

Title : Crowdfunding in the Korean Film Industry : The Mediating Role of Perceived Risk and Perceived Benefit

ABSTRACT. Consumers' role in the markets has changed a lot from being the mere source of a company's profit to co-creators of value. They can be an investor for creative projects with crowd. This is called crowd funding. But crowd-funding is a new phenomena and it is not fully understood from marketing bases. This paper proposes the relationship between individual risk taking decision making and how perceived benefits and perceived risks would mediate the relationship. Risk taking tasks were presented in crowd funding situations. To explain antecedents of crowd-funding, we employ an approach using structural equation modeling on crowd-funding initiatives. Results indicate that crowd-funding supporters give importance only to the perceived source risk in offering their support. It also implies that perceived benefit would be more crucial than perceived risk in risk-taking decision making.

Key words : crowdfunding, perceived risk, perceived benefit, Co-creation, Consumer response

Introduction and Objectives

While consumers have always had a special place in marketing studies, their role in the markets has changed a lot over time with environmental change (Ordanini, Miceli, Pizzetti, Parasuraman, 2011). Basically consumers make buying decisions every day. This means that consumers are mere target for company's sustainability. Then consumers became a key information source in the "market orientation" literature which defines the business in terms of satisfying basic customer needs (Kohli and Jaworski, 1990). Consumers have become smarter with more market knowledge than in the past, therefore some service marketing literature now recognizes an enlarged role for consumers as co-producers or co-creators of value (Vargo and Lusch, 2004). Over the years, this trends has shown an enrichment and empowerment of the role assigned to consumers.

These days the consumer's role has enlarged further to include investment support. This can be called crowd-funding, which is an aggregate support effort by people who network usually via the Internet. Furthermore, there is a movement to regulate this supporting behavior. For example, in 2012, an act was passed in the USA affected consumers' role in marketing. The Jumpstart Our Business Startups Act, known as the JOBS Act enacted in April 2012. It is expected to revolutionize the crowd-funding industry. Despite the fact that crowd funding can provide benefits to and enlarge consumers role, there is still a large group of consumers who refuse to engage in this kind of support due to its risk.

This idea that consumers decide to pay for producing and promoting a product and bear the risk associated with that decision, represents a further step in the evolution of consumers' roles (Ordanini, Miceli, Pizzetti, Parasuraman, 2011). But crowd-funding is a new phenomenon, so it is not fully understood. A question is whether the decisions that consumers make are financial in nature, prosocial in nature, or both. On the one hand the decision to support is financial. They are usually guaranteed some benefit as a reward for investment. On the other hand, sometimes they can donate money without receiving anything for a small amount of money. Therefore we need to find out which antecedents affect the engagement of consumers as investors, and what motivate or depress consumers' investment.

The perceived risk paradigm that states that consumers act to minimize any expected negative utility associated with a decision may be useful in explaining crowd funding behavior. While proven viable in a number of decision making situations, perceived risk has not been examined in the context of crowd funding behavior. Besides judgment of risk and judgments of benefit have been found to be inversely related. So it is needed to find our inverse relationship in detail. This study will partially fill this void by examining the role of risks in crowd funding participation behavior.

Specially, the following research questions were developed to guide the present study.

Are there any differences between crowd funding attitudes and intentions with regard to their perceived risk levels and perceived benefits?

To examine these issues, we employ a structural equation modeling approach associated with crowd-funding initiatives. First, we must recognize that the perceived risk for consumers in crowd-funding is a multidimensional concept. We study the relationship between crowd-funding attitudes and perceived risks including source risk, performance risk, time loss risk, and financial risk. We also examine the relationship between the attitudes and behavioral intention of crowd-funders. In order to carry out this research, we conducted a survey of consumers in South Korea

Literature Review

Crowd-funding

In South Korea, a recent movie named '26 year' gathered more than 2 million viewers. It is interesting to note that more hundreds of people participated in the production of this movie through crowdfunded investment. Another recent project at FundU, a Korean crowdsourcing site, raised 500,000 won for a group of over 70 year olds to teach them how to read and write. In return, a dozen anonymous supporters received hand-written letters from the recipients (Korea Times, 2012). Many other projects were successfully launched by domestic crowd-funding sites. Crowd-funding usually refers to people choosing to raise money through the Internet to fund projects they want to succeed. Even though in Korea, the concept of crowd-funding is not widely accepted yet, currently about 12 local crowd-funding sites exist. Although the concept of getting a crowd to simply raise money for a cause or invest in local business is nothing new, the power of Internet networking enables consumers to enlarge their role in such projects. Crowd-funding usually happens on the Internet, and it is a rapidly growing field.

But raising sufficient money through crowd funding is a challenging activity for a project developer. These days household savings are at an all time low, and consumer debt is at an all-time high, leading to a diminished ability to support such projects.

Crowd funding concerns include the fiscal responsibility of the receiving organization and whether the money will actually benefit. Other mitigating factors include doubts about the worthiness of the cause and/or lack of accurate information about the organizational mission.

These crowd funding motives and deterrents suggest that crowd funding behavior is deliberate and the decision to invest money hinges on a consideration of the costs and rewards.

Some extant literature can help to understand crowd-funding. For example, literature related to donor behavior suggests that people who contribute to charitable causes are motivated by self-esteem, relief from feelings of guilt and obligation. Literature on brand community also suggest some aspects that can be applied to crowd-funding motivations (Hibbert and Horne, 1996; White and Pelozo, 2009). From another viewpoint, brand community members are typically motivated

by identification, status, and fun. But this research and the related theories don't capture the element of monetary support from users, which is a key characteristic of crowd-funding models. As an initial study related to this area we consider perceived risk to be one of the major factors affecting consumer's participation. Because crowd-funding is form of investment for consumers they must consider the risks and rewards and the possible return on their investment.

Perceived Risk

According to previous research if individuals perceive risk, they expect some kind of loss. The development of the theory of perceived risk in the context of consumer behavior began in the 1960s. Bauer (1960) introduced this concept of "perceived risk" to marketing literature. Since 1960, extensive consumer research has shown that perceived risk affects consumers behavior across different cultures. The theory of consumers' perceived risk explains that consumers perceive risk because they face uncertainty and potentially undesirable consequences after purchasing. Therefore the more risk they perceive the less likely they will purchase. This idea can also be applied to crowd-funding.

Perceived risk is powerful in explaining consumer's behavior because "Consumers are sometimes more motivated to avoid risk than maximize utility in purchasing". Perceived risks affect the degree of consumers business model adoption. For example, perceived risk was found to have a significant negative and direct effect on consumers' adoption of new internet services such as internet banking.

So for this research we adopted perceived risk terminology. This concept is highly related to financial consumer's behavior. A growing body of recent research has shown that consumer opinions, evaluations, and adoption intentions for new ideas vary with the perceptions of risk. Moreover a solid stream of consumer behavior research acknowledges that, in order to reduce the effect of perceived risk, research must recognize and measure the effects of several types of risk. There are representative perceived risk types which are most popular in consumer behavior literature (Hassan,Kunz,Pearson,Mohamed, 2006; Lim, 2003) .

A general definition of perceived risk in marketing is "the nature and amount of risk perceived by a consumer in contemplating a particular purchase action". A review of past studies shows that researchers have identified the following dimensions: (Lim, 2003).

1. Perceived financial risk is defined as concern over any financial loss that might be incurred because of decision behavior. Sometimes we can call this economic risk. This explains the possibility of monetary loss arising from investing behavior. For example, even though they invest money and hope to receive a reward for that behavior, sometimes the product can be a failure or unsatisfactory.

2. Perceived social risk associated with other people's opinions on the decision, resulting in possible disapproval by family or friends. This is concerned with individuals' perception by other people. It includes the risk that a consumer's investment may not be accepted by other members of society. But crowd funding occurs with online anonymity. Therefore it is not possible that one's social standing may be enhanced or diminished depending on how crowd funding supporting is viewed.

3. Perceived physical risk referring to the probability that a purchased product results in a threat to human life. Crowd funding does not incur any threat to human life, therefore measures of physical risk were not included in this study.

4. Perceived time risk referring to the time loss associated with investment. In addition to the time spent researching appropriate crowd-funding ideas, this dimension includes waiting time for crowd-funded ideas actualization and commercialization.

5. Perceived source risk reflects concern over whether or not the consumer can trust the online crowd-funding project and feel comfortable in doing business with it. It is a general perception regarding the reliability of the business model planner, such as whether a company exists or whether it can be trusts.

6. Perceived performance risk is the possibility that the business model does not work properly or may be obsolete after only a short period of time.

Generally the types of perceived risks that influence consumer decision making include financial, social, physical, time loss, source, and performance risk. The influence of the different types of risk on consumer behavior varies depending on the brands considered or the categories of interest. Dunn, Murphy and Skelly (1986) found that social risk plays a minor role compared with financial and performance risks.

Crowd fund supporting behavior can be related to investment behavior and donation behavior. Crowd funding is highly related to donation and charity behavior. If we think that crowd funding is a helping behavior then altruism is one of the major motivations for participation. According to self-benefit and other benefit theory, people will be pleased because they feel their behavior is good for society and is a form of prosocial behavior. According to social exchange theory, source is vitally important in charitable behavior. Therefore perceived source risk will have a significant effect on consumer's participation. In this behavior people usually focused on the recipient's credibility. Therefore the participant will also give importance to the source credibility. That means if the perceived source risk is high, there are less participants who will give money for the crowd funding project.

On the other hand, crowd funding behavior is highly related to consumer financial behavior. According to previous studies, it appears that perceived risk has a weak relationship with donation behavior. Furthermore, money related risk is of limited value in differentiating donors from non-donors. Social risk is also of very little use in this regard (Yavas, Riecken, and Babakus, 1993). Other researchers have claimed that perceived risk is not a good predictor of donation behavior. In this point of view, if we think that crowd funding behavior is a form of financial behavior, an investor will consider potential performance and financial risk. According to Kuisma et al. (2007), many customers are afraid of losing money while performing transactions or transferring money over the Internet. For example, at present online banking transactions lack the assurance provided in traditional settings through formal proceedings and receipts. Thus, consumers usually have difficulty in asking for compensation when transaction errors occur (Kuisma et al., 2007).

Therefore the more risk they perceive, the less likely they will invest. Consumers are more often motivated to avoid mistakes than to maximize utility in purchasing. Yet, except for the perceived source risk, most other factors are related to the consequences of consumers' perceived risk.

Numerous studies show that perceived financial risk is a major dimension that determines consumers' behavior.

Therefore summarizing at a macro level the theories examined above, it is logical to consider that in the initial stage of adoption of a new information business model, in this case crowd-funding, when consumers have little knowledge, there may be opportunity factors that motivate users to participate, and barrier factors that make consumers dubious of the concept. As a basis for further research, this study will provide useful results to crowd-funding related marketers. Although previous research shows that perceived risk is an important factor for investment behavior, there has been much concern about the relation between perceived risk and trust. Trust can be defined as a willingness to take risk and perceived risk is the likelihood of both positive and negative outcomes.

To solve the unclear problem related to the existing classification of perceived risk, we need to examine perceived risk from a different perspective.

In these conditions, of the six classical perceived risk components present in a large number of consumer behavior studies, only four were included in the model. Financial risk, time loss, performance risk, and source risk. As the product is highly related to personal investment and donation behavior, we considered social and physical risk to be non-issues. It is because that in the online environment physical risk has no influence to consumer's decision making and it is also hard to listen to friends' opinion with crowd funding platform. For this study we developed six hypotheses:

H1 : Perceived financial risk will have a negative effect on consumer attitudes to crowd funding.

H2 : Perceived performance risk will have a negative effect on consumer attitudes to crowd funding.

H3 : Perceived source risk will have a negative effect on consumer attitudes to crowd funding.

H4 : Perceived time loss risk will have a negative effect on consumer attitudes to crowd funding.

If consumer thought that the reward is attractive even though there is risk, they could choose funding crowd funding project. Evidence provided that in this e-business system, the perceived benefit significantly affects e-business adoption (Zheng et al., 2006) Along the same lines, perceived benefit has a positive impact on the corporate website adoption. Therefore, it reasonable to infer that perceived benefit positively influence adoption and funding intention to adopt crowd funding. And we hypothesized that.

H5. Perceived benefit has a positive effect on attitude in online.

Crowdfunding is a new emerging business and consuming behavior, so we can postulate that crowdfunding involvement has a lot of influence to consumer's decision making.

Theory of planned behavior has been successful in explaining human behavior across various information technologies(Ajzen, 2002). According to theory of planned behavior, a person's actual behavior in performing certain actions is directly influenced by his or her behavioral intention and, in turn, is jointly determined by his or her attitude. Attitude explains a person's assessment regarding the behavior intention. Therefore we can also imagine like this.

H6 : Consumer crowd funding attitudes will have a positive effect on consumer crowd funding intentions.

Methods

Sample and Procedure

Data for the study was collected via face to face question interviews with students of two cities located in South Korea. Of the 430 students contacted during a three-week period, usable responses were obtained from 401.

This project used real crowd sourced projects and informed the participants that this was the case. The study required all participants in the study to be at least 18 years old. Of the six classical perceived risk components present in a large number of consumer behavior studies, only four were included in the model. Because of the nature of crowd funding we considered physical, and social risks not to be an issue.

Measurement

Risk Measures

Risk Measures. In previous research the dimensions have been combined both additively and multiplicatively. Although both approaches have been questioned on a number of grounds, the multiplicative model has been more widely accepted. These days perceived risk is usually measured as a multiplicative function of the likelihood and importance components.

The original conceptualization of Bauer (1960) treated risk as a two dimensional construct consisting of uncertainty and adverse consequences. Later, the “adverse consequences” dimension was defined as “importance loss” and this latter definition dominated empirical study in the following years (Dowling, 1986).

In this study, the risk associated with crowd funding was measured by using the four dimensional definition. Four types of risk (financial, source, time loss, and performance) were identified by impact factors. After each type of risk were defined, respondents were asked to answer questions. It's seven-point scales ranging from “7 = very likely” to “1 = very unlikely”.

The internal consistency of the perceived risk and perceived benefit was assessed by using Cronbach's alpha. Across the measures, alphas ranged from 0.7 to 0.9 and were within the guidelines to permit further analyses (Nunnally, 1978).

In this study the risk associated with investing money and time with a crowd funding project developer was measured by using a two dimensional definition: the likelihood of loss and importance of loss. Several types of risks were identified as potential correlates. After each type of risk was defined for them, respondents were asked to indicate the likelihood of the occurrence, and importance of, each risk.

Crowd funding behavior

Respondents' future crowd funding intentions were measured by asking them whether they were intending to contribute to the suggested crowd funding project. Responses were recorded on a 7 point likert scale basis.

Findings

A total of 401 participants from Korea were surveyed for this study. The survey was limited to young people. Crowd funding is a new phenomenon so it was thought that young people were

more likely to be accepting of the use of new communication technologies to help companies or individuals, and thus be more willing to be accepting of crowd funding. As a screening survey question we asked if respondents had heard about crowd funding before. Overall, 193(48.1%) respondents were male and 207(51.6%) respondents were female. The typical respondent was a university student between 18 ~ 28 years of age.

Cronbach's alpha scores indicated that each construct exhibited strong internal reliability. Convergent validity was assessed based on the criteria that the indicator's estimated coefficient was significant on its posited underlying construct factor. We evaluated the measurement scales using the three criteria suggested by Fornell and Larcker (1981).

(1) All indicator factor loading should be significant and exceed 0.5.

(2) Construct reliabilities should exceed 0.8.

(3) Average variance extracted (AVE) by each construct should exceed the variance due to measurement error for the construct (e.g. AVE should exceed 0.5).

All factor loading values in confirmatory factor analysis of the measurement model exceeded 0.5 and were significant at $p = 0.001$. Composite reliabilities of constructs ranged from 0.86 to 0.93. AVE, ranging from 0.68 to 0.83, was greater than the variance due to measurement error.

Therefore, all three conditions for convergent validity were met.

Discriminant validity assesses the extent to which a concept and its indicators differs from another concept and its indicators(Bagozzi et al., 1991). According to Fornell and Larcker (1981), the correlations between items in any two constructs should be lower than the square root of the average variance shared by items within a construct. The square root of the variance shared between a construct and its items was greater than the correlations between the construct and any other construct in the model, satisfying Fornell and Larckers' (1981) criteria for discriminant validity. All diagonal values exceeded the inter-construct correlations. The results, therefore, confirmed that our instrument had satisfactory construct validity.

Second, we used the Partial Least Square (PLS) method to analyze the data because it is more appropriate for complex models when the goal of the research is exploratory by explaining variance.

We performed the actual analysis globally on the theoretical model using smart PLS 2.0 with boot strap with 401 samples, following closely the guidelines of Gefen and Straub(2005).

Structural Model

The structural model was evaluated using smart PLS 2.0 with bootstrap with 401 re-samples to estimate the significance of the path coefficients. Figure 1 shows the structural model in the light of evaluation. It is interesting to note that figure 1 shows that among the paths hypothesized in the theoretical model of perceived risk and crowd funding attitude perceived source risk and perceived financial risk is supported.

Insert Figure1

Figure 1 shows that perceived time loss and performance risks don't have significant effects on crowd funding attitudes. Hence, hypotheses H2 and H4 are not verified. We can therefore say that source reliability is the most important factor in raising funds. Because crowd funding

behavior is similar to donation behavior, the recipient's credibility would be considered. Literature on charitable decision making suggests that, in general, the cause and victims that attract generosity tend to be ones that are emotionally evocative. One such emotional trigger is the identifiable victim effect. This means that a single victim tends to evoke a stronger emotional response than multiple victims (Kogut and Ritov, 2005), and an identifiable victim tends to evoke a stronger emotional response than an unidentifiable victim (Small and Loewenstein, 2003). We extended this notion to the domain of prosocial investment and we found that source is an important factor in determining whether to help a project.

Discussions

The results of this study shed light on some important issues related to customer intentions toward crowd funding that have not been addressed by previous studies. First, although we postulate that perceived risks have a significant influence on intentions, this study reveals that source risk and financial risk are influential factors. Especially source risk is more important than other risk. This implies that donation related behavior is more important for consumers than investment behavior.

This research proposed a model to investigate the acceptance of crowd funding investment behavior. As crowd funding is a new field, the study participants may not have had much background knowledge about aspects of crowd funding. Accordingly we empirically tested a perceived risk – attitude- behavior model.

As risk perception is context dependent for the crowd funding context of this study we considered four facets of perceived risk : financial, performance, time loss, and source risk. Perceived risk has on limited effect to crowd funding. Therefore if you want to succeed at funding, you need to give an importance to source reliability and financial reliability

As with any research, care should be taken when generalizing the results of this study. First, the survey was conducted using specific university students and employed a non-random convenience sample. However, generalizability could be enhanced if future research is systematically sampled from a more dispersed sample.

Second, in essence, causal relationships are likely to exist between perceived benefits and crowd funding attitude. However, we need to relative influence of perceived benefit and perceived risk to crowd funding attitude. We can add more casual paths, respectively into our proposed research model and rerun the structural equation analysis to validate whether there are possible causal relationships. Third, while this study has identified two external factors(perceived risk and perceived benefits) influencing consumers'particiipation of crowd funding, it is important to recognize the cultural and national limitations of these findings. This is because cultural differences have been found with respect to how individuals respond to a potential risk (Bontempo et al., 1997; Weber and Hsee, 1998). In other words, the customers' participation of crowd funding may be indirectly influenceed by cultural differences. By using a longitudinal study in the future, we could investigate our research model in different time periods and make comparisons, thus providing more insight into the phenomenon of crowd funding.

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Figure1. Results of structural modeling analysis

