



User involvement in the early stages of digital creative content development A case study of digital creative industries

Master of Science Thesis in the Management and Economics of Innovation Programme

OSCAR LUND SVEINN MAGNUSSON

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Tutor, Chalmers: Henrik Berglund

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OSCAR LUND & SVEINN MAGNUSSON

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Department of Technology Management and Economics Division of Innovation Engineering and Management Chalmers University of Technology SE-412 96 Göteborg, Sweden Telephone: + 46 (0)31-772 1000

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ABSTRACT

Users in general have gotten an increasingly prominent role in today's business environment. They have escaped their previous relatively passive role and can instead actively help co-creating products and services in close collaboration with firms. However, this trend is not as evident for the development process of creative content, especially during the initial stages. Yet, major shifts within the creative industries are taking place, leading to growing importance of user involvement within the creative sectors as well. Consequently, this thesis research aims to investigate ways to involve users in the early stages of digital creative content development and explore in which instances such involvements can benefit the creative work. By relating to various innovation management theories, such as lean start-up, design thinking and open innovation, an informative discussion around the topic is generated, with the aim to inspire further research within this relatively unexplored area. Finally, in order to answer the research questions and fulfil the purpose of this project, five case studies investigating individuals and firms from the film production and game development industries were carried out.

Key concepts: User involvement, digital creative content, early stages of development processes, open innovation, lean start-up, design thinking.

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Gothenburg, 16 of June 2015

Keep on dreaming,

Sue B Magnusser

Oscar Lund

Sveinn Magnusson

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1. INTRODUCTION

This chapter introduces the background of this thesis project followed by the purpose and motivation of research relevance and importance. Subsequently the research questions of the thesis are presented followed by the delimitations and disposition of the report.

1.1 BACKGROUND

Users in general have gotten an increasingly prominent role in today's business environment (Banks & Potts, 2010). User involvement is now assumed to be necessary in all stages of new products or services development (NPD). At the early stages it can be vital for companies to involve users to be able to identify a problem that needs to be solved, whereas later on during the development phases user interaction and testing can serve to validate a concept solution. However, the influences of users stretch far beyond this. Users have escaped their previous relative passive role and can instead actively help co-creating products and services in close collaboration with firms (Aoyama & Izushi, 2008; Banks & Humphreys, 2008). In fact today, innovation, development, and consumption can be potentially organized entirely by the users (Aoyama & Izushi, 2008). The increasing importance of users and user involvement has been observed and thoroughly studied by many scholars and the common notion is that firms can benefit from involving users in the whole process, from ideation to market launch, of NPD (e.g., Banks & Potts, 2010; Kujala & Mäntylä, 2000; Parmentier & Mangematin, 2013).

The growing importance of users is also evident in the creative industries, where a major shift within the value chains currently is taking place. Digital media is continuously replacing the physical structures, which sequentially are becoming obsolete. Digital distribution channels such as Netflix and Viaplay are disrupting the movie industry and digital marketplaces in the computer game industry are replacing the old structure consisting of developers, publishers, distributors and retailers. The result is that development firms within those industries have the possibility to sell directly to the end users (P. Hiltunen, personal communication, May 8, 2015). Hence direct communication between creative content developers and the users are becoming more important and the developers need to learn how to gain qualitative knowledge about the marketplaces and its stakeholders. In order to fully take advantage of the opportunities and cope with the new challenges, the creative developers need to learn how to properly involve the users.

Further, the importance of creative content in the global economic environment has increased substantially over the past decades. Creative industries already represent one of the leading sectors in the OECD countries, with annual growth rates between 5 and 20 per cent (Marcus, 2005). Thus the prediction that industries of the 21st century will depend on the generation of knowledge through creative work shouldn't come as surprise (Landry & Bianchini, 1995). The creative industries drive growth, investments, and tourism and have a huge potential for a new generation of

employment and export expansion (Kamen, 2015; Marcus, 2005). Some even go as far as saying that human creativity is the ultimate economic resource (Florida, 2002) and it is a key source for competitive advantages in the knowledge based economy (Marcus, 2005).

One of the reasons behind this rise of creative industries is the emergence and growing adaptation of Information and Communication Technologies (ICTs). It has revolutionised the way products are produced, distributed and consumed. Creative content is often of a highly digitizable nature, meaning replication of original content is easy and thus the possibility to reach wider audience groups likewise. This has led to the emergence of new markets and radical changes in existing ones, creating both challenges and opportunities for firms (Abadie, Maghiros & Pascu, 2008). However, creative content is a fuzzy and broad concept that can be interpreted in different ways. Thus, for the purpose of this research creative content will be defined as *a product or service that to a large extent creates or disseminates expression value and entertainment value, packaged in a novel and unique way*. This definition will be further clarified in the next chapter.

1.2 PURPOSE

This thesis project is part of a collaborative Vinnova funded project carried out by the game development company Fatshark, the service design firm Transformator and the Business Innovation Group at Chalmers. Fatshark has been facing the aforementioned challenges regarding changes within the value chain and have so far solely involved users in the later development stages in terms of user testing. The overall goal of the Vinnova project was to investigate possible ways to involve users earlier in Fatshark's development process and generalize these findings to game development.

The purpose of this thesis, is to investigate ways to involve users in the early stages of digital creative content development with focus on the game development- and the film production industry and explore how such involvements can benefit the creative work. Furthermore another aim with this project is to investigate if innovation theories, such as lean start-up and design thinking are, or could be used to guide user involvement in this context. The goal of this project is to generate an informative discussion around user involvement in the early stages of digital creative content development through which further research within the area should be inspired.

From the aforesaid it is clear that the relation between creative content and user involvement, especially for the early stages of development, is a fascinating topic. Firms within the creative sector are rarely involving users in the initial stages, even though some research findings point towards that external involvement can enhance creativity and generate new ideas (Harrison & Rouse, 2015). There is a lack of and need for research in those early phase relations as well as a lack of appropriate knowledge of possible user involvement methods (e.g., Arakji & Lang, 2007; Smith, 2014). This justifies the first research question, stated below, dealing with how firms can involve users in the early stages. User involvement relates to any kind of involvement, from active to passive as will be discussed further on in the next chapter.

Moreover, whereas almost everyone agrees on the benefits of user involvement in later stages of certain creative content development, such as alpha and beta testing in the computer game industry and test screenings in the film industry, there are two contrasting schools of thoughts regarding the need and importance of early stage involvement. Some previous research point towards that external assessment and feedback evokes strong negative reactions for the creative worker and thus leads to reduction in creativity (e.g., Amabile et al., 2005). This is in line with the notion that creative workers normally dislike the process of having their work reviewed early on. They desire to create something artistic and radical, which has commonly triggered the assumption that external feedback providers are not even able to interpret their ideas and thus can't provide useful advice for this development (Harrison & Rouse, 2015). However, Harrison and Rouse (2015) point out that in some cases, simple user involvement methods, such as feedback sessions can in fact positively affect creative performance, generating even more ideas and thus enhancing the overall creative process. These contrasting views justify the second research question dealing with why users should or shouldn't be involved in the early stages and what role they should have to benefit the creative work. The two research questions of this thesis are stated here below.

1.3 RESEARCH QUESTION AND IMPORTANCE OF RESEARCH

In order to achieve the purpose of the study, following research questions (RQ) are proposed and further investigated in this paper.

RQ1: How can users be involved, in terms of methods, in the earlier stages of digital creative content development processes?

RQ2: Why should or shouldn't users be involved and what kind of involvement is beneficial for the creative work?

In order to answer the research questions and fulfil the purpose of this project, five case studies investigating individuals and firms from the film production- and game development industry were carried out. The case studies serve to give deeper insights from within the core of the development of creative content and thus help answering the research questions. Finally, it should be noted that this thesis project is an exploratory research, meaning that it is not providing or presenting any solutions or methodologies to a previously defined problem.

1.4 DELIMITATIONS

The delimitations were set as follows; First of all, the research investigates digital content only. Henceforth, every time creative content will be mentioned it refers to creative content of a digital nature. Within that scope two creative industries were investigated in order to answer the research questions. Furthermore, due to limitations in time and resources the research was limited geographically to Stockholm and Gothenburg.

1.5 DISPOSITION

This thesis report is structured in a traditional thesis manner. In the second chapter, relevant topics and theories used to compare with empirical data for discussion and to answer the research questions will be outlined. Next, in the third chapter, the research design and research methods used throughout the thesis process will be elaborated upon. Subsequently, in the fourth chapter, the empirical data collected will be presented followed by an informative discussion around the empirical data in relation to the literature review and the research questions in chapter 5. Finally, in chapter 6, the conclusions and answers to the research questions will be highlighted.

2. LITERATURE REVIEW

This chapter aims to outline the relevant topics and theories used to answer the research questions. Firstly, creativity is discussed and creative content is defined for the purposes of this research. Secondly, an outline of user involvement in the creative industries is presented. Next, relevant theories and appropriate tools for user involvement related to innovation management are presented. The central assumptions for this sub-chapter is that all those different approaches and methods should be present to some extent, or at least have the potential to benefit the creative worker by involving users in the initial development stages. Finally, theories discussing risks of involving users in early development stages and the importance of keeping the whole innovation ecosystem in mind are presented.

2.1 DEFINITION OF CREATIVE CONTENT AND CREATIVITY

It's not easy to precisely define creativity and creative content. First off, creative content differs from products and services developed for more readily identifiable problems and needs. A transportation vehicle for example solves the obvious problem of getting from point A to point B in relatively short time. However creative content mainly delivers some sort of expression value or experience, normally not based on easily identifiable needs (Throsby, 2008). Over the years, various scholars and institutes have defined creativity in numerous ways (e.g., Amabile, 2012; KEA, 2006; Abadie, Maghiros and Pascu, 2008; UNCTD, 2004; Ochse, 1990, p.4), but no general definition has yet been set. Hence a further elaboration on the topic is needed in order to give the reader a chance to fully interpret the rest of the report.

In this subchapter creative content is defined. This is done in order to give the reader a better understanding of what creative content is and how it will be used throughout the report. To further clarify, the expression creativity and how it previously has been defined is briefly outlined. Further, the creative industries and the expression value that is significant for these industries are presented. The aim is to give the reader an overview of the industries concerned, but also to point out the target industries for this research. Lastly, the theory presented in this subchapter is utilized to define creative content. It's of importance to mention that the theory presented in this subchapter mainly is used to define creative content.

2.1.1 Creativity

To be able to fully grasp the phenomenon of creative content, the expression creativity also needs to be analysed. Through a comparison of different views, interpretations and definitions previously made by scholars, the term creativity is further unravelled in this sub-chapter.

The concept creativity, does not have any clearly stated metrics of classifications (Throsby, 2008) and is therefore a topic of subjectivity. Hence, a discussion around creativity theories is needed in order to back up the definition of creative content in this research.

Amabile (2013) defines creativity as "...the production of ideas or outcomes that are

both novel and appropriate to some goal." She also adds that the task carried out has to be open-ended. KEA (2006) explains creativity as "... a complex process of innovation, combining some or all of the following dimensions: ideas, skills, technology, management, production processes as well as culture.". Moreover Abadie, Maghiros and Pascu (2008) define the creative sector as "creation and distribution of goods with an intrinsic cultural, aesthetic or entertainment value which appears linked to their novelty and/or uniqueness". In UNCTD's paper on Creative Industries and Development the concept of creativity is extended to "... any activity producing symbolic products with a heavy reliance on intellectual property and for as wide a market as possible" (UNCTD, 2004). Those are a few of many definitions of what creativity is and how it could be perceived. Although the definitions are different at some points, similar ideas and interpretations can be drawn from them collectively. It's also of importance to consider the fact that different definitions can serve to be useful for different researches. Hence it's crucial to match the definition in this paper to the questions it aims to answer. In order to do so it's necessary to learn more about what creativity really is, by breaking it down into components.

The componential theory of creativity

The componential theory of creativity by Amabile (1983) presents the components needed to define creativity in terms of both social- and psychological factors. Four components of creativity are conferred in this theory, three of which are related to the individual (e.g. internal aspects) and one related to the surrounding (e.g. external aspect) (see. fig. 2.1). Amabile (2012) points out two important aspects affecting this model. Firstly that there is a continual span of creativity from low to high, where low is the everyday life creativity and high is the creativity level of significant inventions of history. Secondly that every single individual possesses some level of creativity. This is a function of the components of creativity at a specific time.

The components of creativity are presented below: (Amabile, 2012).

Expertise: Knowledge, expertise, technical skills, intelligence and talent in the specific field. Those are the skills a creator draws upon in order to enhance the creative outcome of the task.

Creative thinking skills: Cognitive style and personality characteristics which are helpful to taking on new perspectives on problems. This includes the ability to apply a wide lens and break out of perceptual thoughts and ideas and the personal type is related to self-discipline and ambiguity.

Intrinsic motivation: The individual's motivation to carry out a specific task due to personal interest, personal challenge, self-fulfilment or satisfaction rather than extrinsic (external) factors. Research show that "...people are most creative when they feel motivated primarily by the interest, enjoyment, satisfaction, and challenge of the work itself..." (Amabile, 2012, p.2).



Fig. 2.1. The Components of Creativity (Amabile, 1983).

The social environment: The external forces that can block or stimulate creativity. External factors that can hinder creativity are: norms of harshly criticizing new ideas, political problems within the organization, and excessive time pressure. External factors that can stimulate the creativity are: a sense of positive challenge in the work, collaborative teams, diversified skills, idea-focus and freedom to operate.

2.1.2 Creative industries

This section serves to give an overview of the creative industries and what defines them. Creative industries have been discussed and divided into numerous models in which the categories have been split up with regards to various parameters. Examples are the concentric circles model by Throsby and the cultural and creative sectors model by KEA. (Throsby, 2008; KEA, 2006). However for the purpose of this report another model will be further elaborated; the expression value model. In order to minimize the chances of confusion, only the theory concerning this model is presented below.

The expression value model of the creative industries

This model presented by the Work Foundation, in collaboration with the Department for Culture, Media and Sports, DCMS, divides the creative industries into four different categories and it's based on the value creation within those industries. This value is called the expressive value and it includes following: (Work Foundation, 2007).

- *Aesthetic value* reflects beauty, harmony and form as well as other aesthetic characteristics.
- *Spiritual value* the quest for spiritual meaning shared by all human beings. The benefits include understanding, insights and awareness
- *Social value* It illuminates the character of the society that we inhabit and creates a context in which relationships and identities can thrive.
- *Historical value* Part of the importance of artistic outputs is that they offer a unique snapshot of conditions at the time they were created and, in turn, provide clarity and a sense of continuity with the present.
- *Symbolic value* expressive objects are repositories of meaning. To the extents that individuals extract meaning from a work, that work's symbolic value will lie in the meaning conveyed by the work and its value to the consumer.
- *Authenticity value* this underlines the fact that the work is the real, original and unique artwork, which it is, represented to be.

These values are defined as values that enlarge cultural meaning and understanding (Work Foundation, 2007). All of the above-mentioned values, except authenticity value, were mentioned by Holden (2004) as characteristics of cultural values often included by scholars. This strengthens the trustworthiness of the parameters and indicates that they are a good measure of value creation in the development process of creative content.

Further, the four fields used to describe the creative industries are core creative fields, cultural industries, creative industries and activities and the rest of the economy (see fig. 2.2). The inner circle represents the industries in which core expressive value is being created and the outer one where little or no expressive value is created. The fields are presented below: (Work Foundation, 2007).

- *Core creative fields* Commercial outputs possess a high degree of expressive value and invoke copyright protection. (Creation of core expressive value.)
- *Cultural industries* Activities involve mass reproduction of expressive outputs. Outputs are based on copyright. (Film, publishing, music, video games). (Commercialisation of pure expressive value.)
- *Creative industries and activities* The use of expressive value is essential to the performance of these sectors. (Design, software in addition to the performance of the wider economy). Delivers both expressive and functional value.
- *The rest of the economy* Manufacturing and service sectors benefit from and exploit the expressive outputs generated by the creative industries.

•

The expression value-based model gives a coherent division of the creative industries and clearly defines the differences of the industries within. Hence, it gives a good overview and will be used in this research.



Fig. 2.2. Expression Value Based Model of the Creative Industries (Work Foundation, 2007).

2.1.3 The definition of creative content used in this report

This chapter has previously presented the growing importance of the creative industries and the impact of those industries in the global economy. Accordingly we have further visualized the justification to carry out this research.

By looking into the creative industries we have illustrated previous models and classifications of the concerned sectors. In line with the aforesaid, we decide to use the expression value model to define the creative industries for all purposes in this master thesis project. The main reasons are: *coherency* and *value based division*. Furthermore the scope of this project is focused on digital industries aiming at mass production of creative content. For this reason we pinpoint the cultural industries in this model (see fig. 2.3)

In the previous section of this chapter creativity theories and a components model were presented. This was done in order for the reader to get a perspective of the natural fuzziness of the expression and the inability to precisely define creativity for a general purpose. It was also done to thoroughly clarify the reasoning behind the definition of creative content and creativity used in this project.



Fig. 2.3. The Cultural Industries - Pinpointed (Work Foundation, 2007).

Creativity is defined as an individual's quality to constructively combine expertise, creative thinking skills and intrinsic motivation to construct something novel and unique. The social environment affects the creativity.

In regard of the value based division in the model above we chose to use expression value as a significant factor for the definition of creative content. Henceforth, we draw upon previous definitions of creativity, the expression value model and the components of creativity in our definitions. We define creative content as follows:

Creative content is a product or service that to a large extent creates or disseminates expression value and entertainment value, packaged in a novel and unique way. Furthermore, creative content is characterised as open ended, meaning it does not aim to solve readily identifiable problems and needs.

2.2 USER INVOLVEMENT

Similar to creative content, user involvement can be interpreted in different ways. Thus a clear definition is needed. In this research project, user involvement will be used to describe any kind of information gained directly or indirectly by a firm from people who are using and consuming the creative content. The involvement will concern both active and passive user involvement. *Active user involvement* is defined as human interaction between users and developers and *passive user involvement* as

the involvement where the users are merely utilized as sources of information without any active interaction (Kujala, 2003). In line with this all level of user involvement from informative, through consultative to participative will be included. Informative involvement concerns users as information providers and or objects for observations; consultative involvement concerns users as commentators or testers of already existing solutions and participative involvement concerns users as equal partners with active decision-making powers (livari, 2006; Damodaran, 1996). Informative involvement includes instances where the user is included in a passive way. An example of that could be big data analysis since in that case, the user is only used as a source of information without any interaction. In contrast, both consultative- and participative involvement are examples where users are actively influencing the developer in the development process. However, the difference between them lies in the decisionmaking power of the users. In consultative involvement, such as alpha- and beta testing, the user only gives feedback on existing version of a product or service, whereas in *participative involvement*, the user could have the power to actually create parts of a product or service.

2.2.1 User Involvement in Digital Creative Industries

User involvement has been studied for a long time (Banks & Humphreys, 2008; Kujala, 2003; Kujala & Mäntylä, 2000). Still, it wasn't until recently that creativity and early stage user involvement methods such as general feedback session appeared together in research (Harrison & Rouse, 2015). Creative content development and user involvement has now started to gain more attention and it has been pointed out that user involvement from the perspective of creative industries represents an emergent economic model that is moving from the periphery to the core of our economies (Banks & Potts, 2010).

In addition, most scholars agree about the usefulness of user involvement in the later stages of creative content development. The benefits of later stages user testing of creative content have proved its importance. Example of this would be the alpha and beta testing of computer games before launch, and test screenings of films before release. The online communities have furthermore shown their potential of user involvement of creating value in various creative industries (Banks & Humphreys, 2008; Gul, 2011). Those online communities have even helped extend the shelf life of many creative products such as with the MODing for computer games.

As mentioned, the relationship between users and firms are much more ambiguous and less studied in the initial phases of creative content development. Some previous research findings suggest that external assessment and feedback evokes strong negative reactions for the creative worker and thus leads to reduction in creativity (Harrison & Rouse, 2015). This can be related to the case of the development of the gaming console Nintendo Wii. The firm has admitted that if they had involved the user they could have never developed their successful radically different types of computer games (Aoyama & Izushi, 2008). In order to better understand early stage user involvement, innovation management theories are further investigated below.

2.2.2 User Involvement in Innovation Management

To focus on users and their role in the creation of innovations has gained huge interest and popularity among researchers. Much of the existing entrepreneurial theories, ranging from broad innovation approaches to specific entrepreneurial tools, recognise and emphasize the importance of early stage user involvement. The approaches, which are presented in more detail below, have specific methods and tools associated with them. However, it should be noted that not all of the methods deal exclusively with user involvement although they all have in common that users are at least one aspect of it. An example of that would be open innovation which has much more broader focus than solely looking at the user's role.

2.2.2.1 Open Innovation

It is common knowledge that innovation is key to sustainable success in today's highly competitive and dynamic market and the importance of innovating has risen more than ever before, partly because of globalisation, increased competition, and market dynamism (Gassmann, 2006). Innovation based only on internal resources, knowledge, and processes can be risky (Grönlund, Sjödin, & Frishammar, 2010; Munsch, 2009). Therefore, it is not too surprising that in recent years it has been a growing trend towards cooperation between different partners. This is vital to increase innovativeness and reduce time to market (Enkel, Gassmann & Chesbrough, 2009). The old logic of closed internal innovation, where all ideas are created and commercialised internally within the firm, has shifted to this new open model. In 2003, Henry Chesbrough (2003a) coined the term open innovation to describe this new trend. It basically implies that firms should use both internal and external resources and paths to market when trying to maximize its innovation based profits (Grönlund et al., 2010). There are several reasons for this trend. Chesbrough (2003b) for example mentions the dramatic rise in the number and mobility of knowledge workers as an important factor. In addition it's also harder for companies to control their proprietary ideas and expertise. The easier availability of private venture capital has also played its part (Chesbrough, 2003b). Additionally, companies can gain some profits from open up and license out some of their technologies that are not necessarily targeted towards their current markets needs (Chesbrough, 2003a). This trend of openness has led to that external parties, such as users, are now considered as possible co-creators and sources of knowledge and possible innovation for the firm. The external crowd of users, customers and consumers have a more vital role than before, which relates to the next term discussed, crowdsourcing.



Fig. 2.4. Open Innovation (Neumann, 2014).

Crowdsourcing, which is one type of open innovation, can be defined as "... the act of outsourcing tasks originally performed inside an organization, or assigned externally in form of a business relationship, to an indefinably large, heterogeneous mass of potential actors." (Hammon & Hippner, 2012, p. 163). Crowdsourcing requires lower level of involvement than open innovation. Traditionally it's used to ask a given crowd about its opinions, insights and suggestions to some challenges. However, there are also lots of examples of bigger tasks being crowd sourced. Also, open innovation and co-creation imply a stronger involvement from stakeholders who are included in the value chain and development process (Neumann, 2014). Crowdsourcing is traditionally highly related to online communities even though it can occur without the aid of the Internet as well. This opens up for great possibilities in value creation as firms can get input from large numbers of users to a small cost. Thus firms can achieve better and qualitatively better solutions than otherwise possible by using their own limited resources (Hammin & Hippner, 2012). Crowdsourcing is also an efficient way to achieve specific results such as funding projects and is then referred to as crowdfunding. Both crowdsourcing and crowdfunding have been of importance within the creative industries. Crowdfunding websites such as Kickstarter have successfully helped creative projects such as computer games, films and videos, theatres and various design projects get funded. Crowdsourcing has also been used to help co-create and test various products from computer games to TV-shows (e.g., Andrejevic, 2008; Banks & Humphreys, 2008). Some common tools for open innovation and crowdsourcing are the endless number of websites that allow cocreation, online communities and online platforms.



Fig. 2.5. Crowdsourcing (Neumann, 2014).

Co-creation is another type of open innovation and it is normally defined as: "An active, creative and social process, based on collaboration between producers and users that is initiated by the firm to generate value for customers." (Neumann, 2014). User co-creation is about collaboration between the firms and users, working with the company's value proposition in order to be able to deliver better products or services. This is not be confused with user involvement, which has a broader meaning. User co-creation is always a type of user involvement but not vice versa (Adams, 2013). For example, one type user involvement could be a process where users create something completely by themselves that a firm exploits for its benefits. This is not a co-creation process, which is about people working with you to make a good idea even better (Neumann, 2014).



Fig. 2.6. Co-Creation (Neumann, 2014).

2.2.2.3 Lean start-up methodology

Lean start-up is a method for developing products and new businesses, especially well suited for start-ups and small companies. The mind-set of the approach is to achieve better results faster, using less budget and eliminate non-value adding activities similar to lean manufacturing. It was first proposed by Eric Ries (2011) and has since gained huge popularity in the start-up community. The method proposes that companies should interact with customers and users early on and continuously iterate or pivot during the product development process according to this customer validation learning. It is vital for start-ups to construct some sort of minimum viable product (MVP) to test on customers long before market launch instead of spending a lot of money on a complete product that perhaps is not needed or sellable.

Closely related to lean start-up is the customer development model, which has been described as one of the cornerstones of lean start-up. It is hands on model for business creation rather than a broad overall approach like lean start-up. The customer development model was proposed by Steve Blank and similarly to lean start-up it revolves around the idea of constantly getting feedback and testing your ideas by getting out of the building. The model involves four steps; *customer discovery, customer validation, customer creation* and *company building*. In the first two steps the goal is to create product market fit before continuing to the execution phase and the company building (Blank & Dorf, 2012).

There are several hands-on tools that are frequently used in order to implement lean start-up practises. *Customer interviews, surveys, testing of ideas* and *MVPs* are essential tools to use throughout the whole iterative development process. Those tools enable the firms to get necessary insights and feedback to know if they are on the right track or not.

2.2.2.2 Design thinking

The last user oriented innovation approach discussed here is design thinking. This approach concerns more than just design and it goes way beyond how a product looks and feels (Gobble, 2004). Design thinking is a human-centred approach that starts with the experiences and needs of people (Brown, 2008) and it builds on a range of tools and methods evolving around human experiences (Gobble, 2004). Martin (2009) additionally argues that design thinking combines exploratory openness with systematic process. Brown (2008, p.2) defines design thinking as "*Put simply*, [design thinking] is a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity."

This human-centred approach sees users and consumers as essential information providers along the whole development process. Similar to the lean start-up concept, design thinking also builds on iterative processes where ideas and products are continuously tested, validated and refined. Inspiration, ideation and implementation make up the ground for the design thinking iterative process (Brown, 2008). Be that as it may, the two approaches are also partly contrasting. While design thinking builds on ideation and a problem-solving mind-set, lean start-up instead starts from an already

set product vision and a validating mind-set. Further, design thinking focuses on qualitative development methods (ethnography, user research, observation etc.) while lean start-up mainly concerns quantitative methods (metric-based analysis, providing matrices, testing etc.) (Mueller and Thoring, 2012).

Moreover, there are various tools used in the design thinking process. *Qualitative interviews* and *observations* are of strong focus. *Ethnography* is also a common tool. *Workshops*, based on methods such as *brainstorming*, *mind mapping*, *poster creation*, *storytelling* and *storyboards* are also utilized in this approach.

2.2.3 Risks of Involving Users

The importance of user involvement in general and various user approaches and methods have been presented in detail above. However in some cases it has proven to be risky to put too much trust in the uses. In certain cases, it can hinder creativity, and hence reduce the possibilities of coming up with radical, disruptive innovations (Verganti, 2008; Aoyama & Izushi, 2008). Further, innovation within other parts of the value chain can create more value, than user centric innovations (Adner, 2012). This is further elaborated below.

2.2.3.1 Design Driven Innovation

Abadie, Friedewald and Weber (2010) argue that the digitizable nature of the content produced within the creative industries combined with a creative social environment provides a fruitful platform for radical innovation. Brown (2008) adds that significant innovations (radical) are explored by creative and novel exploration.

Further, Roberto Verganti (2008) argues that user-centric design thinking does not relate to, or lead to radical technological innovations. Similarly, Henry Ford is assumed to have stated, "If I would have asked the customers what they wanted, they would just have said that they needed a faster horse" (Vlaskovits, 2011). Likewise, the CEO of the Japanese video game company, Nintendo, expressed following after the release of their previous console, Wii: "Nintendo has grasped two important notions that have eluded its competitors. The first is, don't listen to your customers. The hard-core gaming community is extremely vocal -- they blog a lot -- but if Nintendo kept listening to them, hard-core gamers would be the only audience it ever had" (Aoyama & Izushi, 2008, p.10). All of those are examples of situations where radical innovations are the outcome of not involving users.

Moreover, Verganti (2008) express that radical innovations do not start from user's insights. Due to socio-cultural aspects, customers are bad at understanding radical innovation (Gero & Kannengiesse, 2004). Accordingly, user-driven methods might therefore be of little or no use when the goal is to come up with something radical. Further, radical innovations are not based on solving specific pre-determined user problems, but instead coming up with product or service proposals for the users. This makes it innovation pushing, which better spur radicality (Verganti, 2008).

2.2.3.2 Innovation Ecosystems

The theory about innovation ecosystems constructed by Ron Adner (2012) partly strives towards explaining the blind spots of innovators and how to successfully explore and manage dependency risks. The blind spot of innovators is explained as *"failing to see how one's success depends on partners who themselves would need to innovate and agree to adapt in order for their efforts to succeed."* This implies that even the most brilliant of innovations couldn't be successful if the value they create depends on other innovations that fail to arrive on time (Adner, 2012).

However the risks are not themselves the biggest threat to the innovator. It's failing to see the risks that are the real setup for failure. Adner (2012) describes that as long as you know about the risks of the game, there are less problems. It's when you start playing a game on false assumption you are in real danger. This means that one of the hard parts of successfully managing innovations is to find the blind spots and dependency risks.

3. METHODOLOGY

This chapter aims to describe in which way the research was undertaken. First the research design will be presented and motivated, followed by a description of the research methods used to answer the selected research questions.

3.1 RESEARCH DESIGN

The first step of this thesis work was to decide upon the research design, by formulating research questions and decide what data needed to be collected in order to answer them. The intention of this project from the beginning was to investigate the potential impact that an early stage user involvement can have on digital creative content development. With that purpose in mind and after carrying out a brief exploration of existing theory, formulation of two relevant research questions quickly emerged. Although those questions were adjusted and re-formulated slightly along the process of the literature review and the first interviews, the core essence of them remained the same throughout the whole thesis process. The first research question formulated asked how, or with what kind of methods, user can be involved in the initial stages of the creative content development, whereas the second question asks in what situations it is applicable to use such an involvement. It should be noted that the goal was never to arrive at a certain fixed answer to those questions, but rather spur enlightened discussions around them.

Once the research questions had been roughly formulated, the next step was to decide what type of evidence was needed to collect, in order to answer them. Some sort of empirical study of user involvement during creative content development process was needed. Considering that the initiation of both the research topic and this thesis can be traced to a collaboration between the Business Innovation Group of Chalmers, the creative game development studio Fatshark and the service design firm Transformator, investigating Fatshark as a one source to collect data was a straightforward decision. Access to information and to staff members from the game development studio was easy and furthermore, Transformator and Fatshark were already carrying out project investigating the thesis research topic. Additionally, since the research topic is of a broad exploratory nature it was quickly decided to investigate more than one case in order to collect more data and allow for deeper and more meaningful discussions. Thus four film producers were studied as well.

The data was collected through a qualitative multiple-case study, a design that is sometimes also called comparative design. A case study can be performed in many different ways but fundamentally a basic case study entails a detailed and intensive analysis of a single case occurring in a bounded context. The subject of the study can be a whole organization, event, action or an individual. A multiple case study simply entails that the number of cases examined exceeds one (Bryman & Bell, 2011). Case studies are beneficial when "how" or "why" questions are being posed, which is the case in this thesis research. Multiple-case study furthermore allows researchers to compare and contrast findings derived from each of the cases. This allows for

consideration of what is unique and what is common across cases, and thus enables the researchers to reflect upon theory and explore what of it will or will not hold (Bryman & Bell, 2011). Thus, multiple case study was deemed to be the best approach for this thesis research, especially considering the highly explorative nature of it. This topic has not been much researched and the formulated research questions allow for a broad discussion instead of formulating narrow problem that could be fairly simply answered. Finally, just like most case studies, the findings of this research cannot be validated externally and can thus not be generalised, which was indeed never the aim. In fact Lee, Collier and Cullen (2007) claim that particularisation rather than generalizability constitutes the main strengths of case studies.

In this thesis, four different film producers, working in different business environments within the film production industry were interviewed. Furthermore, the game development studio Fatshark was studied as a case, focusing on the organization itself. How those cases were carried out will be explained below.

3.2 RESEARCH METHOD

Having decided upon the research design the next step was to carrying out the research methods. First a literature review process was started, followed by five case studies. Finally by combining the theory and the empirical findings, the analysis and discussion were carried out.

3.2.1 Literature review

First, an initial explorative literature study was undertaken to identify and structure existing research and position the study in relation to it. It was soon identified that user involvement within creative content development has gained more attention amongst scholars lately. However, research of the initial stages of such user involvement has not been thoroughly studied. By identifying this knowledge gap, the two research questions were formulated. After that a large body of relevant literature was collected, first looking at user involvement within the game development industry as a starting point since at that point it was already known that the gaming industry would be studied for empirical data. This was soon expanded to include other industries and finally general user involvement in the process of digital creative content development. The search was conducted both by using the Chalmers library database and Google Scholar to find online articles or e-books dealing with the research topic. Most relevant keywords included combination of following words: "user involvement methods", "creative content", "creative industries", "cocreation", "open innovation" and similar. Although most effort was put into the literature review in the first phase of the thesis process, the search for theory continued to some extent during the whole thesis process since in many cases previously found literature spurred interest for further digging of it.

3.2.2 The case studies of film producers

After a relatively large body of applicable literature had been identified and main findings of it had been drawn, the gathering of empirical data began. In order to be able generate meaningful discussion it was emphasized to contact film producers that all work in different ways within the industry, allowing for comparison and richer material be collected to relate to theory. The producers were all contacted via email after someone who knew them provided us reference and contact information. Thus for example, after having interviewed the first film producer, she upon request pointed towards other people working differently than her within the industry. That information consequently led to interviews with two other film producers with totally different mind-sets towards user involvement. Arguable by the use of those references, the process of getting interviews went more smoothly and contacted film producer were more positive in participating. This is evident since all four producers all responded right away declaring interest in participating.

A face-to-face interview was scheduled with each producer, where we relied upon the same semi-structured interview guide in each case. The interview guide can be seen in Appendix A. A semi-structured guide was considered the best option since a big emphasis was put on being flexible but at the same time also being able to make some comparisons across the cases. It furthermore allowed for new ideas being brought up depending on what the interviewee said during the interview. However, it was made sure that all beforehand prepared questions were asked as well in order to not missing out on interesting input and data. A big emphasis was put on listening by letting the interviewee do the talking as much as possible. This was a good approach, since in all cases the interviewee start talking about some unexpected topics that turned out to be of great importance for the later discussion. Two interviewers (the both of us) were present in the interviews which led to a good flow and less need to pause since one interviewer asked all the questions whereas the other one took notes and complemented with additional questions and remarks when needed. Straight after the interviews, we discussed the data gained from them to ensure a common understanding of the outcome of it was established. This reduced the changes of data being interpreted in the wrong way.

All the interviews were recorded with a smartphone voice recorder to make it possible to re-listen whenever. Afterwards, those recordings were all fully transcribed into a word document and later on re-read several times, ensuring that no data would get lost or forgotten. Finally, it should be noted that all the interviews were conducted around the same period of time, so previous data was always fresh in mind before the next interview. This helped to achieve the most relevant data in relation to the previous held interview. Two of the film producers are anonymized upon their request and will further on be referred to as *Sarah* and *Erica*.

3.2.3 The case of the game development studio, Fatshark

The case of the game development studio Fatshark was carried out in a different way compared to the other four cases. First of all data was collected both directly and indirectly, based on secondary data. The game development studio Fatshark and the service design firm Transformator were already collaborating in investigating how users can be involved earlier in the Fatsharks' game development process. In order to do so a workshop session, where we also participated fully, was set up at Fatshark were employers collaborated to come up with game development fragments that had the possibility to be used as a trigger material presented to users. This allowed us to

see how material used to include users in early stages could be created. A detailed description of this process and the case will be presented in next chapter, in the empirical findings.

The trigger material created during the workshop at Fatshark was presented to users to explore if they could in turn act as "co-creators". In order to gain information about Fatshark's conclusion on this user involvement session a Skype interview was conducted with an employer, who was present during it. Apart from not being conducted face-to-face, the interview was set up in the same way semi-structured way as the other four cases. Additionally, the employer was asked other question of Fatshark's opinion on user involvement in general.

Furthermore, Transformator allowed us access to all information they had written about this project by sharing access to their Google drive folder. This was especially useful to gain information about work that was done on the project prior to the start of our thesis work. In addition, a few Skype interviews were held with employers at Transformator to get further information and insights about the project.

4. EMPIRICAL FINDINGS

In order to gain knowledge and insights of the user involvement in creative content development, five case studies, studying individuals and firms from the film production and game development industries were carried out. Those industries are all similar in the way that they develop digital creative content for mass production and distribution. The first four cases are similarly structured and all look into film producers. In each case, one person was thoroughly interviewed about how he or she has involved users in the line of creative work. To structure the data collected and make it an easier to follow, the four first cases are set up in the same way. First a brief background of the person interviewed is provided. Then their opinions and thoughts of the industry are presented, followed with how they have involved users in their projects. Finally their view of the purpose of their creative content development is presented. The final case presented, from the computer game development industry, is different from the rest of the cases and the data is thus structured in a different manner, due to the fact that it's a research project carried out over time. This case investigates how trigger material can be developed within the firm and then later used to involve users at early stages of the development process.

It should be noted that the aim is not to compare different creative industries to each other, but rather to explore different ways of developing creative content and involve users. However, the cases were selected to represent different development approaches and mind-sets within the creative industries. Thus, for example even though most of the cases explore the film production industry, those all provide different insights.

The structure of this chapter will be as followed. Firstly the film producer *Sarah* is introduced. After that the case of *Peter Hiltunen*, the founder and film producer at the production company Dragon Films, is presented, followed with the case of the independent film producer *Hanna Sköld*. and *Erica*, producer at an advertising bureau. Finally the video game case concerning Fatshark is presented. All information presented in the first four cases comes solely from data collected from interviews.

4.1 THE FILM PRODUCERS

In this subchapter the findings from the film producer cases are presented. Every case is divided into three parts, *the individual thoughts of the industry, the user involvement* in that specific case and the *purpose* of developing films.

4.1.1 Sarah, film producer and CEO of film production company

Sarah is a producer and the CEO of a film production company that produces both short films and feature films. Sarah has around 15 years of experience from within the movie industry. She started out as an editor but gradually moved towards working as a producer. Sarah has produced multiple prize-winning films.

Sarah's thoughts of the film industry

Film production companies are normally involved in the whole process of filmmaking, from idea generation to market release. This process normally takes around 3 years. The process starts with an idea and a vision, which is developed into a script. A key success factor according to Sarah is that everyone in the whole team shares the same vision. It is vital that everybody is on the same page regarding the creative content and the outcome of the project.

The Swedish film industry is fully subsidised by the government making it completely different from the private risk capital funding in the US. In Sweden, and in fact most European countries, government funded institutes have the role to uphold and defend cultural and democratic values of the country. Those institutes, such as the Swedish film institute and Göteborgs Stad have a fixed yearly budget for the film industry, which means that production firms must come up with and pitch ideas in order to get funded. For example the role of the Swedish film institute is to fund films which market Sweden in the best way according to a fixed agreement made with the Swedish government every fourth year. These agreements can vary and for examples factors such as size of projects, types of projects, gender equality can be taken into account. Some companies in the industry try to adjust to those agreements in order to become more eligible for funding. However, other firms such as Sarah's do not adjust their work according to this at all since by looking solely at the money side of things can limit the creativity and political agenda those companies stand for and are trying to achieve. For them it is more about art than product and the goal is to enlighten people or show things from different perspectives.

The film industry in Sweden seems to be undergoing lot of changes. Marketing is done much earlier than before with the emergence of social medias such as Facebook and Twitter. Nowadays, production firms create platforms early on to meet future audience and present and update about upcoming projects early on. The goal with this is rather to keep everyone informed rather than looking for feedback. This also relates to the emergence of crowdfunding, which is constantly becoming more influential and widely used within the industry and perhaps is the future of it. The industry has changed from few selective firms producing films towards the new model where almost everyone can start shooting content. The equipment and capital needed is much more accessible than couple of years ago. This has completely revolutionised access of materiel whereas anybody can post their material on Youtube and other medias, which enables capturing of much more and variable aspect of society before it was in the hands of few selective.

The distribution channel of the movie industry has undergone some major changes. Previously there was a big holdback period for every project. Films were first shown in the cinema for a long time, then DVD version was made available and much later it could be shown on the TV. The Internet changed this process and those holdback periods are much tighter now where films can be accessible by anyone shortly after release. For Sarah as a film producer with political agenda and message to tell this is a good evolvement since her films will reach broader audience groups faster. However, Sarah's view on this matter normally contrast other actors in the industry since they still want to milk every possible revenue window as much as they can.

Sarah's thoughts of user involvement in film production

User involvement differs a lot between different firms in the industry. In the case of Sarah, the end-users or the audience are involved in the editing phase, late in the overall process. This is done only few weeks before the final cut. The method most commonly used is test screening where group of people (normally around 10) are invited to see the current cut of the film and give feedback of their understanding of it. Several questions are laid out for the test screening participants to answer and they are additionally involved in brief discussion or interview afterwards. This user involvement for Sarah is not about finding out if the audience like the film or not but only to test their understanding of it and if the message gets through or not. Problems identified from those test screenings most often result in simple solutions such as adding scenes for better understanding. According to Sarah, the creative director should be responsible what he or she wants to say with the film regardless if people like it or not. However the producer and marketing responsible must make sure the message gets through. Test screening is normally used when lot of material has been shot and there are many possibilities of creative editing in the post-production phase. Those who focus solely on the economic aspect and try to shot only scenes that will be used do not have the same possibility of creative decisions later on in the process. This lack of possibility for creative decision making in the later phases can limit movies since it is "hard to say when magic is gonna happen".

Other firms within the industry emphasize much more on user involvement and they research beforehand what kinds of movies users want to see get produced. One common user involvement method is to do script readings in front of group of audience and see how they react. If for example the plan was to produce a comedy the production firm often hires actors to read the script in front of audience to determine if it is funny enough. Another widely used method is to use mood reels. Mood reels is about putting together images, music etc. to create the feeling of the new project. By doing so you can test for example how the user think of it, if he or she gets captured in the atmosphere, understands how it will be shot and which kind of music or lighting will be used. Additionally a common and simple way to include users is to pitch to them several ideas in order to get feedback and feeling how users like them.

Sarah's purpose of film development

One of the core aspects of projects Sarah has worked on is creativity and own expression. She believes that too much outside opinions early on in the filmmaking process can hinder creativity. Such was the case when writing the script of her upcoming feature film. In the first phases of the project an outside script consultant, who was part of the funding body, gave opinions of the script. Sarah rewrote additional versions in many directions in accordance to the consultant's as well as other people's feedback. However, this only led to confusion between Sarah and co-workers since they lost track of the direction they initially wanted to take. Sarah describes it as they "... hit a wall in the creative process, because suddenly you were

writing for someone else" and the only reason was because they needed their money. In the end they convinced the funder to let them work further on their initial idea, which paid off since later all parties agreed of that approach.

Whether firms listen to users on the early stages or not depend a lot on what you want to accomplish. If the goal is to produce something only adapted for the market, users are much more involved and listened too. For Sarah producing films according to statistical reports about users and their preferences is "... as asking the kids in school, what do you want to learn. For me filmmaking is much more about that you have something you think is important in society or images that are missing or stories that are missing or something you want to enlighten. I have a much more political agenda in my line of work". The essence for Sarah is to produce films that she thinks users should be looking at instead of adjusting to their wants.

Sarah stresses that she does not work in the most common way. There are other ways, which are much more user oriented (as can be shown in the next case with *Peter Hiltunen*), and uses target groups to trigger ideas. A large amount of production firms start by doing research on what users want to see. Those firms are more focused on generating revenues and one strategy is to produce sequels to previous success films since they know users are likely to see it.

4.1.2 Peter Hiltunen, founder and film producer at Dragon Films

Peter Hiltunen is the founder and film producer at the production company Dragon Films. The company develops, finances and produces scripted content on different platforms, focusing on kids up to young adults as their main target groups. The reason for that focus is because Peter is interested in the type of stories told for that audience group and additionally there is a market for it with interesting business model opportunities. Peter has 25 years of experience within the film industry, having previously co-founded the film production company Illusion Film with his co-worker in 1990. His role as a film producer is multifactorial and involves factors such as: putting the creative team together, giving constant feedback on scripts, packaging and financing the project and generally being a decision maker throughout the whole film development process.

Peter's thoughts of the film industry

The industry is currently going through major changes and consequently faces huge challenges. The consumer behaviour is completely different from what it used to be. One aspect is the trend that people do not go to the cinema as much as before. The cinema experience can now almost be simulated at home with the use of huge flat screens and surround sound systems. Also, new distribution channels, such as Netflix and HBO have emerged, offering their streaming services as new convenient platform. Those channels do not pay huge amounts for film material, partly because they are not looking for being the first platform to premiere them. However, TV series are the main focus for them. There has been a general trend towards talented actors, actresses, writers, directors and others moving into the TV-series production. Thus, one of the upcoming challenges for Dragon Films and other firms within the industry is the need to change their business models to cope with those shifts. However, this also creates

opportunities for filmmakers, since the increased focus on TV-material reduces the number of quality films, fit to be success in cinemas.

Broadcasters have in many cases huge powers over content and structure of TV scripted material. In cases where broadcasters are big investors, they normally require the standard structure of 90 minutes TV-movies. In spite of that, Peter doesn't think those restrictions limit creativity since writers, directors, editors and producers are all used to create material to fit this format. Everybody is on board with the arrangement from the beginning. However, outside restrictions regarding age limits and violence because of their airtime.

Peter's thoughts of user Involvement in film production

One way to involve users is to identify, discuss and interview face to face certain target group for an upcoming project. This provides insights and ideas for what must be present in order for targeted audience to like the movie. When Peter talks with the scriptwriters he always tries to make sure they know which audience they are writing for. This is challenging task since many of them can't work in that way and have their own procedures and angles to follow. It is impossible to force them to work in a specific way but having the discussion about pinpointed target group is still necessary. Peter has used the target group approach often in his projects and gives an example of an upcoming project dealing with girls interested in horses. By talking to the target group, in this case girls interested in horse riding, Peter got valuable information such as that actors or actresses should really know how to ride a horse since otherwise this main target group would simply refuse to see the film. User involvement for Peter is not about having any scientific approach, rather about being open minded, have eyes and ears open, read and follow relevant topics. In the case of the upcoming horse movie, a big part is to follow the main bloggers and eventually try to cooperate with them because they have the crowd behind them. By involving those key partners they will in turn involve and bring the consumers.

Another way to include users is to use the so-called big data information about user's behaviour and film type preferences. Making a successful movie is extremely hard task and it is therefore so important to know the audience and understand which kind of films the desire to see. This also helps when it is time to package and market the movie as well as finding the subject itself in some cases. The use of this hasn't really started in Europe to large extent yet but is something that the industry really has to start doing. However, there are several things pointing towards this is starting to happen now and there will for example a big workshop be held in London this summer that deals with big data and how to use it in the industry. Apart from that, test screenings (described in the Sarah case) prior to premier and before the final editing is also very common. However, Peter notes that here in Scandinavia the industry is extremely bad at general user involvement compared to the US. The focus here is still on the artistic view from the director and writers that decide how the final cut will be.

Crowdfunding is becoming frequently more used in the industry and has caught Peter's interests and curiosity. He strongly believes he will use websites such as Kickstarter in the future but has not yet found suitable project for it. A benefit of using crowdfunding is that you have the audience already and you get stories from them. However, it is necessary to be specific and clear about the direction you want to take before involving the audience since otherwise they might not understand it. Overall it is interesting to co-write script with the consumers and it could also help in financing the project since investors would know that the audience is on board already.

Finally, another factor to consider is the importance of already existing fan base. This can be extremely hard target group to please since they are picky about how the content of a potential film can be developed and presented. Peter stresses the significance of locating and engaging with a fan base if it exists, since by convincing them, the likelihood of your project to be successful increases substantially. As an example Peter discusses the case of the famous and successful Swedish young adult fantasy novel Cirkeln. The book has been selling extremely well and it has huge fan base, which have created online communities around it. Recently the film Cirkeln, based on the book was released in cinemas and despite of getting positive reviews from the critics it flopped in reaching high audience numbers in the cinema. Somehow the moviemakers failed to reach out and appeal to the huge existing fan base, who didn't go see the movie in large numbers and thus didn't spread the word. The most important factor of the value chain failed in this case by not getting the attention of the already existing fan base.

Peter's purpose of film development

Peter likes to produce films for certain known target group that are really pointed out. At the moment this target group is young viewers, ranging from kids up to young adults depending on the project. The goal is to find subjects that this target group is interested in and then create content for it since the audience will pay for it if good content is produced. He believes by doing so it will be easier to write, package and market the end product and has thus the possibility of greater revenues. "I think it is a good business model, because still there is always coming more young people and they will watch movies, there is a market and there will be a market, so that is the main thing". Peter's goal is to produce movies that people want to watch and then as consequence sustain profitable business. Researching potential script material is key and observing previous projects can provide vital clues for profitable projects. Peter emphasizes that "It is expensive to start and letting idea grow too far and you haven't done your research of it, because in the end the market will tell you, this will work or not work". For Peter having the audience in mind from the beginning is necessary, since otherwise he wouldn't really know how to package the project in suitable manner.

4.1.3 Hanna Sköld, independent film producer

Hanna Sköld is an independent film producer currently in charge of the development of a feature film called *Granny's Dancing on the Table*. This process was initially crowdfunded through a successful Kickstarter campaign in 2012. Prior Hanna produced a feature film and launched it on the landing page of the file sharing website The Pirate Bay which led to a high rate of user adoption and user interaction.

Hanna's thoughts of the film industry

It is different working in the industry as an independent developer. One thing is that it can be harder to reach audience due to the holdback periods between different platforms. Being only able to release a film in the cinema before any other platforms is an old structure based on old thoughts of how it is supposed to be. There needs to be a change in the regulations since even the cinemas would benefit from simultaneous releases of certain movies. This is something that Hanna believes is about to change.

For the future it would be good if a marketplace were consumers and creators could meet person to person would be created. If a consumer can visually realise that there are people behind the movies and that those people easily could be contacted it would result in bigger incentive to donate or pay for a film. It would be good for the industry to enhance the interaction and relation between the creator and the users.

Kickstarter might not be the next source of full financing for movie project, but for creating pilots and get projects started it could be a good channel. If creators use Kickstarter on a regular basis the consumers might also get tired of the format and stop funding projects.

Hanna's thoughts of user Involvement in film production

Hanna released her first feature film on The Pirate Bay. The movie got lot of downloads and people started translating subtitles for different languages and even started donating money. People also got into contact and offered to help distribute the movie, leading to for example to the movie being shown in cinemas in Ukraine. Hanna explains that the success this first feature film grew from the inside, or from the users since they created an interactive distribution of it. That experience really made Hanna start thinking about user involvement and how it can be used. After that process she had already established a user base, which she benefited from when starting out her crowdfunding campaign.

Hanna describes her interest to investigate what happens with an art-project if users are involved in the creation process. She believes that user involvement can enrich the creation and enhance the initial vision of the artist as long as this vision is not completely lost. For example she tried to collect stories from her followers (i.e. the users) about their grandmothers. It was an open-ended approach, which means that there was no framework for how the stories should be told or what they should include. People were asked to tell whatever they wanted about their grandmothers. Those stories where later incorporated into the main storyline of a movie project called Granny's Dancing on the Table.

The movie is about a girl who lives isolated from society in the woods with her father. To help her understand the world until she one day leaves home to discover it she imagines stories about her grandmother. The sub-stories collected from the user base were turned into the inner world of the girl in the movie and were presented as short stories from within her head along side of the main story. In this way the sub stories could be included in a structured and suitable manner without losing track of the main vision of the artist.
Hanna says that this process gave her rich pieces of material but also a qualitative value for the co-creators. She also mentions that she probably wouldn't have come up with all the stories on her own. It was good to have a stock of material to work with during the less creative parts of the development process. This was a good way to get going. Collaboration can be a keystone to build relations. It brings people together on a mission to create a better world. Stories and storytelling is an important tool to create societal changes. If more people get the chance to tell their stories, collaboratively we can continuously enhance to understanding between people.

Moreover it could be important to find a common denominator between what the audience want to tell and what the artist want to tell. It might be possible to create a high value content but to mainly cater to what everyone wants to see. Hanna does not believe in creating something that everyone wants. Even if the final result reaches only a small audience the not important part is to highlight important stories and put new ideas into the minds of people.

Hanna's purpose of film development

Hanna notes that she doesn't really believe in creating something that everyone wants to see. In those cases it might be more about reaching a big audience. For her as an independent moviemaker it's more about seeing a problem and wanting to create something that can create a change. Even if it reaches a small audience it is important because it set new thoughts in minds of the people. She doesn't believe that she is the only one who has something to tell that is related to what she wants to say. The goal is find and mix what she wants to tell and what the audience wants to tell in a project, regardless of how many the movies will reach. The importance is to find this collaboration.

4.1.4 Erica, producer at advertising bureau

Erica is a producer of film, digital media and web at an advertising bureau. Her expertise and background lies within film production, where she, for example, has worked as producer, line producer and production manager. Two years ago she decided to shift her focus by joining the advertising bureau and has since been working with digital content production at the firm. The bureau creates and produces digital experiences and marketing material traditionally used in marketing campaigns. They work with various clients and projects, with projects such as setting up websites and integrated web shops for self-employed designers or small businesses. They also create catalogue and PR material for larger clients.

Erica's thoughts of the film industry

Most of Erica's work, which is almost all produced within the firm, is parts of digital marketing campaigns and thus not a physical product. The company sells their competencies, their creative ideas, their staff and their knowledge. Most often clients reach out to them but sometimes propose projects to possible clients as well. Also, in many cases bigger agencies come with parts of projects if there is a need for designer, director and so on.

Projects normally have short duration and take around four to eight weeks in total. The project initiation starts with meeting with clients who convey to them what they want to achieve with a given product and how the tend to launch it. Digital material is proposed such as film, still images, web store et cetera and the costs of each element are listed. When the scope and budget is settled upon, the firm starts to investigate the client thoroughly by looking into what they have worked with in the past, their current goals and what restrictions they have on the creative content. The next step is to form a project group, most often consisting of two to four employers who start brainstorming about solutions. The firm has its own studio and use it frequently to produce prototype material. Some sort of storyboards and scripts are created which afterwards are used to pitch ideas to the client in order to get feedback.

Erica's thoughts of user Involvement in film production

Erica does not include the outside users or the final audience in her development process. However, the company always test ideas and material within the firm to see if it works on all devices and looks good. The disadvantages with that arrangement are that the employers might be too involved in their own projects and outside perspective could be beneficial in some cases. However, they also often test their ideas and products on family and friends, which can be the final audience in some cases.

According to Erica, testing is time for them, which would result in much higher costs for the clients since the firm charges testing by hours. However, if the budget would be available in larger projects they probably would go outside the building and test the products on users. Those users would preferably have to sign some sort of non-disclosure agreement prior to the testing since a lot of the material they work with is highly confidential. The client has to feel safe that their campaign material will not be leaked out.

One problem with user involvement is that they come in too late and after the firm has done their work. Their clients trust in them that they are the expertise and will deliver good product. Another problem would be that it is hard to test how viral and popular a campaign will turn out to be. The final outcome of Erica's work is something that aims to be reachable for as wide audience group as possible. For the client virality, for example on the social media, is one of the success factors. How users will behave exactly on the Internet is almost impossible to predict, which is one of the reasons why the firm does not try to predict or research that to large extent. Also the campaign does not last forever and thus it is not necessary to test it to large extend, in contrary to computer games products which do not have a fixed short term life span. There are also a lot of differences from the movie industry since there are much bigger risks involved in that industry. Both because of project are bigger, take longer time and involve lot of investment risks but also because there it is also about the person him or herself since reputation from previous films have huge affect on later projects.

According to Erica, their clients are used to interact with their users. This usually means that they know a lot about their users already and communicate that knowledge to Erica. It is not her role to know about the end consumers since their work ends before the campaign goes viral. The clients are the one who delivers to the end consumers. The restriction set by the clients can affect the creativity of 's work a lot. However, Erica believes that this can be both a good and a bad thing. It can result in that they can't feel free in their mind, however the limits can often lead to emergence of new creative ideas. The firm always tries to deliver something creative and unique, although they get inspired and use elements from other projects.

Erica's purpose of film development

The competition in the industry is hard since often the clients are discussing and negotiating with few different design studios, which are pitching ideas to the client. Therefore it is vital for Erica to be spot on with her proposed ideas and in some cases not too creative, depending on the client. Thus, creativity is adjusted to the client in all cases to increase likelihood of getting the project. If Erica gets the project she continues to work in this iterative way where new ideas and work is constantly presented to the clients for possible feedback. The idea often changes a lot along the way, both because of the feedback from clients but also because of unpredictable changes in the business environment, which forces the client to change the direction and scope of their upcoming campaign.

4.2 VIDEO GAME DEVELOPERS

In this subchapter the findings from the game development case are presented. An introduction and background to the case is first presented followed by the findings from the three phases of this case study.

4.2.1 User involvement in the Game Development Industry.

Fatshark is an independent game development studio located in Stockholm. The firm has worked both as a subcontractor on several blockbuster games as well as self-published their own games on most of the major platforms. This case concerns a project, managed as collaboration between the service design firm *Transformator*, *Fatshark Game Development Studio* and *Chalmers Center for Business Innovation*. The main goal of the project was to investigate user involvement in the initial stages of game development processes and explore possible user driven methods at that stage to enhance the idea generation and minimize risks. The main contact at Fatshark was Rikard Blomberg, the deputy CEO.

Background of project

The project, which was initiated in the fall of 2014, derived from a need within the core of the game development industry. Fatshark presented worse results than expected and a great shift within the value chain was discovered. Digital marketplaces were replacing the traditional in store sales channels (see. fig. 4.1). The essence of this transition is that game developers, instead of relying on the internal know-how of publishers, need to gain qualitative knowledge about the markets and their customers.



Fig. 4.1. Simplified model of the new digital value chain within the video game industry.

By including users along the whole development process, from ideation to market launch, game development firms can gain additional knowledge about what types of products their users want to buy. Furthermore, by involving users qualitatively in the early stages of game development, the hypothesis was that users might be able to act as co-creators and provide valuable information (see. fig. 4.2) (The picture illustrates Fatshark's development process).



Fig. 4.2. Transformators hypothesis of how user could be involved in a qualitative manner in the early stages of game development (Transformator, 2014).

The project was divided into three significant phases with clearly stated gates and objectives. The following text briefly presents those stages, where Transformator co-workers acted as the project leaders.

Phase 1

The first phase of the project was the pre study phase with the aim to map out the internal development processes of Fatshark and identify opportunities in relation to user involvement. Transformator carried out several interviews, both with employers at Fatshark as well as with their users, the gamers. The main findings from this phase are presented here below.

Main findings:

- Game development is an *art form*. Thus the users shouldn't be too influential in what material is produced.
- Users might not fully understand ideas and fragment material presented in early stage of the development phase. Additionally, the material presented might give the wrong idea of the final product, leading to disappointments amongst users when fully ready.
- If users give back feedback or ideas, they *expect it to be appreciated* and used.
- The user is involved like a *thinker rather than co-creator*. Today the user involvement is quantitative and at late stages of the development, such as alpha testing.
- There is an *unutilized potential in co-workers* and it could be a possibility to minimize the thresholds for creative work by using them.

Phase 2

The second part of the case was carried out during the spring of 2015 with the main goal to come up with and test a method for user involvement based on the findings from phase 1. The hypothesis from Transformator was that iterated qualitative user interactions would be a good way to come up with "co-creation where ideas and feedback from gamers and co-workers continuously integrates into the game development process.". In order to do that Transformator set up a Hack Day workshop day at Fatshark focused on the creation of game fragments and "light-pitches" The participants consisted mainly of game developers but also members from this research project, e.g. Chalmers researchers. The fragmented material would then later be presented to users in order to involve them.

The Hack Day workshop was thenceforth divided into five stages, all based on brainstorming activities. Each part focused on explicit functionalities of a game. The first being *game challenge*, followed by *player motivation, interaction, emotional context* and *full game concept*. The Game Challenge focused on coming up with fragments of games that challenged each one of the four gamer types. For example the competitors desire to win against other players might be satisfied by a pre-known challenge that the rules of the game eventually changes over time. The player motivation session was focused on creating drivers of motivations for each gamer type. The essence was to find reasons behind playing the game. The interaction part challenged the participants to come up with how each gamer type would want to

interact with the system and/or other players. During *the emotional context* session the goal was to come up with framings such as environmental context, storylines and suitable moods for the different gamer types. The last part, *the full game concept*, consisted of a fully open session where each group's mission was to come up with a concept partly based on previous findings during the workshop. Subsequently all the ideas were presented along the way during the workshop. In the end of this workshop a lot of ideas had been accumulated and those where collected on trigger material card for later use. Those cards were made up of an informative title, short text descriptions and a picture explaining the idea.

Phase 3

Finally in the last phase the trigger material created at the Hack Day was presented to users, which engaged in a discussion with representatives from both Transformator and Fatshark. In total 4 groups of users were interviewed in this phase of the case study. The groups consisted of both men and women. The sessions were divided into four parts. First the participants got to introduce and describe their favourite game to get the conversation going. After followed a sequence where the users got to look at the trigger material and combine some of the cards to a game idea. Subsequently a game field was presented and the users were asked to build their game idea on top of a built up world. Finally a wrap up session was held. The findings from this phase are presented below.

The trigger material created from the workshop turned out to be useful and the users interviewed managed to understand the material and it provided a good structure for the feedback and brainstorm session. The trigger material also gave Fatshark the possibility to not reveal any game material that was not ready. Instead those small fragmented elements of a non-existing game could be used. Moreover an important finding from this phase was that when the material presented was more finalized the users turned out to be more judging and eager to rate or test the material. In contrast when only small fragment of a non-existing game was presented the users were more eager to discuss ideas around new games and game segments.

Fatshark also gained vital learning from the workshop and the overall collaboration with Transformator. An important learning was the knowledge of how to better structure workshops and brainstorming sessions within the firm, which can help them coming up with better game ideas in the future. Also they gained experience in communicating and interviewing users. It would take a lot of practice before those sessions would pay off. Also, for Fatshark the expected results of user involvement depend on how many interviews are carried out. With few interviews it is only possible to test ideas and get validation. By using more interviews systematically, Fatshark could investigate certain groups, leading to the possibility of pinpointing and identifying new potential customers.

However, the results from the user interaction sessions aren't something that Fatshark believe they will be able to use for their future production. The discussions were very open ended and too broadly focused. The users were asked to put their own game together based on the trigger material presented to them. If Fatshark had been in charge of the interviews they would have steered the discussion towards narrower topics. For example it would be more beneficial to ask users their opinions and ideas regarding some specific aspects instead of asking them to come up with a whole game based on the trigger material.

This different ways of carrying out the interviews relates to that Fatshark and Transformator had different opinions on the project from the beginning. Transformator wanted to explore the possibility of making the user a vital co-creator of the whole game, whereas Fatshark were only interested in getting new ideas and validation from the users. They don't believe that early stage user involvement has the potential to steer their strategy, only to guide specific projects in the right direction.

Fatshark is not used to involve users at the initial stages at all as the situation is now. At most they only test their concepts and game ideas on friends and colleagues within the game industry. This is due to several reasons. One reason is that employers have a tendency of not wanting to show game material that is incomplete and not ready. Also, it is not an easy decision to start involving user in the initial steps since it is both costly and time consuming. Furthermore, it is hard to know if the results from the interviews will turn out to be valid. There is a need for lot of practice before the possibility of carrying out such interviews productively and with validity. Thus, it is only benefit in the long run and lot of experience has been gained.

In spite of that, Fatshark is enthusiastic about the possibility of involving users in the initial stages. The reason for that is the fact it is extremely risky to undertake such major investment as computer games are without knowing what the users will think. Fatshark is used to work by relying on their internal ideas. The ideal way for Fatshark to involve users in their opinion would be to test few ideas on them, where only specific fragments of the game would be presented. This would allow Fatshark to observe if the users think alike themselves with the direction of the game or if the users will generate new useful ideas that could be analysed and tweaked into the previous vision. Also validation of concepts is seen as a vital role. This has the potential to also help Fatshark practising in communicating their ideas and see if they are being understood correctly. In many cases the game isn't bad but poor communication and description of it can be the end of it. People should know what to expect. However, early stage user involvement can be hard since in most cases majority of the employers are still working on finalizing the previous project. Consequently there aren't many resources present to work on early stage involvement for the upcoming projects.

5. DISCUSSION

This chapter aims to generate an informative discussion around the cases in relation to the literature review and the research questions. Firstly user involvement in the film cases is discussed. This is followed by a discussion around user involvement in the game development case.

5.1 THE CASE OF FILM PRODUCTION WORKERS

The empirical findings presented in the previous chapter provide an answer to the first research question, how users can be involved in the early phases of creative content development. First it should be noted that in all empirical cases users are being involved, at least some way in the later stages of the development process. An example of that is the common use of test screenings to test if the users understand the message of the film and if they easily follow the storyline. However, later stage involvement in creative content development is a well-known phenomenon and has been researched substantially in previous literature (e.g. Banks and Potts, 2010; Andrejevic, 2008; Gul, 2011). In addition later stage user involvement is not of core relevance to this research topic. Hence, the following discussion will solely focus on the initial phases of film production.

How can users be involved, in terms of methods, in the earlier stages of digital creative content development processes? (RQ1)

Some examples presented in the empirical chapter, mainly found in the case of Peter and Hanna, show that certain types of user involvement can be beneficial for film producers during the initial development phases. Methods found to be used are: *user interviews*, *observation*, *user surveys*, *script reading*, *mood reels*, *idea pitching*, *crowdsourcing*, *engagement with online communities*, *lean start-up*, *design thinking*, *co-ideation and fragmented material*.

It is of importance to note that there are different approaches, goals and purposes with user involvement within the film producer cases. For instance, Peter interacts with users mainly to understand them better and to gain knowledge about what they would like to see included or excluded in a new film. Hanna however, interacts with users mainly in order to get more film material and ideas for her already established project vision. Consequently the user feedback is interpreted and incorporated in two completely different ways by the two producers. Further, Peter is highly interested in data that depicts user behaviour in order to better grasp how the market works and evolves over time. By exploring surveys, online communities, blog forums and other market information, Peter manages to identify new prosperous projects to work with in the future. In contrast Hanna is not interested in finding out what the audience want to see. It's clearly pointed out that she mainly wants to validate if her ideas are mirrored in her films and understood by the consumers. Thus, the purpose arguably has greatest impact on how the ideas and feedback from the users are incorporated and utilized by the creator and not which methods are being used. We believe that all of the above mentioned involvement methods could be of use in the early stage user involvement in film production.

One method that is interesting to discuss further in relation to theory is crowdsourcing. Both Peter and Hanna are well aware of and exploit or plan to exploit open innovation methods such as crowdfunding and online communities. Hanna has successfully funded and incorporated users' ideas in her projects using the online crowdfunding site Kickstarter, whereas Peter declared that he is looking for a suitable project to crowdfund. Even Sarah, who has no interest in involving users in the early phases of her projects, is fascinated by the potential of crowdsourcing for film production and believes it could gain momentum in the future. Hammin and Hippner (2012) argued that crowdsourcing could enhance the value creation and help firms achieve qualitatively better solutions due to inputs from non-limited resources. Ehmann (2010) presents that groups of people are better suited for creative work. In addition Amabile (1983) discusses the expertise factor of creative work. Hanna highlights the expertise factor and says that external input is risky when the people in the crowd are not known to be experts in the field concerned. Consequently crowdsourcing might not benefit creative development where task specific qualities are needed in order to carry out the task in a productive manner. In line with this discussion it's worth mentioning how Adner (2012) indicates that as long as you are aware of the risk, there are no problems. In the case of crowdsourcing in the early stages of development of creative content it should therefore be noticed that the risks of including users into the creative work is important to take into consideration. Therefore, if users are involved, the expertise factor needs to be accounted for.

Equally important to mention is the discussion around the future usage of crowdfunding in relation to film production. Hanna clearly stated that she believes in crowdfunding as a source of initial funding and especially for indie producers and their first projects. However she mentioned her distrust in full funding of major productions. She said that crowdfunding might gradually lose the attention of the users if campaigns are utilized, repeated and replicated too often. Thus the impact of crowdfunding on virality might gradually decrease as the phenomenon becomes more widely used. Further, Sarah mentioned how co-scripting with a professional script consultant had affected her creative work negatively. The main reason was lack of transparency and different visions. This implies that even if the expertise factor is reached, the creative work can still be negatively impacted by external involvement. Although this does not particularly exemplifies user involvement it's worth to mention this side of external involvement in the development of creative content. Accordingly factors regarding shared visions and information flow should also affect external involvement and in particular co-creation.

Moreover, Peter shows clear evidences of utilizing parts of lean start-up and design thinking in his engagement with users. In line with the lean start-up approach he uses quantitatively driven data analysis to define new projects and constantly utilizes validated learning by interacting with users in order to figure out what they really want to see included in films. Peter is not afraid of iterating and changing his ideas based on this validating learning. He emphasizes on testing his ideas early on and also and he is continually looking for the best business model for his situation. However one important factor of the lean start-up approach is the employment of MVPs, which cannot be found in the way Peter carries out his early stage development. We believe that further integration of MVPs in the film development in specific but also the creative industries in general could be beneficial. As mentioned in the empirical findings and in addition found in existing theory, some creative developers find it hard to show unfinished creative content, which of course make the implementation of MVPs in this development process harder. Despite this fact we still believe that presenting early stage material could be a good way of involving users, at least in some cases. For example if early stage ideas can be presented to users in accordance to MVPs, users could possibly validate and give feedback earlier on in the development process. Possibly even before any creative content has been produced. In addition we believe implementation of MVPs could also speed up the validation process. Hence MVPs in the early stage development of digital creative content can be further explored.

Arguably some producers could also benefit from implementing some kind of customized customer development model in order to more systematically involve users. As noted in the empirical findings, the producers who involve users are not always fully aware of how or why they do it. In some cases they don't even know that they are involving users. Hence, we believe that a more structured way of planning user involvement could be good for certain cases of film production. However this will need to be further investigated in future research in order to confirm and develop our hypothesis.

Furthermore, design thinking can also be traced back to the observations and interviews Peter carries out in order to gain knowledge about the wants and needs of the users for further development. Nonetheless, there is a significant difference between the creative content development and the basics of design thinking development. While design thinking builds on the assumption that users have problems that need to be solved by a new product or service, creative content development instead (according to our definition of creative content) is characterized as open-ended and thereby does not focus on any specific problem. This difference causes a contrasting purpose of the development, which could affect the overall applicability in the case of creative content development. However design thinking is an approach that to an extent could be utilized in the early stages of digital creative content development, at least in terms of methods and mind-set.

One interesting finding was that Hanna involved her users in the process of distributing her film by premiering it online on the front page of The Pirate Bay. This is a somewhat new way of involving users and in relation to how the value chain has been changing in regards of less need for independent distributors, it is an important finding. Although our main focus is how user involvement can affect the creative content itself and not the distribution of it, it is still of relevance to discuss this topic further. By releasing the project on the highly visited webpage a lot of people got access to the product. Even though Hanna did not ask the users to do anything, actions were seen around Europe. This phenomenon could be referred to as a special segment

of crowdsourcing. According to the literature crowdsourcing requires lower level of involvement than open innovation and co-creation. In line even though Hanna did not directly involve the users the creative content (her film) reached a viral success. This indirect user integration could therefore be good to bear in mind for creators of creative content. Additionally Hanna also grew a fan base, which could constructively be utilized in next projects.

Finally, both Hanna and Peter have that in common that they don't think they use systematic methods to involve users. This is evident when they both refuse that they use any user involvement methods, although they certainly do so. Perhaps they do so because don't want people to minimize their role as a creative content worker, by admitting users actually helped a lot with shaping the final outcome. Another reason could be that they are fully focused on their development processes and do not fully analyse the ways in which they carry out the work. However it could be important to actually realize which methodologies are used, in order to reflect over and enhance the development processes for future projects.

To summarize, user involvement in early stages of the creative content development process can benefit the creative worker a lot. Users can be included by the use of various methods. Those methods are often not so formally structured and users tend to have an incremental role in the creative content development. Finally, some aspects of known user involvement approaches for innovation management such as *lean start-up* and *design thinking* are used as well. This points towards that creative workers could benefit from the learning more about the mind-sets and approaches of *lean start-up* and *design thinking*.

Why should or shouldn't users be involved and what kind of involvement is beneficial for the creative work? (RQ2)

To answer the second research question, why firms should or shouldn't involve users, it is necessary to first analyse and discuss the findings from the cases more thoroughly. From what's presented in the previous chapter it is obvious that each of the film producers use different approaches and has different opinions of user involvement and have various motives that drive their work. With these differences in mind, it's possible to categorize the cases in a 2 x 2 matrix, depicted below (fig. 5.1). The x-axis relates to whether or not the film producers have some personal agenda that they want to convey with their creative work. It concerns the overall motives and purpose of the planned creative work. The left side of the matrix represents the category of producers who aim to express artistic personal message after own conviction regardless of what opinions user have about it. The right side on the other hand represent the category of those who are not as personally attached to the outcome of their creative work, but rather create something based on restriction or market preferences. For this group the opinion of user or client matters a lot. The yaxis shows the degree of user involvement during the early stages of creative content development. The upper row represents cases where user involvement is comparatively high in the early stages whereas the lower row shows cases where users are not at all or only to a small extent involved in the early development process. The following paragraphs will explain where each film producer belongs in the matrix and argue for the reasons behind it.



Fig. 5.1. 2x2 Matrix of the film producers and their position.

As can been seen in (fig 5.1) Sarah is located in the bottom left corner, meaning that she doesn't involve users much in the early stages and that she has some personal agenda in her line of work. Sarah only involves users in the final stages of the development process by the use of test screenings. She does not want to involve users or any other external stakeholders in the beginning since her experience of external involvement in the initial phases has lead her to "hit a wall in the creative process, because suddenly you were writing for someone else.". The whole experience of outside feedback only created confusion since there wasn't any common shared vision for the message of the script. This aligns with Harrison & Rouse (2015), claiming that creative workers dislike having their work reviewed early on and that external feedback providers are not even able to comprehend their ideas and direction. This has the potential to reduce the creativity of the creative worker, which was exactly what happened to Sarah. However, Hanna and Peter who have experience of involving users would arguable also have lost their direction phasing a similar situation, dealing with changing the overall direction of the project. Sarah could most likely benefit from simple user involvement. However it seems as if she doesn't do it simply because she has gotten used to work without user input, and it has worked out well for her so far. It could also be a matter of principle, because Sarah seems to emphasize that she or the director need to come up with the material otherwise their role as a creative workers might be jeopardised.

By looking at the second parameter, Sarah describes that she has always some political agenda or message to convey to the users. The use of test-screenings is merely to test if the message is understandable and gets through to the user. Sarah wouldn't care if individuals didn't like her movie as long as she delivers and satisfies her intrinsic motivations and personal agenda. According to our definition of creativity intrinsic motivation is a key driver of creativity, which correlates with Sarah's tendency to use her personal motivation factors as drivers. She really doesn't care for making films just because users have something specific in mind they would like to see. In fact Sarah compares this to "asking the kids in school, what do you want to learn". She supposes she is the one who should be fully in charge and control of the creative content she produces. This also relates to the fact that Sarah doesn't even adjust her work to the rules of existing governmental funds in order to increase her likelihood of getting funding. She would rather try her best to convince funding units that her material deserves to be funded than to change the script.

Next let's explain Hanna's position in the matrix. Like Sarah, Hanna has a strong personal agenda in her filmmaking and doesn't believe in the way of making films that everyone wants to see. She explained that for her filmmaking was mostly about identifying relevant topics that could solve problems through the format of a film. Thus Hanna clearly belongs to the left side of the matrix (see fig. 5.1). However, in spite of having similar intrinsic motivations and purpose for creative content development she has completely different ways of including users in her work. In contrast to Sarah, Hanna, like previously explained, involves users at the early stage of development. Hanna emphasized that she only involves users to get inspiration and spur new ideas and it is important to not completely loose the initial vision. Unlike

Sarah, this user involvement has helped increasing her creativity. This is line with the findings of Harrison and Rouse (2015) who believe user involvement can help creativity in the initial phases of development. However it's of importance to notice the difference in the nature of Hanna's projects, compared to Sarah. Hanna never involves users to shape or change the whole storyline or vision of her projects, but rather to provide fragmented material, like she did with the collection of short grandmother stories for her upcoming project. Hanna emphasizes that she always need to work with the creative development herself, so perhaps she is not that unlike Sarah.

So far the cases that fall into the left side of the matrix have been explained. Next let's explore why Peter Hiltunen is categorized in the top right corner (see fig. 5.1). Like Hanna, Peter involves users in the early phases, as previously described in the beginning of this chapter. However he has a different mind-set compared to both Sarah and Hanna regarding the personal agenda or purpose of his creative work. Peter roughly follows market-pull orientation since he adjusts his work according to what the market calls for in each case. He tries to produce material that users want to see but not as much according to what he wants to say. This can be best seen by the following quote: "It is expensive to start and letting ideas grow too far and you haven't done your research of it, because in the end the market will tell you, this will work or not work" (P. Hiltunen, personal communication, May 8, 2015). Identifying best available business models and generate revenues seems to be the main task for Peter in his line of work. Thus Peter is categorized in the right side of the matrix.

Finally, Erica is categorized in the bottom right corner of the matrix (see fig. 5.1). First of all it should be remarked that the case of Erica differs from the other three cases in that way that she is working for an advertising consultancy firm, not a film production company. However, as previously mentioned, she has her background in film production and produces film material although it is different from producing feature films. Erica has not engaged with the users in the projects she has been working with. The main reason for that is restriction in time and budget that does not allow for user interaction. Erica and her firm have to deliver products to their customer in relatively short time. If there was time and money present, Erica believes she would in fact involve users. However those kinds of involvement would merely be to test and get feedback on their work, but not to help in their creative process. Similar to Peter, Erica is very revenue driven in her line of work. The main task is to secure getting projects, even if that means adjusting her initial creative idea. In the end they are always producing material for their customers but not themselves, which plays a vital role. Thus Erica does not have any personal agenda or message she wants to convey with her creative content and is categorized in the bottom right corner. Certainly she always aims to create something new with her film material, but it cannot be denied that this case differs from the others. However, this does not matter so much since the aim is not to compare the cases with each other but explore the development of creative content in different situations for film producers.

As can been seen above, all the cases differ from each other and provide scenarios where user involvement is or is not applicable. Thus it can help answering the second research question that asks why firms should or should not involve users in the early stages of the creative content development. It has been observed that user involvement is in most cases only beneficial when it is of an incremental nature. Users can be of great help by validating early ideas and concepts as well as helping with co-ideation and providing elements and fragmented material that don't change the overall direction of the project. Thus the creative worker should be careful by involving the user too much when the aim is to create something radical. Since, creativity is radical in its nature and creative content development normally has at least some unique aspects it shouldn't come as a surprise that users are not being involved as co-creators and it perfectly aligns with prior theory such as the one seen with the case of the development of the Nintendo Wii console.

Also, the users normally don't have the same creative skills (expertise) as the film producers, which is one of the crucial factors for developing creative content. Hanna for example pointed out that it could be risky to outsource major tasks to users, for example finding or creating music samples for parts of films because users will probably lack the expert skills. The findings points towards that it is hard to co-creative creative content when the users have a major role in providing material and shape the vision. In most cases users don't even have enough understanding of the creative workers vision to contribute valuable input. This is in aligning with what theory has told us (Harrison & Rouse, 2015).

There could of course be exceptions, but if the creative workers want to involve users in a participative manner, the crucial factors are to first make sure they have the relevant skills and secondly to make sure they share the same vision as the creative worker and has full understanding of the project. In fact Sarah mentioned the second point, as the most important factor in collaboration of creative content, since skills don't matter at all if shared vision between co-workers has not been established. This should be true for user co-creation as well. One other finding is that creative workers should not let personal feeling be in charge when getting feedback. It is crucial not to be too attached to the content or the user involvement will possibly create frustration and reduction of creativity.

To summarize, the effect of early stage user involvement in creative content development depends on the type and purpose of project, as well as what kind of user involvement is utilized. In most cases users shouldn't be involved as a source of radical ideas or given a major task, at least not without the assurance that they have the creative capabilities and shared vision. The creative worker should never let user involvement lead to loss of the overall vision of the project. However, users involvement seem to be beneficial in most cases where they are solely used for validating learning, providing feedback, spurring new ideas and providing fragment material to fit in the whole creative content vision. Thus the involvement is mostly of an *informative* or *consultative* nature. Participative involvement was only found to be useful in rare cases and then only up to certain degree and with limitations. Users can thus possibly help actively with co-ideation in the initial stages of a project as long as the creative worker still has full control over the vision.

Summary of research questions in film production cases

Figure 5.2. summarizes the findings from the two research questions previously discussed. Users were found to have both active and passive role, when being involved in the creative content development process. However, the involvement is most beneficial for the creative work when it is of informative or consultative nature. Participate involvement is only beneficial in rare cases. Finally, for a better overview, the figure summarizes which methods are being used by which developer.

According to the literature passive user involvement is of an informative nature since there is no interaction taking place between the developer and users. As shown in figure 5.2. three methods found in the cases are solely of an informative nature. Interestingly, those methods were only used by Peter, whereas Hanna utilized methods with higher level of user and developer interaction (see Figure 5.2). As can be seen, many methods identified were used both in an informative and consultative way. Good example of that would be the different ways Peter and Hanna engage with online communities. Peter follows discussions and blogs online in an informative manner to identify market trends, without actively engage with the users. However, it should be noted that Peter also involves users in a consultative way in other cases. On the other hand, Hanna commonly engages with online communities in an active way, where she encourages users to comment and give feedback on ideas she posts online. Also, it can be seen that four methods are solely being used in a consultative way, where users have the role as testers in an active interaction. Those methods were only found to be used by Hanna or within the industry by other actors separate from the cases. In fact, Hanna does not involve users in an informative way at all since she always wants to tell her own stories instead of identifying market trends in an informative way.

Further, participative involvement was not found to be used to large extent. The only example found was when Hanna included users to provide material in form of short stories based on their life experiences. However this involvement was only participative up to certain degree and with limitation since the users had no real decision making powers of the final outcome. Hanna used this output, to a large extent, as source of information and inspiration to further develop her own story. Thus the co-ideation method can be categorised as both informative as well as participative.

Finally, it can be seen that Lean Startup and Design Thinking are labelled differently from other methods in figure 5.2. This is to emphasize that Lean Startup and Design Thinking are higher level approaches, which can involve many types of methods. In the cases discussed, traces of those approaches were found to be used but only in an informative or consultative manner. Obviously, in other cases they are used in a highly participative manner, for example, where co-creational relations are beneficial. To make the overview easier, the higher level approaches were put in the same column as the methods.



Fig. 5.2. Role of user, involvement type, methods and developer.

5.2 THE CASE OF THE GAME DEVELOPMENT

The case of the game development studio Fatshark allows for an interesting discussion in relation to the thesis topic. The results from the user involvement phase (phase 3) in the collaboration project of Fatshark and Transformator is very much in align with the findings from the film producers cases presented above. The users can validate specific components or serve as a good source of new ideas, which has the potential to spur creativity in the game developer, leading to generation of more ideas. Though, one can speculate that this will only work when the developers will take their personal feelings away from interaction, since theory as well as empirical data from the Fatshark case has shown that creative workers feel insecure showing incomplete material to users and that creativity could actually decrease from an early on feedback if that is the case (R. Blomberg, personal communication, May 29, 2015; Harrison & Rouse, 2015). In fact, this is one of the reasons Rikard mentioned why Fatshark hasn't been involving users in the initial phases so far. In relation to that, the trigger material created during the Hack Day workshop at Fatshark and presented to users proved to be beneficial to reduce the feeling for Fatshark employers that they were revealing incomplete material that had been working on. This can be related to the MVPs used in the Lean Start-up approach. Using the minimal amount of information and content

to illustrate the ideas seem to be a good way also in the game development case. Also, the importance of visualising ideas and not future products was evident. Consequently, the use of MVP in the co-ideation process of game development is probably beneficial. Also, the trigger material cards gave the sessions a good structure, pointing towards that with more experience it can become a good method for involving user.

However, users were not found to provide fruitful data when trying to come up with major game parts by themselves. One reason is that they arguably don't have the same expertise skill, which in the literature review was named as one of three vital components of creativity, as the professional game developers. This is also supported by insights the authors of this thesis got by participating in the Hack Day workshop. It was evident in all phases of the workshop that we were nowhere close coming up with ideas or game components of same standard as the employers of Fatshark. The differences in the expertise level and thus the usefulness of the fragment material were clearly evident during the workshop. Furthermore, even if some users possess the needed expertise, there still would be a need to establish a common vision between the users and the creative content developer.

Another interesting aspect from this case is the fact that the two collaborating firms, Fatshark and Transformator have completely different backgrounds which might have led to the different outcome expectancies of the overall project, highlighted by Rikard. Employers at Transformator are used to interact with customers and users in a qualitative way throughout the whole development process of new service design. Their intentions with this project was partially to investigate the possibility of extending the methods they traditionally use, to involve user in the game development process as a co-creators. However, the results from the project, as previously mentioned, were that users are more suitable to contribute as a source of new ideas rather than coming up with big components of the game. Transformator were arguably too blinded by their background and experience to realise that such co-creation was not likely to take place. This can be noticed for example by looking at one of the findings from the pre study phase, where Transformator concluded that users generally don't want to take the artistic role away from the creative game developer in the creation of game material. Their hypothesis that the user could actually serve as potential co-creators of gaming content seems somewhat contrasting to this finding. However, it should also be considered that Transformator knew that users normally don't serve as co-creator in creative content development and only wanted to explore this previously unexplored field with their hypothesis.

The fact that Fatshark were never really interested in including the users as a cocreator is also interesting. Rikard described that the optimal way for Fatshark would only to be involve users as validators and source of new ideas. Despite this fact, they still participated in investigating if users could serve more as co-creators. Fatshark seem to have previously fixed mind-set of the outcome of the user involvement phase. Perhaps users can be involved in more qualitative ways than they are being traditionally used. Like Rikard rightfully pointed out, there is always a need to repeat new procedures several times before they have the potential to become beneficial in the long run. Perhaps Fatshark are just not ready or capable of carrying out such intense user involvement procedures. The logical way would be to first start using the users as a source of new ideas and validation. User interviews are both timeconsuming and costly, especially if the goal is to collect qualitative data and use them as co-creators. Thus it shouldn't come as a surprise that Fatshark are not yet focusing on the possibility of looking at users as co-creators.

In summary, similarly to the film cases, it could be beneficial to involve users for validation or as sources of information to spur further creative development also in game development projects. However it's important to take the personal feelings into account when exchanging material. Insecurity about non-finished products is a possibility. The trigger material concept proved to be a helping solution for this issue. In line with the lean start-up methodology MVP like fragments of product-ideas constructively help out in idea generation sessions. It's also of importance to see how the co-creation in line with the film cases was not a good way to involve users in the early stages of game development. Likewise, in this case, the expertise factors of creative content development were the main reason. Hence, co-creation is not yet a focus of Fatshark. However, if the process is repeated and further developed, the focus might be able change in the future. Finally, the common vision was discussed. If the users should be involved in the development in the future it's of great importance to successfully share a common vision with the users and transparently show the goals of the involvement.

6. CONCLUSIONS

In this chapter, the answer to the two research questions is summarised based on the previous chapter. The purpose of this research project has been to analyse and discuss how users can be involved in the initial phases of creative content development and what role the users can have to benefit the creative work. Hopefully, the conclusions can inspire researchers and creative workers to further develop this area of research.

RQ1: How can users be involved, in terms of methods, in the earlier stages of the development process of creative content?

The answer to the first research question is based on the findings from the film producer cases, the game development case and the literature review. From the data gained from the film producers it's evident that users are being involved in various ways all over the development process. In the early stages of the development, following ways to include users were identified: user interviews, observation, user surveys, script reading, mood reels, idea pitching, crowdsourcing, engagement with online communities, lean start-up, design thinking, co-ideation and fragmented material. Further, the game development case showed examples of more ways of user involvement in the early stages. It's concluded that user workshops mainly focusing on qualitative interviews is a way to involve users early on in this field of operation. It's important to point out that all of the methods above mentioned are just examples of possible ways to include users in the early stages of creative content development. The list is based on few case studies and it is therefore not exhaustive. More ways might be possible to add, and further research within this field is arguably necessary in order to fully understand the topic. Finally, the methods identified are all of a simple nature and not used in a structured manner. Thus, further research could explore if creative content developers can benefit from involving users in a systematic and structured way, for example by knowingly appling lean startup and/or design thinking approaches.

RQ2: Why should or shouldn't users be involved and what kind of involvement is beneficial for the creative work?

The answer to this question is also based on the findings from the cases and the literature review and it's divided into two parts. The first part is about why users should or shouldn't be involved. Thereafter the kind of user involvement that benefits the creative work is presented.

Evidence show that user involvement is only beneficial in some cases. Early stage user involvement can have a beneficial impact on creative work when users are utilized for validating learning, providing feedback, spurring new ideas as "*co-ideators*" or providing fragmented material to fit in previously established vision. A substantial aspect to all kind of early stage involvement is that all the material presented to the users has to be constructed in a way, in which the users interpret it as early stage ideas or content. This is both to get feedback on the actual ideas and not a future product and also to make sure the creative content developer doesn't feel being judged for his or her final product when the goal is merely to test unfinished product.

Furthermore, numbers of aspects to take into consideration when involving users at early stages were identified. The first one is that radical ideas and innovations are not benefitted by user involvement. In contrast it's noticeable that radical ideas usually prosper from innovation pushing approaches. Even though, creative industries in general are considered to be a flourishing ground for radical ideas, user involvement does not thrive radical content development in the those industries. Therefore, it is important to analyse the reason behind involving users in every specific development case. Another aspect to take into account are the risks. Due to the fact that task specific expertise is needed in many parts of the development of creative content there could be risks of involving users for the wrong purposes or tasks. Hence, it's of importance to be aware of those dependency risks. Lastly, high level of user cocreation wasn't found to be beneficial in the creative content development process, whereas it was found to have negative impact on the creative work in some cases. For the early stage involvement of users, co-creation is therefore not recommended. Thus, the kind of involvement that is beneficial for the creative work are mostly informative user involvement and consultative user involvement.

Finally, this thesis research has contributed by exploring benefits of user involvement for creative content on a high level and related it to existing innovation management theory in a speculative way. We hope by doing so we have managed to spur interest in a topic that needs more in depth research. A further research is needed where more hands on methods and tools can be proposed which could act as a guideline for creative workers to follow through the initial development stages.

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APPENDIX A - Interview Guide – Film production cases Interview Guide – Film production cases

Start by giving a short introduction to our project and why we are doing this interview. Ok to record?

Interview questions. (Semi structured) A brief introduction to who you are Work Role in film production Background? What does the company do? Mainly Do you do more things? Can you tell us a bit more about the industry (creative)? Current or recent projects you worked on Can you tell us a bit more about them? Do you involve users at any point in your development? User involvement in projects? In what phase of a project do you use user involvement? Please give some examples of this? Do you use any specific methods for involving users? Can you give any example? How often do you involve users in creative projects? Always, never, a few times?

FOCUS

Specific project with a lot of user involvement? Case? Background of project (size?) Stakeholders How/when where users involved? (Methods, timeline?) Results - What was good/bad? In what way did it/didn't benefit the project to involve users? What could be done differently (improvements to next project)

Other relevant contacts we can contact? Number/Mail?

Main questions to answer with this case: We need to know about the specific industry How do they involve users? (Methods) - How could it be done?