Crowd Intelligence in Independent Film Productions

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ABSTRACT
This paper is devoted to the challenges of independent film production in raising funding. It gives a brief overview of crowdfunding and crowdsourcing methods as one possibility to improvement funding, as well as the process in acquiring funding. We attempt to suggest to improve the traditional film production tecniques and process with crowd intelligence methods. We further describe the appropriate ways of its implementation. The paper reveals the main similarities and differences of the methods as well as it pinpoints to the advantages and disadvantages of their implementation in different cases.

Categories and Subject Descriptors
K.6.1 [**Project and People Management**]: Management techniques

General Terms
Management

Keywords
Independent movie production, crowd intelligence, crowd funding, crowdsourcing

1. INTRODUCTION
One of the biggest technological innovations in media industry of the last century was the invention and evolution of motion picture cameras. Since then, films appear to be one of the most popular forms of media. They are considered to be the cultural artefacts of the new generation; apart from entertaining and reflecting the current issues of the society, films are a powerful educational and even indoctrination tool. However, before every one-hour-film there is a lengthy process of production. In some cases even longer than one year. Despite film technology evolved rapidly, the

production process became more complex. Some argue that the production process as such did not change, and the main goal is to tell a story. However, many new technologies required new specialized crafts in a production. Social media is one of the new trends, and crowd funding and sourcing did not make hold in film productions.

One prime example of crowd based production – especially optimizing the production process through social media has been demonstrated by "The Iron Sky", 2012 (Directed by Timo Vuorensola. Produced by Blind Spot Pictures Oy, Finland. For further information please visit: http://www.ironsky.net/). Part of the budget was collected by crowd-investments, the pre-production of the feature film was crowd sourced to the online community, and the interactive production/post-production was based on the talents of the crowd. Crowd souring is the process of soliciting small contributions from a large number of participants in order to obtain a significant result with the reduction of expenses. [1] Crowd funding is financial crowd sourcing: the use of small amounts of capital from a large number of individuals to finance a new business venture. [2]. These are the methods to be widely implemented in the production of independent ("indie") films – feature films being produced and distributed by independent entertainment companies, outside the major studios. [3]

The reasons of this research are continuous discussions concerning the experience of «The Iron Sky» and the possibilities of the implementation of crowdsourcing method in future, along with the lack of theoretical material covering this topic.

The successful examples of currently existing crowd sourcing and crowd funding platforms are:

Kickstarter (http://www.kickstarter.com/) targets artists and entrepreneurs who need funding to bring their creative projects to life.

Crowdrise (http://www.crowdrise.com/) allows you to support charities and volunteer organizations by voting for their projects on the site, donating money, or helping them fundraise.

Wreckamovie (http://www.wreckamovie.com) is a collaborative film production platform to allow individuals to start a film production and build a community around the idea.

Related Works

There is sufficient literature about the general topic of film production process [3] as well as the independent film production guides [19] [20]

In spite of the high popularity and prospects of the crowd intelligence use in particular, not much of the information is being standardized and processed into the research works. However, we would like to highlight the influence of [21] on this paper, giving a clear idea of the possible ways of interaction and collaborating tools for the film production.

Another useful source of inspiration is Brabham [22]. He surveys the major issues in crowdsourcing, including crowd motivation, the misconception of the amateur participant and considers the future of crowdsourcing in both theory and practice, describing its possible roles in journalism, governance, national security, and science and health.

2. BRIEF DESCRIPTION OF FILM PRODUCTION PROCESS

A film production process is generally divided into four steps: development, pre- production, production and post-production. [3]

2.1 Development

On the first step the idea of a potential film is created either by a writer having a screenplay to suggest to the producer, or by a producer himself searching for a screenplay. In both cases screenplay appears to be a starting point since all the calculations concerning film budget and filming time are based on it. As the budget is arranged, the crew hiring process is started by a director. Therefore, on the first step three positions are demanded: director, producer and screenwriter. [4] It is important to indicate that in some cases these positions might be filled by one person.

2.2 Pre-production

The second step is pre-production, when the actual arrangements concerning the film shooting are made. The locations for filming are arranged by the director, and the cast and crew are agreed, while the script development continues. The storyboard, a visualized shot sequence, is created in order to arrange the shooting process effectively in terms of budget, time and effort.

2.3 Production

Principal photography is the actual shooting process. At this stage, more technical support is required and thus more crew members are involved: a camera operator, light managers, a sound operator and various assistants. All of these roles are usually vital for the process. However, the production office is empowered to create any other positions which would fulfill any particular requirement of the case.

2.4 Post-Production

Post-production involves all the technical action connected with the creation and edition of a full meter film using the shots provided by principal photography, sound effects and special effects. As the last stage of post-production comes the distribution of the end product. This includes showing the film to a local or worldwide audience along with advertising via different channels.

An advertising channel is any outlet used by a production company to advertise their products. The amount of channels available to marketers has grown enormously with the advent of internet technology. As a result, offline advertising channels, such as TV, radio or outdoor advertising, are now being replaced with technology-based advertising. In case of film production, social media advertisement appears to be one of the most effective measures. [5]

3. TRADITIONAL AND INDEPENDENT FILM PRODUCTION PROCESS

Generally the filming process takes place within major film studios. A major film studio is a production and distribution companies whose subsidiaries command a significant share of the region's box office. However, during the last decades independent filmmaking has become an alternative to the traditional way of film production.

Independent filmmaking is a term referring to the process of a film creation outside a major film studio. This results in lower budget costs and the possibility of production process transformation according to the artistic vision of the filmmaker [4]. Thus, not only additional positions in the crew may be required, but the whole process itself is often changed in order to fulfill the production needs. An independent film when obtained a required funding and distribution might compete with major studio films.

A major disadvantage of being an independent producer is the lack of financial resources since one of the most common ways of funding within a film studio is its own budget. Industry financing, which includes studio development production deals, independent distributor funding as well as talent agency support, is another possible way of obtaining a budget, but all of these ways lead to certain obligations and restrictions of the process [3]. In addition to this, every step of the process has to be reported and will be evaluated. Generally, these reasons stimulate the filmmakers to gain more independence. The problem of low budgets encourage them to search for an additional source of financing the production.

3.1 Crowd Funding as an alternative to traditional investments

Crowd funding, or crowd finance, is another type of distributed problem solving. According to Investopedia [6], crowd funding is "the use of small amounts of capital from a large number of individuals to finance a new business venture." Crowdfunding makes use of the easy accessibility of vast networks of friends, family and colleagues through social media. This method is a great opportunity to increase entrepreneurship by expanding the pool of investors from whom funds can be. Generally, this is a broadened concept of personal investments and individual distributor funding.

One of the first crowdfunding method implementations took place in 17th century to finance book printing. This business model was called Pränumeration: an additional benefit in a form of mentioning a name on the first page was offered to donors. [7]

In 2006, a band SellaBand transferred this model to Internet by building a specific platform where bands could start raising funds from their supporters to record an album. [8]

In film industry crowdfunding, as well as croudsourcing, was mostly used for the creation of short films and documentaries. In this field, crowd funding was pioneered by film-maker Franny

Armstrong who had raised £1.5m through the web for her 2009 film The Age of Stupid on the topic of climate change [9].

The major difference between crowdfinding and traditional financing is the increased number of investors, which leads to the decrease of an average donation size, and a drop in the filmmakers' dependency on the investors' terms and conditions. If organized and led properly, the 'crowd' does not appear to be requiring and mostly tend to support the director's concepts. However, it might be a long process of the audience preparation. An example of 'The Iron Sky' (2012 Finnish-German-Australian motion picture directed by Timo Vuorensola) clearly shows that the result of 300,000 € obtained via crowdfunding with a minimum donation of 1€, and 900,000 € via crowd investment with investments from 1,000 €, was achieved only after almost seven years of tight collaboration with the community of fans [10].
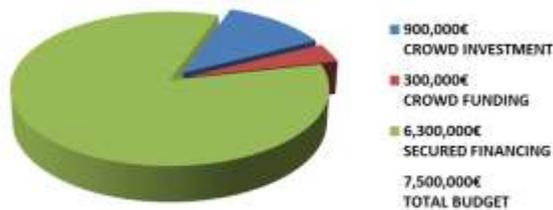

Figure 1. [10] Iron Sky budget distribution, 2012.

Timo Vuorensola is a Finnish movie director, whose name is well-known in connection to Star Wreck: In the Pirkinning (2005) and Iron Sky (2012) – two motion pictures of professional quality and feature length, produced with a relatively small budget. [11] His first film was Star Wreck: In the Pirkinning – a fan-made sci-fi parody, which was created with a budget of about €15,000 [11] and published both as a free download and a commercial DVD and reached over eight million viewers. This was the first strategically important step of building a worldwide community of fans ready to invest in further projects. If Timo would have chosen the traditional way of monetizing the film, the chance of active interaction of the audience would probably have been much smaller, but by sacrificing the potential profit of first film he obtained the devoted community, connected by a common interest in the topic. This way, when the idea of Iron Sky appeared, not only crowd-investment was possible, but also crowdfunding from volunteers via merchandise sales and preorders. Particularly, the collaborative filmmaking platform called Wreck a Movie was created for the film crew to have a direct connection with their audience willing to interact with movie projects.

Thus, in one of the interviews [12] Timo Vuorensola reveals three most common mistakes of crowdfunding, which he managed to avoid. The first one is simply not to pay enough attention to the audience. Then, a full and interesting presentation of your project is one of the most important steps, where the crew should not fail. Since the audience generally does not know much about the film production process and does not have any particular criteria for project evaluation, it is essential to give them the full picture of what they are supposed to invest in, otherwise . Finally, the simplest, but very common mistake is to overestimate the result.

Nowadays crowdfunding is a method to obtain a part of the budget? Not the whole. In order to get a certain amount of money from public, it is necessary to prove that you are able to make this money work. Thus, starting with some sum and using it effectively, you can gradually increase the obtained amount.

It appears to be difficult to create the complete budget using only a crowdfunding tool. However, since the required sum of money has to be collected before the principal photography is started, all the process of attracting the crowd investors is to be started on the pre-production phase or even earlier. Thus, at least part of the decisions concerning the film budget are caused not by the ambitions of film company managers, but by an audience request, expressed in a tangible form of investment. This is a strong message to the director that his ideas are able to make the audience interested and even involved in preproduction. In addition to this, the crowd intelligence involvement creates a high possibility of the successful distribution since a significant part of the audience would be already willing at least to see a movie they or their friends have put some effort into.

The only difficulty which should be taken into account is legal issues, since in some countries, such as Finland, direct donations to the filmmaking process are not actually allowed. However, the solution already exists: the crowdfunding process may be organized in a form of barter: in exchange for the donations people can get some nominal reward in a tangible form of some souvenir, such as a fan T-shirt, a cup or a picture. In this case, they are buying a certain product with the aim of supporting the production.

To sum up, if the basis of the loyal community of people supporting the filmmakers' idea already exists, crowdfunding and crowd investment are perfect tools to enhance the interest of the audience and improve the budget. In addition to this, crowdfunding gives a director more freedom of planning the filming process in comparison with traditional investment methods.

3.2 Crowdsourcing in film production

The support of the audience might be expressed not only in financial equivalent, but also in real action. Here the concept of crowdsourcing comes to life.

'Crowdsourcing' as a term comes from the combination of the words 'crowd' and 'outsourcing' since in this case a certain amount of work is outsourced to a crowd of workers [13]. Since preproduction and developing the script might require a significant amount of special knowledge or idea generations, which leads to the creation of extra positions with a fixed salary, audience involvement has the following advantages:

1. Wide range of special knowledge and skills

2. Voluntary nature, no salary

3. Deep involvement and productivity due to personal motivation

4. Fresh perspective from the side [14]

By canvassing a large number of motivated people for their participation, the idea generation quality might be enhanced significantly without extra costs [15]. Since all the participants are supposed to have different backgrounds and different specializations, their input is expected to be diversified. The input might include not only a deep knowledge of some particular aspect, but also the presence of the useful connections which

might help the production or distribution. The independent movie distribution process is mostly dependent on the personal connections, which may help to obtain information about various festivals or competitions. Participation in such events might raise the audience awareness of the film and the film's popularity. Even for this purpose crowdsourcing tasks to the community is very helpful: information about the potential movie is spread among the community and members' friends incredibly quickly with the help of different social media channels.

Another way in which the social media might be helpful is to attract attention to the project using public pages or pages of celebrities. The example of the TV show «Veronica Mars» proofs this idea. Its creators have launched a crowdfunding project on kickstarter.com which allowed them to pledge $2m USD to fund the feature-length movie, and received donations just after a few Twitter posts made by leading actress, Kristen Bell [14]. This is an accomplished example of how can an existing community of fans be quickly organized. Therefore, crowdsourcing and crowdfunding as marketing ploys offer a good possibility to attract the audience's attention to the production and then to the film itself.

Popularity is also a key to the bigger amount of crowd investments: when Zach Braff announced a crowdfunding campaign for his upcoming movie Wish I Was Here, by the end of the first day of the campaign he had raised more than $1 million toward his $2 million goal. [16]

Technical issues might also be solved using crowdsourcing technology. A large number of small mechanical tasks, such as proofreading, corrections and capturing images, might be performed not by a professional worker in a studio, but by a regular person. [17]

Any effort of the crowd should not be gratuitous. Nowadays the system of crowd reward is mainly based on small bonuses and souvenirs. Since the experience of history shows that people tend to require increasingly bigger reward for their effort in a long-term besides the pure motivation, in the future an elaborate reward system should be provided to keep the people involved. It might concern meetings with actors or celebrities or tickets to special occasions. In other words, a wide range of possibly crowdsourced tasks enables the contributor to feel deeply involved into the film production process and a special community. This is likely to result in the participants being more loyal and more productive since their motivation would be raised not only by a reward, but also by an aspiration to be a part of a closed elite society.

CONCLUSION

The implementation of crowd activity for independent movie production can be much more effective than the traditional way of production in terms of efficiency and costs.

Firstly, crowd investment and crowdfunding are powerful tools for raising funds. However, it is important to understand that at the beginning they can provide a part of the film budget, but nowadays no successful example of creating a feature film by not a well-known public person only with crowd donations is known. On the other hand, when people having their devoted audience come to action, they can reach the goal of full covering of the expenses: the examples listed above [16] give a proof of that.

Secondly, crowd sourcing certain tasks appears to be a successful way to reduce the personnel costs by, for example, avoiding the expenses on the full-time experts salaries when a motivated community has some specialists in the field, or is able to conduct a research by themselves. Outsourcing some technical tasks like editing may allow to reduce the number of required technical crew as well.

Moreover, since the audience tend to become increasingly requiring, crowdsourcing might be implemented as a good marketing tool to attract the attention to an upcoming movie.

Finally, while being involved in the process, the audience incurs a part of responsibility for the quality of the end product and might influence it – here comes to life the concept of corporate social responsibility, which is about connecting with consumers and the issues that matter to them. [18]

Crowd intelligence is a powerful tool which can bring significant benefits to the film production process; however, for obtaining the best possible results, a step-by-step strategy of working with the audience should be implemented.

Further research in the area of crowd intelligence and crowd effort might boost the development of the independent filming.

4. ACKNOWLEDGMENTS

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