even before its final launch is considered as a fascinating opportunity which works as a motivation behind customer engagement. This motive is clear reflection of *reputation* motive for customers involvement in product development from theoretical framework.

When it comes to the *challenges of customer engagement* in games development, it demonstrates two way challenges; thus challenges faced by the companies and challenges encounter by the customers. According to the results of this study, the challenges from companies' perspective comprises of *biased opinions, difficult to find out the useful information, trust issues, expectation gap, difficult to choose the right person, risk of trolling,* and *difficult to manage the community*. On the other hand, the challenges from customers' side include *lack of appropriate knowledge about the subject, lack of interest in engagement, cultural and communication challenge*. However, although a major portion of the customer engagement challenges identified based on the empirical data are directly related with those mentioned in the preliminary theoretical framework, but some challenges could not be linked with the theoretical framework.

The first customer engagement challenge from company perspective is *biased opinions*. This challenge identified from the empirical data suggests that companies often face biased opinions given by the customers due to the relationships they hold with them. For example, if companies engage their social circles (friends and family) in new product development, they might not give honest feedback as they do not want to bash one's product due to their personal relationship. The findings show that customers try to make comments based on their own play style which might be detriment to others. This challenge was not clearly mentioned in the preliminary framework of this study.

Another important challenge that companies face during customer engagement is *difficult to choose the right person.* The qualitative study has found that companies feel it's hard to choose the suitable person who are sincere enough give effective feedback during the early stage engagement of new product development. The result shows that gaming companies usually invite their super fans or loyal customers to participate in new games development as a part of their developers team, but they need to be cautious while selecting the persons to test the games or engaging them in the pre-prototype stage. Because, choosing the wrong people could lead things to the wrong direction. This challenge explicitly supports the selection of appropriate customers challenge from the preliminary framework.

The next problem that companies consider as hard in their customer engagement activities is *difficult to find out the useful information*. The result shows that it is difficult for the companies choose the valid information from the accumulated customer

data received as feedback. The companies collect wide range of data from the customers about any particular feature of the game to be developed, thus it requires more careful investigation to find out the useful information which is really challenging in terms of the method they could use and the decisions they could take regarding the significance of the information. This is the clear reflection of *hard to choose the right comment* challenge from the preliminary framework.

Another interesting challenge from company's perspective is having *trust issues* with the customers. The findings suggest that issues regarding trust between the company and the customers may arise from multiple circumstances. For example, confusion about the customers if they speak the truth while giving any feedback about a feature which seems important to the company during testing phase, and players feedback concerning any issues of the game after playing the game, these are two situations where trust issues arise. This challenge could not be linked with the preliminary framework.

The next important challenge of customer engagement in product development is *risk of trolling*. According to the findings of this study, companies often engage people for new games development in their social online platform which could become a danger for the brand as internet is full of trolls. There might be always some people who try to find out negative things out of focused topic. This challenge can be linked with the risk of becoming an *anti-brand in terms of online community* from the preliminary framework.

The last challenge identified from the empirical data is *difficult to manage the community*. The results show that most of the gaming companies build their own community to keep them around for their brand interest. The companies use the community platform for their games development whether it is about new games or the existing ones. But there are always some people who make poisonous comments in the community which deteriorates the community environment. Apart from that, companies might face backlash from the customers outside the community while engaging community in games development. This challenge could not be directly linked with any challenge from the preliminary framework.

The challenge from the customers' side starts with the *lack of appropriate knowledge of the subject*. The findings of this study has found that most important challenge customers encounter during their engagement in new games development is that they

might not know what to say. This challenge explicitly supports the challenge of imagining and giving feedback about something they have not experienced.

Another important challenge that customers encounter concerning engagement activities for games development is *lack interest in engagement*. The findings of this study suggest that customers might look into the company's reputation while thinking of being engaged, they might also think about their own benefits out of this activity as well as the priority they get from the companies compared to the closed community-forum of the companies. These are the factors affecting the customers to be interested in engagement. Although it was not directly mentioned in preliminary framework, but a portion of this challenge supports motivational challenge of theories to some extent.

The last challenge from customers' perspective identified from empirical data of this qualitative study is *cultural and communication challenge*. Considering the global business platform, a community around the brand has also people from diversified cultures. The findings of this study suggest that customers often face difficulties with understanding the cultures of the peers, as a result they could get the wrong message which might lead them to an uncomfortable situation before the community members. Hence, this problem arises when company tries to engage the diversified community in their new product development project. However, this problem could not be directly linked with the preliminary framework.

When it comes to the analysis of solutions for the companies based on the findings and the theories, the linkage of the theories can be made with the results of the study. For instance, *building and managing the strong community* from the findings of this study can be connected with *social relationship management* and *virtual information community* where purposes and actions of the both are almost same, that is building and managing a platform for the customers to share their valuable knowledge. Another solution recommended in the study for the companies to influence customers in engagement activities is *giving rewards* for their contributions to the games development. This solution can be linked with the motivational strategy *monetary rewards* from the theories.

When it comes to solve the problem of filtering the information to choose the right comment, companies can use *advanced tools*. This qualitative study has found that companies can use data analytics, game analytics, unity analytics and google analytics etc. to choose the useful information from accumulated data during engagement. Interestingly, this solution could not be directly connected with preliminary framework.

The next solution for the companies to engage customers in games development is providing them *proper training* before the engagement. The results of this study suggest that companies should train the customers before they are ready to contribute to the product development. This solution can be linked with the preliminary framework in respect of training in *virtual information community*.

The last solution for the companies during customer engagement suggested in this study is *appreciating the participants' efforts*. The companies should show positive attitude towards the customers' contribution to the games development so that they could at least think their opinions have significance to the companies. The findings of this study recommended that participants should be treated well to keep them around the brand for longer period. This solution could not be directly related with anything from the preliminary framework.

For the customers, the most important solution recommended in this research is *preparation* or the ground work. The research has found that most of the customers comment on something they do not know well, and/or they have not studied enough to give feedback about features of a new game for changing which is conflicting with the thought of the developers. The empirical study recommended they should do enough ground work to provide effective feedback on new a product in the early stage.

Another solution for the customers to be engaged in product development is *effective communication*. The results of this study suggested customers prompt report of the problems they encounter during any phase of playing the games or within the community. It was clearly mentioned that customers should send message directly to the developers or report on the store pages. This solution for the customers of gaming industry could not be directly connected with the solution of preliminary framework.

The *voluntary engagement* found in the results of this study is one interesting solution from customers' perspective. The findings recommended that customers should consider the engagement as their own task, thus they should participate voluntarily in the product development activities. This solution could not be connected with the preliminary framework.

It can be learnt from the analysis that the preliminary framework and the findings of the research are *positively correlated to a great extent*. Some results have exclusively come from this study which were not available in the preliminary framework. It is also true that some of the recommendations from the theoretical framework could not be supported by the qualitative study. Nevertheless, those exclusive results could not be

connected with theories, but it does not necessarily mean that those cannot be used, rather they can be helpful to find out or match the problems and useful to support the probable solutions.

5   CONCLUSION

The purpose of this study was to identify the motives, challenges and solutions of those identified challenges for customer engagement in mobile games industry. The researcher tried to acquire data enough to analyze the industry practices through personal observation and multiple interviews from the experienced personalities in the said industry. Thus the researcher attempted to come up with some suggestions for effective customer engagement in product development from both customers and companies' perspectives.

In the second chapter, a preliminary framework was initiated based on existing theories, then after analyzing the empirical data a revised framework has been proposed in this chapter. The major data was collected through a semi-structured case study which includes interviews from the participating companies and the researcher's own observation. The research found many real life elements suggested by the interviewees as well as some probable solutions recommended for the challenges demonstrated by the participating companies. Therefore, the theoretical and the managerial implications of this research are presented below.

5.1   Theoretical Implications

From the data collected through interviews, it was understood that all the participating companies are working with targeting a different group of customers each. The data collected from the respondents from the companies that participated in the semi-structured qualitative study is way diverse than their existing practices regarding the customer engagement. Although they have few differences in terms of their value offerings, but they follow almost similar types of strategies for customer engagement in games development. However, the most common platform for customer engagement in games development is online community forum including social media platforms. The offline or face to face engagement is getting popularity among the beneficiaries though.

In the preliminary framework, it was shown that customer engagement has three parts - *customer engagement motives, customer engagement challenges, customer engagement solutions*. In the first part - customer engagement motives - the reasons why customers are engaged were known, then last two parts identified the challenges

of customer engagement and subsequently proposed solutions to the customer engagement challenges.

The preliminary framework was based on the theories available around the phenomenon. As the research intended to develop a framework focusing the mobile games industry based on the empirical data collected from the companies and personal insights which has followed the induction method. Hence, the motive was to facilitate the customer engagement in the specified industry.

The proposed framework for customer engagement in games development process has demonstrated all the three sections from perspectives of both the parties. Therefore, the structure of the framework includes discovering the reasons why customers should be engaged, identifying the challenges and their possible solutions to ease the customer engagement in the games development.

Admitting the existence of motives for customer engagement from both sides, that is why companies intend to engage customers in their games development, and why customers engage in the process, is the first stage of the framework of customer engagement in the study. The mutual interests will help to face the customer engagement challenges by both the parties. As the product is developed for the customers, so companies try to make it as of customers' choices. The companies try to test the games by the customers which also works as a part of marketing activity and a cost efficient factor that works as a supplementary act to *research and development* work of new games project. As a knowledge based product, games can have some technical issues faced by the players, so they encourage customers to engage in reporting the problems. On the other hand, customers, grabbing the opportunity of being a part of developers, they look into the opportunity to play reputed studio's games even before its final launch.

By acknowledging the reasons and the importance of customer engagement, in the first part of the framework, the companies and the customers should focus on how the engagement process can be established smoothly. To do so, both parties have to be active in identifying the challenges from their own instances as well as to work on overcoming those challenges.First of all, gaming companies should concentrate on building a strong community who will defend them from the comments of bad people and online trolls. Nevertheless, customers should also come forward to support their games developers as they are the target group for whom games are developed. They should take *appropriate preparation* to solve the problem of *biased opinions* where

companies should also support them by providing necessary trainings. However, the companies, especially the new ones, can give rewards to the customers for their useful comments, and at least, appreciate them for their efforts in games development which may reduce the risk of sudden withdrawal from the engagement as well as encourage customers to grab the opportunity of being a part of it. Focusing on *community building* and *its management,* and customers' *voluntary participation* will help build a loyal relationship which can *resolve the trust issues* between them. Moreover, companies can also get benefitted in *choosing the right person* for engagement by closely monitoring the activities of the community members.

When it comes to the *finding out the useful information*, companies can use any of the advanced technological tools available to date such as google analytics, games analytics, data analytics, and unity analytics etc. These tools are used by companies from various industries for filtering the important data collected from the customers. Together with the companies, customers should also be active to overcome the challenge of cultural and communication gap accordingly.

5.2   Managerial Implications

From the qualitative study conducted through the interviews, observation of community gatherings and online data, it has been learnt that customer engagement in games development is a multi-faceted task among the companies and the customers. But the main decision maker or the initiator is the company who has to take the necessary measures for ensuring the efficient customer engagement which would ultimately help them for developing a successful product.

The study suggests that the gaming companies should motivate their customers to actively participate in the game development activities. They must focus on how the problems can be solved, thus they should first attract customers, by creating such favorable environment, in early stage of the new product development with the aim of detecting the problems from customers point of view about the game. Engaging customers in early design stage or prototype and testing stage helps companies to reduce their costs by alternating the separate *research and development* work.

When it comes to the community management, it is the company who has to take the decision how the community should be managed. The research suggested that the company must manage their community by setting the rules for its members. The

management can appoint a commentary board for monitoring the community in the cases of disputes over any feature of the game or whatever else needed to ease the community environment. While considering the rules setup, they can take customers opinions as well as look into other social media community platforms how those are operated.

From the researcher's observation, industry-wide community gatherings which is not just for any single company rather for overall industry within a particular region can be taken as an opportunity for early stage customer engagement in games development. For example, during such gathering companies, comparatively the new ones, can organize a new game testing event for the players to have feedback on it. Another example can be given here from the practical experience of the researcher, one of the reputed mobile games companies sponsored such an event organized by the IGDA Finland in 2018, where they had a session for the existing and potential customers about how they could give good suggestions regarding the features of upcoming game.

Another important motivating factor, also a part of managerial activities is *treating the participating customers as a part of developer team*. Company's management can give instruction to the developers for taking care of them so that they can feel as part of it. Consequently, customers will be more committed towards the brand. This will eventually help the company building stronger team for games development.

The aim of this study is to facilitate customer engagement in games development which tested the existing the literature against the current practice in reality. The major topics covered in this research are customer engagement, new product development, motives, challenges and solutions for customer engagement challenges. Hence, this study intended to contribute to the theories related to the customer engagement, and the theoretical and managerial implications may help in conceiving and employing the strategies in an effective way.

6   SUMMARY

The study aimed to ensure the customer engagement in games development for the interests of both parties involved; customers and companies. According to the theories, it was primarily apprehended that customer engagement is nowadays a common phenomenon and necessary as well. It is obvious that there are bi-modal motives behind it. It was also understood that customer engagement has also some challenges simultaneously. Thus, studying the preceding points, the main research question is:

- *How to engage customers in game development?*

The research problem has been answered through three sub-questions, which are:

- Why customers are engaged in game development process?

- What are the challenges to engage customers in game development?

- How to overcome those challenges to engage customers in game development?

This research followed a semi-structured qualitative study where data was collected from different sources; taking interviews of different responsible persons from various firms, attending multiple community gatherings of the industry, relevant internet pages and reports etc. The interviewees were asked open ended questions relevant to answer the research questions.

In this study, customer engagement is studied as one of the most significant phenomena of marketing theories which puts customers closed to the firms. It brings to an end to the perception that solely companies develop their products for the customers, and the relation between companies and customers something about profit making and consuming. Rather, customer participation in developing products benefits both sides in meeting their expectations. Nonetheless, customer engagement happens in various stages of product development; from design stage to final stage after launching the product in the market.

The findings of this study suggested that gaming companies, more narrowly mobile games companies, give considerable importance on customer engagement for their product development, because customers have reasonable expertise which can add significant value to their products. Customers themselves have some substantial motives behind their engagement in games development those drive them to contribute to the process. The notable motives of companies to engage customers are namely *feasibility analysis, promotional tool, financial factor, validating ideas/getting sponsor equity,* and *getting continuous feedback.* For customers, the reasons for their

engagement have been found as *recognition, monetary rewards, early birds opportunity, opportunity to play reputed studio's game,* and *opportunity to be a part of developers*. Hence, both the companies and the customers focus their own interests prior to the commencement of engagement activity.

To answer the second sub-research question for solving the main research problem, the researcher collected and analyzed the data related to existing and potential challenges in customer engagement for game development. When company intends to engage customers in their game development process, they certainly has to face some obstacles which can arise from their own limitations and/or due to some other factors. Subsequently, customers also have some problems to be engaged in the process. However, both sides must come forward to overcome those challenges. The study recommended that companies take effective measures for ensuring customers participation, such as building strong community around the brand, motivating customers by offering various rewards, providing necessary trainings, adopting the most advanced technology for filtering the feedbacks from customers as well as appreciating them for their efforts towards the games development. Like the companies, customers should be sincere enough to solve their problems. Otherwise, it will be difficult for companies to ensure everything possible of their own. For example, besides training provided by the companies, customers must take appropriate preparation prior to giving any feedback for new games development. Moreover, they also ought to engage themselves voluntarily as they are the ultimate people for whom games are developed. Therefore, customer engagement in games development has multiple aspects; both the customers and the companies are beneficiaries of making it happen, thus both parties should be cooperative to each other. Further research can be done with a suitable method to come up with strong and efficient solutions for existing and potential obstacles.

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