provided by AIS Electronic Library (AISeL)

Association for Information Systems AIS Electronic Library (AISeL)

PACIS 2017 Proceedings

Pacific Asia Conference on Information Systems (PACIS)

Summer 7-19-2017

The Antecedents and Consequences of Crowdfunding Investors' Citizenship Behaviors – an Empirical Research on Motivations and Stickiness

Wenjie Zhang

Southwestern University of Finance and Economics, 490481035@qq.com

Yan Chen

Southwestern University of Finance and Economics, 504473715@qq.com

Peiying Li

Southwestern University of Finance and Economics, 1248427341@qq.com

Xu Yun

Southwestern University of Finance and Economics, xuyun@swufe.edu.cn

Haichao Zheng

Southwestern University of Finance and Economics, haichao@swufe.edu.cn

Follow this and additional works at: http://aisel.aisnet.org/pacis2017

Recommended Citation

Zhang, Wenjie; Chen, Yan; Li, Peiying; Yun, Xu; and Zheng, Haichao, "The Antecedents and Consequences of Crowdfunding Investors' Citizenship Behaviors – an Empirical Research on Motivations and Stickiness" (2017). *PACIS 2017 Proceedings*. 45. http://aisel.aisnet.org/pacis2017/45

This material is brought to you by the Pacific Asia Conference on Information Systems (PACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in PACIS 2017 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

The Antecedents and Consequences of Crowdfunding Investors' Citizenship Behaviors – an Empirical Research on Motivations and Stickiness

Completed Research Paper

Wenjie Zhang

School of Economics Information Engineering, Southwestern University of Finance and Economics Chengdu, China 490481035@qq.com

Peiying Li

School of Economics Information Engineering, Southwestern University of Finance and Economics Chengdu, China 1248427341@qq.com

Yan Chen

School of Economics Information Engineering, Southwestern University of Finance and Economics Chengdu, China 504473715@qq.com

Yun Xu

School of Economics Information Engineering, Southwestern University of Finance and Economics Chengdu, China xuyun@swufe.edu.cn

Haichao Zheng

School of Economics Information Engineering, Southwestern University of Finance and Economics Chengdu, China haichao@swufe.edu.cn

Abstract

This study investigates the antecedents (internal and external motivations) and consequences (stickiness intentions) of crowdfunding investors' citizenship behavior. In addition, this study examines the moderating effects of investors' perceived project novelty on the relationships between motivations and citizenship behavior. Based on a sample of 226 crowdfunding investors, results indicate that internal and external motivations significantly influence investors' citizenship behavior, which further affect investors' stickiness intentions. Furthermore, results show that investors' perceived project novelty moderates the relationships between internal/external motivation and citizenship behavior.

Keywords: Crowdfunding, citizenship behavior, motivation, stickiness

Introduction

Crowdfunding refers to the efforts by entrepreneurial individuals and groups – cultural, social, and for-profit – to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries (Mollick 2014). Entrepreneurs promote their projects through the public platforms to attract investors, and investors who are interested in those projects might provide financial support for it. Entrepreneurial ventures secure funds without having to seek out venture capital or other traditional sources of venture investment. Besides, the risk of individual investors could be largely reduced because of the portfolio diversification.

Although crowdfunding has gained unprecedented attention in recent years, in the academic field, the research is still at the initial stage. The topics are focused on the conception of crowdfunding, the influential factors of success and the motivations of participation (Harms 2007;Gerber et al. 2012;Lin et al. 2014). In general, the motivation of fund-raisers is relatively apparent ,while it is much more complicated for researchers to study the investors' behaviors and different researchers chose different ways and methods to study it. For instance, Harms(2007) used theory of consumption value as a framework to capture five value dimensions (financial value, quality performance value, social value and emotional value) relevant for driving motives to participate in crowdfunding activities. On the other hand, Ordanini et al.(2011) argued that patronage, social participation, monetary contributions, innovative orientation and social identification are key factors for investors to participate in projects.

Undoubtedly, previous researches have investigated the participation motivations of entrepreneurs and investors, which make great contributions to the theory and practice in the crowdfunding field. However, in view of the novelty and rapid development of crowdfunding, there are some limitations in existing research.

Firstly, most literature focused on the motivations of investors' participation, while ignored the customer citizenship behavior (CCB) of investors. Unlike the general behavior of participation, CCB is voluntary and discretionary actions by individual customers, which are not directly or explicitly expected or rewarded but may have an impact on a firm's interests and performance (Groth 2005). Drawing on the previous study, information of the project (risk, novelty, social responsibility) could influence investors' citizenship behavior in crowdfunding (Zheng et al. 2015). However, scholars hardly study the investors' own motivations of their citizenship behavior, that is, why investors may do voluntary and discretionary actions.

Furthermore, we need to know the CCB of investors whether do have an positive impact on the project or entrepreneurs. As we all known, if a project or entrepreneurs could get sustained attention and support from investors, there is a good chance the project will succeed and the entrepreneurs achieve their long-term goals by one project after another. In other words, the sustained attention and support is the stickiness intention of investors in crowdfunding. Unfortunately, there is still a vacancy in this research area. Therefore, it is necessary to make clear the relationship between the CCB and the stickiness of investors, which will demonstrate the importance of investors' citizenship behavior and provide ways to enhance the stickiness of investors.

At last, previous studies have confirmed that project novelty has an impact on investors' citizenship behaviors (Zheng et al. 2015). However, scholars did not study the motivations of the investors' citizenship behavior, nor did they have an in-depth study of the interaction effect between investors' perceived project novelty and investors' motivations. For example, whether project novelty has the same impact on different investors with different motivations. Specifically, we need to explore that whether project novelty will strengthen or weaken the external or internal motivations of investors' citizenship behavior.

Based on the theory of CCB, this paper aims at exploring the antecedents and consequences of investor citizenship behavior in the field of crowdfunding. First, we divide the motivations into internal and external parts as antecedents of investors' citizenship behavior. Next, we further study whether investors' citizenship behavior will have an impact on their stickiness intention of investment as a consequence. In addition, this paper examines project novelty as a moderating variable to study how the investors' perceived novelty moderates the relationships between investors' motivations and citizenship behaviors.

Literature Review

Motivations

The research on motivation has been widely covered in various fields, including behavioral science, psychology, economics, sociology, and other interdisciplinary subjects. As an innovative way of financing, crowdfunding is getting more and more attention from experts and scholars in multiple academic fields. In crowdfunding, the motivations of entrepreneurs are relatively obvious, including collecting funds, attracting the public's attention, receiving feedback for their products or services (Gerber et al. 2012), and exploiting the market potential (Gerber and Hui 2013). In fact, the motivations of investors, who need to pay out first, have attracted more attention with a wide variety. Harms(2007) used theory of consumption value as a framework to capture five value dimensions (financial value, quality performance value, social value and emotional value) relevant for driving motives to participate in crowdfunding activities. Jian and Shin(2015) found that belief in freedom of content, altruism, and contributing to one's community were self-reported to be highly valued by investors in crowdfunded journalism. Moreover, investors are not just financially motivated, but intrinsic motives (i.e., the attainment of self-affirmation and fun) play a significant role (Allison et al. 2015; Lin et al. 2014), The motives have some common characteristics: innovation-oriented, interested in interacting with others, identify themselves with the company or the product, and interested in the financial result (Gerber et al. 2012; Ordanini et al. 2011). In terms of cognitive evaluation theory and self decision theory, the representative motivations of investors are divided into two categories: internal motivation and external motivation by their sources. More relevant studies are as shown in Table 1.

internal motivation	enjoy	Harms 2007; Schwienbacher and Larralde 2010; Bretschneider et al. 2014; Jian and Shin 2015; Lee et al. 2015		
	interest	Ordanini et al. 2011; Bretschneider et al. 2014		
	contribution	Harms 2007; Ordanini et al. 2011; Gerber and Hui 2013; Amara et al. 2014; Lin et al. 2014		
external motivation	economic returns	Harms 2007; Ordanini et al. 2011; Gerber et al. 2012; Bretschneider et al. 2014		
	reward	Lin et al. 2014; Gerber and Hui 2013; Lee et al. 2015		

Table 1.Motivations of investors

Based on the above research results, it can be known that the current research on the motivation of the investors to participate has been widely studied. However, the research on the motivation of investors' citizenship behavior is still limited. Therefore, this paper will draw lessons from current research results, to study the effects of internal and external motivations on investors' citizenship behavior.

Customer citizenship behavior

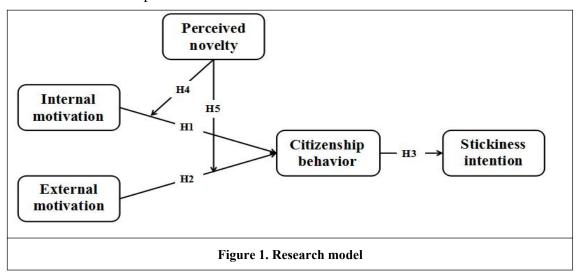
Customer citizenship behavior is voluntary and discretionary actions by individual customers, which are not directly or explicitly expected or rewarded but may have an impact on a firm's interests and performance (Groth 2005). Prior literature indicates that there are seven broad categories of customer citizenship behavior, including positive word of mouth (WOM) communication among customers, display of affiliation, cooperation, participation, customer voice, policing of other customer, and flexibility (Bettencourt 1997; Groth 2005). This category of customer citizenship behavior embraces a level of tolerance and acceptance.

With further in-depth study of customer citizenship behavior in online environments, A. Anaza and Zhao(2013) suggested recommendation, helping behavior, and service firm facilitation are three different types of voluntary and discretionary behaviors, which are called e-customer citizenship behaviors. There is no doubt that customer citizenship behavior plays a positive and prominent role in promoting the development of both online and offline business, and similarly, the investors' citizenship behaviors can make huge contributions to the success of crowdfunding projects through effective recommendation and feedback. Unfortunately, the current study of the CCB of investors in crowdfunding is extremely rare, in which (Zheng et al. 2015) identified the antecedents of investors' citizenship behaviors as perceived project risk, project novelty, and project social responsibility.

Drawing on two dimensions of investors' citizenship behavior - recommendation and feedback (Zheng et al. 2015), we will study how investors' motivations influence the investors' citizenship behaviors.

Research Model and Hypotheses

Based on the CCB theory, this paper constructs the research model and hypotheses as shown in Figure 1, which aims to investigate the antecedents (internal motivation and external motivation) of investors' behaviors (recommendation and feedback) and their effects on his/her stickiness intention, that is, investors' sustained attention and support to the projects or entrepreneurs. Meanwhile, in order to make an empirical study on how the investors' perceived project novelty affects the CCB of investors, we bring in project novelty as a moderator on the relationships between investors' motivations and citizenship behaviors.



Internal motivations

Internal motivation is defined as the doing of an activity for its inherent satisfactions rather than for some separable consequence (Ryan and Deci 2000). When internally motivated, a person is moved to act for the fun or challenge entailed rather than because of external prods, pressures, or rewards. In crowdfunding field, there is no study on the internal motivation of the investors citizenship behavior, though there are a lot of theoretical and empirical analysis on the internal motivation of investors' participation behavior, which roughly divided into the following three types. First, enjoyment, which means investors will feel pleasure to participate in the project (Bretschneider et al. 2014; Harms 2007) (Lee et al. 2015). Second, curiosity or interests, which indicates that investors are involved in the project because they want to experience this kind of funding model or the extremely innovative project products (Bretschneider et al. 2014; Ordanini et al. 2011). Third, contribution, a feeling of being at least partly responsible for the success of others' initiatives, which represents some investors may simply participate in projects for support or patronage (Harms 2007; Ordanini et al. 2011; Gerber and Hui 2013).

Therefore, drawing on the research results of the internal motivation of investors participation behavior, we believe that the above three aspects of the internal motivations of investors participation behavior will also have an impact on their citizenship behavior. In other words, investors will do citizenship actions like recommendation and feedback for the projects because of enjoyment, curiosity or interests and contribution. Hence, stated formally:

Hypothesis 1: The internal motivation of investors has a positive effect on their citizenship behavior.

External motivations

External motivation refers that people perform some kind of behavior in order to get a reward, to avoid punishment, or to obey orders. (Ryan and Deci 2000) Crowdfunding investors are usually motivated by external rewards (tangible or intangible) instead of punishment or orders. In crowdfunding field, there is no study on the external motivation of the investors' citizenship behavior, though there are some theoretical and empirical analysis on the external motivation of investors' participation behavior, which roughly divided into the following two types. One is tangible rewards,

including product returns and economic returns (Gerber et al. 2012; Harms 2007; Ordanini et al. 2011). The other is intangible rewards, such as unique experiences (Gerber and Hui 2013; Lin et al. 2014; Lee et al. 2015). The project rewards investors expected always can be fulfilled after the success of the project, in other words, if the project fails, investors will get back their own money rather than the rewards they expected. Therefore, when investors have a certain degree of expectation to the project product or economic returns, citizenship behavior will be generated to help project success in order to obtain the desired rewards. In fact, we believe that the above two aspects of the external motivations of investors participation behavior will also have an impact on their citizenship behavior. In other words, investors will do citizenship actions like recommendation and feedback for the projects because of tangible and intangible rewards. Hence, stated formally:

Hypothesis 2: The external motivation of investors has a positive effect on their citizenship behavior.

Stickiness Intention

As known to all, stickiness intention in consumption virtual communities, is defined as willingness of customers to retain on a website and prolong his/her duration of each stay (Yu-hong et al. 2013). In consumption virtual communities, community members' positive WOM, useful feedback and sharing behaviors can increase the popularity and reputation of the community, and facilitate the promotion of community service, thus enhancing members' satisfaction of the community, which will further increase the revisits and retention to the community (Lin 2007). Similarly, stickiness intention in crowdfunding is the willingness of investors to spend more time, energy or money for the projects or entrepreneurs. Investors' positive WOM, useful feedback and sharing behaviors can increase the popularity and reputation of the projects, and facilitate the promotion of the projects, thereby enhance the sustained support and attention to the projects and entrepreneurs. In fact, feedback and sharing behaviors are typical citizenship behaviors as mentioned in previous paper. Therefore, we believe that when investors have made recommendations or feedback for the projects, they could be willing to spend more time, energy or money for the projects or entrepreneurs. Hence, stated formally:

Hypothesis 3: The citizenship behavior of investors has a positive effect on their stickiness intention.

Perceived project novelty

Society has a vital interest in encouraging and rewarding innovation and creativity. Neoclassical economic theory suggests that private investors support the funding of innovation in exchange for the opportunity to appropriate financial returns (Carr 2013). The demand for novelty is an important part of the demand of the product, which comes from people's pursuit of individuality and novelty (Dewett and Williams 2007). Ordanini et al. (2011) suggested that investors are attracted by the novel way to use the underlying technology platform, particularly in the context of social networking, which stimulates the desire to try new modes of interacting with firms and other investors. Products with high novelty can bring people more surprises, and people are more inclined to spread surprising things (Zheng et al. 2015). Consumer perceived novelty is perceived degree of 'newer and better', or you might say 'more than merely new' (Lowe and Alpert 2015). Correspondingly, in crowdfunding, investors' perceived novelty is perceived degree of 'newer and better' in projects or products. Meanwhile, investors tend to invest, to participate in and to make recommendations and feedback for the project with higher degree of novelty (Zheng et al. 2015). Drawing from the existing literature, it is known that the project novelty has a significant positive impact both on the investor's participation behavior and citizenship behavior. We believe that it is because project novelty plays a role in enhancing the relationship between investors' motivations and citizenship behaviors, which means higher degree of project novelty will lead to more investors' citizenship behaviors. On one hand, higher perceived novelty could make investors with enjoyment and curiosity be more likely to performance citizenship behavior. On the other hand, investors' perceived novelty affects investors with material expectations, since that investors usually believe an innovative project will bring about higher value products or economic returns. Therefore, we believe that investors' perceived project novelty has positive significant moderating effects on relationships between motivation and citizenship behavior .Hence, stated formally:

Hypothesis 4: The investors' perceived project novelty positively moderates the relationship between internal motivation and citizenship behavior.

Hypothesis 5: The investors' perceived project novelty positively moderates the relationship between external motivation and citizenship behavior.

Research Method

Measures

All the constructs were measured using multiple-item scales adapted from prior studies, including internal motivation, external motivation, citizenship behavior, stickiness intention, project novelty, as Table 2 shows. Some modifications were made to these scales to tailor them to the target context of crowdfunding. A five-point Likert scale was used for all measures. Following (Zheng et al. 2015), we developed investors' citizenship behavior as a with two dimensions – feedback and recommendation. Feedback includes sponsor's advices or suggestions which could help entrepreneur to improve the projects or service. Recommendation refers to investors' recommendation the projects to his/her friends or family.

Construct		Items	Source
internal Motivation		 What matters to me the most in participating in this project is to tackle problems that are completely new to me. What matters to me the most in participating in this project is to try to solve complex problems. What matters to me the most in participating in this project is to enjoy fixing difficult problems. 	Ke and Zhang 2009
	external	 I am strongly motivated by the money I can earn when participating in this project. I am keenly aware of the possible career promotion when participating in this project. 	Ke and Zhang 2009
Citizenship behavior	feedback	 1.I often comment on the entrepreneur's updates of this project. 2.I often respond to other sponsor's comments about this project. 3.If I have a useful idea on how to improve the project, I let the entrepreneur know. 	Yi and Gong 2013
	recomme ndation	 1.I have recommended this project to my friends many times. 2.I say positive things about this project to others. 3.I often encourage friends and relatives to sponsor this project. 	Yi and Gong 2013
stickiness intention		1.I would spend more time in the project.2.I would invest more of my talents into the project.3.I would contribute more ideas to the project.	Agarwal and Karahanna 2000
Perceived novelty		1.The technology this product incorporates was new 2.The product features was novel/unique 3.This product offers dramatic improvements in existing product features	Molina and Munuer 2009

Table2.Measurement

Data Collection

A survey was conducted in Zhongchou (www.zhongchou.com) which is a well-known crowdfunding platform in China.

The survey was designed in www.sojump.com which provided professional service of electronic questionnaire development. The survey was first drafted in English, and then translated into Chinese by one author who is proficient in both languages. The Chinese version was then translated back into English by the other authors to check for inaccuracies. Changes were made to the original versions until the authors all agreed that the items accurately reflected the intention of the measurement.

The survey invitation and questionnaire link was posted on Zhongchou's public portal via WeChat, which is the largest social network application of mobile phones in China. The sponsors who subscribed to Zhongchou WeChat portal can read our invitations. The qualified respondents are the individuals who sponsor at least one project in Zhongchou. In order to increase the response rate, an economic incentive was provided for the survey respondents (50 Yuan RMB).

During the survey period from January 28, 2016 to March 6, 2016, 480 sponsors click the invitation and survey link, and 248 qualified sponsors fill out the questionnaires. 22 surveys were removed because of missing values or duplicate response, thus a total of 226 responses were left for data analysis. The statistical characteristics of the sample are shown in Table 3.

Characteristics	Frequency	Percentage (%)
Age		
18-25	45	19.7
25-30	43	18.9
31-40	73	32.0
41-50	41	18.0
51-60	12	5.3
Older than 60	2	0.9
Missing	12	5.3
Gender		
Male	132	57.9
Female	94	41.2
Missing	2	0.9
Income (Yuan RMB)		
0	21	9.2
Less than 2000	15	6.6
2000-3000	35	15.4
3001-5000	54	23.7
5001-8000	45	19.7
8001-15000	38	16.7
15001-50000	16	7.0
More than 50000	2	0.9
Missing	2	0.9
Internet experience (years)		
Less than 1 year	0	0.00
1-2	11	4.8
3-5	36	15.8
6-10	65	28.5
More than 10 years	91	39.9
Missing	25	11.0

Table 3. Characteristics of respondents

Data Analysis and Results

Measurement Model

We assessed the constructs' reliability and two types of validity (convergent and discriminant). Reliability was assessed by means of composite reliability (Fornell and Larcker 1981). The results in

Table 4 show that all CR exceed 0.823 which is higher than the suggested cut-off value of 0.7 (Nunally and Bernstein 1978).

Convergent validity was assessed by examining factor loadings and average variance extracted (AVE). For reflective constructs, all the outer loadings are larger than 0.7, except for one of the internal motivation items. In addition, all the AVE values are greater than 0.619 indicating acceptable convergent validity of the construct (Fornell and Larcker 1981). Therefore, we concluded that the measures demonstrate adequate convergent validity.

Construct	Item	factor loading	AVE	Composite reliability
Citizenship Behavior	CitizenshipBehaviorRecommendation-1	0.863		
	CitizenshipBehaviorRecommendation-2 0.909			
	CitizenshipBehaviorRecommendation-3	0.887	0.744	0.946
	CitizenshipBehaviorFeedback-1	0.864	0.744	
	CitizenshipBehaviorFeedback-2	0.851		
	CitizenshipBehaviorFeedback-3	0.798		
	ContinuationIntention-1	0.903		
Stickiness Intention	ContinuationIntention-2 0.941		0.841	0.941
	ContinuationIntention-3	0.907		
External Motivation	ExternalMotivation-1	0.914		0.000
	ExternalMotivation-2	0.753	0.701	0.823
Novelty	Novelty-1	0.880	0.8001	0.923
	Novelty-2	0.891		
	Novelty-3	0.915		
Internal Motivation	InternalMotivation-1 0.678			
	InternalMotivation-2	0.790	0.619	0.828
	InternalMotivation-3	0.880		

Table 4. Results for item reliability

The square roots of AVE were compared with the correlations among the latent variables for discriminant validity evaluation (Fornell and Larcker 1981). The results in Table 5 indicate acceptable discriminant validity for reflective constructs – the square root of the AVE from other reflective constructs was greater than the correlations involving the construct.

	1	2	3	4	5
Citizenship Behavior(1)	0.863				
Stickiness Intention(2)	0.723	0.917			
External Motivation(3)	0.351	0.331	0.837		
Novelty(4)	0.486	0.479	0.519	0.895	
Internal Motivation(5)	0.419	0.404	0.392	0.503	0.787

Table 5. AVE scores and correlations between latent variables

Note: Square root of AVE of reflective scale is shown on the diagonal.

Results

After the measurement model was evaluated, two structural models was tested using SmartPLS 2.0. Model one examined the three hypotheses without the moderator between internal motivation and citizenship behavior, between external motivation and citizenship behavior, and between citizenship behavior and stickiness intention. Model two tested the moderating and direct effect of perceived novelty on the relationship between motivations and citizenship behavior. The structural models provided two important pieces of information on how well the hypothesized relationships were predicted by the structural models. The first piece was on calculating path coefficients (i.e.,standardized beta: β) which indicate the strength of the relationship between two variables (Wixom and Watson 2001). The second one was on the squared multiple correlation(R^2) for each endogenous variable in the research model. The R^2 value explains the percentage of the variance explained by independent variables in the structural model.

	Model one			Model two		
	coefficient	T value	P values	coefficient	T value	P values
citizenship behavior ->continuation intention	0.723	16.160	P<0.001	0.723	16.158	P<0.001
external motivation -> citizenship behavior	0.221	3.928	P<0.001	0.027	0.654	Not significant
internal motivation -> citizenship behavior	0.333	5.208	P<0.001	0.219	3.945	P<0.001
external motivation * novelty -> citizenship behavior				-0.276	2.948	P<0.01
internal motivation * novelty -> citizenship behavior				0.212	3.102	P<0.01
motivation -> citizenship behavior R^2	0.217			0.382		
citizenship behavior ->continuation intention R^2	0.522			0.523		

Table 6.Results of two models

The results of model one are as Table 6, without a moderator, external motivation and internal motivation had significant effects on citizenship behavior (β =3.928,p<P<0.001; β =0.333,p<P<0.001, respectively), providing support for H1 and H2. Citizenship behavior had a significant effect on continuation intention (β =0.723,p<P<0.001), providing support for H3. In terms of R^2 value for each endogenous variable, the two motivations explained 21.7% of the variance in citizenship behavior, and the citizenship behavior explained 52.2% of the variance in continuation intention. Therefore,

The results of model two are shown in Table 6, with the perceived novelty as a moderator, internal motivation had a significant effect on citizenship behavior (β =0.219,P<0.001), providing support for H1,while external motivation had no significant effect on citizenship behavior. Citizenship behavior had a significant effect on continuation intention (β =0.723,P<0.001), providing support for H3. Perceived novelty had significant moderating effects on relationships between external motivation and citizenship behavior, internal motivation and citizenship behavior (β =-0.276; β =0.212,respectively) at p<0.01,indicating that it was a key factor facilitating these relationships and thus providing support

based on the model one, three hypotheses (H1,H2,H3) were all confirmed.

for H4 and H5. In terms of R^2 value for each endogenous variable, the two motivations explained 21.7% of the variance in citizenship behavior, and the citizenship behavior explained 52.2% of the variance in stickiness intention.

Discussion

This paper studies the antecedents and consequences of investors' citizenship behavior and how the perceived novelty adjust the relationship between motivations and citizenship behavior. Based on the analysis of the questionnaires' data, we design two models before and after adding the moderator. The results are as follows.

- Internal motivation of the investor has a positive effect on citizenship behavior (H1). According to Model one, hypothesis 1 was supported, which confirms that internal motivations of investors' participation behaviors could still apply to their citizenship behaviors (Harms 2007; Gerber and Hui 2013; Lee et al. 2015).
- External motivation of the investor has a positive effect on citizenship behavior (H2). Model one suggests hypothesis 2 was supported. It proves that external motivations of investors' participation behaviors could still apply to their citizenship behaviors (Gerber et al. 2012; Harms 2007; Bretschneider et al. 2014). However, from Model two, we can see that H2 was not supported after adding the novelty as a moderator, which we did not anticipate before. It might be sensible and proves that novelty as a moderator plays an important role on external motivations. Positive path coefficient from the model one showed that the external motivations have positive effects on citizenship behaviors, while negative path coefficient of H5 from the model two showed that the novelty has a negative effect on the relationship between external motivations and citizenship behaviors. Thus, it is precisely that the positive impact was offset by the negative impact, which resulted in the hypothesis 2 in model two was not significant.
- Investors' citizenship behavior has a positive effect on the stickiness intention (H₃). From model one, hypothesis 3 was significant. This suggests that the WOM, feedback and recommendation from investors all have positive impacts on their stickiness intentions in crowdfunding, which just like it in the field of virtual communities (Lin 2007) and e-commerce (Flavián et al. 2006).
- The investors' perceived novelty positively moderates the relationship between internal motivation and citizenship behavior(H4). From model two, hypothesis 4 was supported. This suggests that investors' perceived novelty enhancing the relationship between internal motivation and citizenship behavior. In other words, higher perceived novelty could make investors with enjoyment and curiosity be more likely to performance citizenship behavior.
- The investors' perceived novelty positively moderates the relationship between external motivation and citizenship behavior (H₅). From model two, hypothesis 5 was not supported because the moderating effect was negative rather than positive as we expected, which suggests that investors' perceived novelty weaken the relationship between internal motivation and citizenship behavior. In other words, higher perceived novelty could make investors with material expectations be less likely to perform citizenship behavior. Although this result do not meet our expectation but is in line with the results from Lee and Colarelli O'Connor(2003) who suggested that customers who are faced with an innovative product experience positive (surprise and optimism) as well as negative(discomfort and insecurity) perceptions ,and Molina-Castillo and Munuera-Aleman(2009) also showed the same concern about novelty products. Consequently, owing to a sense of anxiety and insecurity, when investors are facing with innovative projects, the perceived novelty may have negative impacts on the relationship between external motivation and citizenship behavior, which means high level of project novelty may result in less feedback and recommendation, or perhaps none at all.

Implications for Research and Practice

Based on the theory of CCB, we discuss the antecedents and consequences of investors' citizenship behavior in the field of crowdfunding and make some contributions. First, we confirm the internal and external motivations do have impacts on investors' citizenship behavior and we explain how the citizenship behavior (recommendation, feedback) works, which extends the study on investors' citizenship behaviors in crowdfunding. Besides, this paper first introduce the stickiness intention in the field of crowdfunding, since it might determine investors whether to provide sustained supports or not. Lastly, we introduce investors' perceived novelty as the moderator to study the interaction between investors' motivations and their behaviors, which demonstrates that how the "novelty", an interesting topic, acts on investor motivations thus affects citizenship behavior.

Our findings offer some valuable suggestions for entrepreneurs. For example, entrepreneurs should actively collect feedback from investors and interact with investors more frequently to learn what

motivates investors to participate in the project. On the one hand, entrepreneurs realize that investors' tendency of novelty derive from natural curiosity, and people's supports towards emerging things. On the other hand, entrepreneurs should learn to face one possibility that investors may not perform citizenship behavior due to a sense of anxiety and insecurity of expectations despite the high level of project novelty. Besides, if feedback and recommendations investors provided could gain the encouragement and attention from entrepreneurs, they might have desire to keep their eyes on these projects and continue investing to a large extent.

Conclusion

Based on the CCB theory, we developed hypotheses and collected data from crowdfunding websites to test models and got conclusions by SPSS and smartPLS 2.0, which offer an in-depth explanation of the citizenship behavior in crowdfunding. This could be an example for studying the motivations of citizenship behavior of investors and could also serve as a starting point to introduce the stickiness intention theory of e-commerce and virtual community into crowdfunding area. In addition, we also made an empirical analysis of how the perceived project novelty affects the relationships between investors' motivations and citizenship behaviors.

Through our study, it is known that the motivation of citizenship behavior is basically consistent with it of participation behavior. More importantly, the results indicate that investors' citizenship behaviors are highly relevant for stickiness intentions, which provides a way for entrepreneurs and platforms to enhance investors' stickiness intentions—to attract investors to engage in giving feedback and recommendation, which means that crowdfunding platforms should provide a more convenient environment for participants'(entrepreneurs and investors) communication. Although novelty is one of the important indicators affect the evaluation of investors in crowdfunding, the results show that citizenship behaviors could be hindered if entrepreneurs aimlessly pursue novelty. Thus, we conclude that modest novelty of projects could enable investors to engage in citizenship behavior better, make the project succeed more easily and enhance the investors' stickiness intention, which is beneficial to enterprises' development in the future.

Acknowledgment

This research is supported by Major Program of National Natural Science Foundation of China (Grant No. 91218301), the Fundamental Research Funds for the Central Universities (Grant Nos JBK120505; JBK160934), and the collaborative Innovation center for the Innovation and Regulation of Internet-based-Finance.

References

- A. Anaza, N., and Zhao, J. 2013. "Encounter-Based Antecedents of E-Customer Citizenship Behaviors," Journal of Services Marketing (27:2), pp. 130-140.
- Agarwal, R., and Karahanna, E. 2000. "Time Flies When You're Having Fun: Cognitive Absorption and Beliefs About Information Technology Usage," MIS quarterly), pp. 665-694.
- Agrawal, A. K., Catalini, C., and Goldfarb, A. 2011. "The Geography of Crowdfunding," National bureau of economic research.
- Ahlers, G. K., Cumming, D., Günther, C., and Schweizer, D. 2015. "Signaling in Equity Crowdfunding," Entrepreneurship Theory and Practice (39:4), pp. 955-980.
- Allison, T. H., Davis, B. C., Short, J. C., and Webb, J. W. 2015. "Crowdfunding in a Prosocial Microlending Environment: Examining the Role of Intrinsic Versus Extrinsic Cues," Entrepreneurship Theory and Practice (39:1), pp. 53-73.
- Amara, M., Ben Cheikh, A., and Abdellatif, T. 2014. "Crowdfunding: Determinants and Motivations of the Contributors to the Crowdfunding Platforms,").
- Bettencourt, L. A. 1997. "Customer Voluntary Performance: Customers as Partners in Service Delivery," Journal of retailing (73:3), pp. 383-406.
- Bretschneider, U., Knaub, K., and Wieck, E. 2014. "Motivations for Crowdfunding: What Drives the Crowd to Invest in Start-Ups?,").
- Carr, S. 2013. "Collective Action and the Financing of Innovation: Evidence from Crowdfunding,").
- Dewett, T., and Williams, S. D. 2007. "Innovators and Imitators in Novelty Intensive Markets: A Research Agenda," Creativity and Innovation Management (16:1), pp. 80-92.
- Flavián, C., Guinalíu, M., and Gurrea, R. 2006. "The Role Played by Perceived Usability, Satisfaction and Consumer Trust on Website Loyalty," Information & Management (43:1), pp. 1-14.

- Fornell, C., and Larcker, D. F. 1981. "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," Journal of marketing research), pp. 39-50.
- Gerber, E. M., and Hui, J. 2013. "Crowdfunding: Motivations and Deterrents for Participation," ACM Transactions on Computer-Human Interaction (TOCHI) (20:6), p. 34.
- Gerber, E. M., Hui, J. S., and Kuo, P.-Y. 2012. "Crowdfunding: Why People Are Motivated to Post and Fund Projects on Crowdfunding Platforms," Proceedings of the International Workshop on Design, Influence, and Social Technologies: Techniques, Impacts and Ethics, p. 11.
- Groth, M. 2005. "Customers as Good Soldiers: Examining Citizenship Behaviors in Internet Service Deliveries," Journal of management (31:1), pp. 7-27.
- Harms, M. 2007. "What Drives Motivation to Participate Financially in a Crowdfunding Community?,").
- Jian, L., and Shin, J. 2015. "Motivations Behind Donors' Contributions to Crowdfunded Journalism," Mass Communication and Society (18:2), pp. 165-185.
- Joenssen, D. W., Michaelis, A., and Müllerleile, T. 2014. "A Link to New Product Preannouncement: Success Factors in Crowdfunding,").
- Ke, W., and Zhang, P. 2009. "Motivations in Open Source Software Communities: The Mediating Role of Effort Intensity and Goal Commitment," International Journal of Electronic Commerce (13:4), pp. 39-66.
- Lee, C. R., Lee, J. H., and Shin, D. Y. 2015. "Factor Analysis of the Motivation on Crowdfunding Participants: An Empirical Study of Funder Centered Reward-Type Platform," Journal of Society for e-Business Studies (20:1).
- Lee, Y., and Colarelli O'Connor, G. 2003. "The Impact of Communication Strategy on Launching New Products: The Moderating Role of Product Innovativeness," Journal of Product Innovation Management (20:1), pp. 4-21.
- Lin, H.-F. 2007. "The Impact of Website Quality Dimensions on Customer Satisfaction in the B2c E-Commerce Context," Total Quality Management and Business Excellence (18:4), pp. 363-378.
- Lin, Y., Boh, W. F., and Goh, K. H. 2014. "How Different Are Crowdfunders? Examining Archetypes of Crowdfunders and Their Choice of Projects," Academy of Management Proceedings: Academy of Management, p. 13309.
- Lowe, B., and Alpert, F. 2015. "Forecasting Consumer Perception of Innovativeness," Technovation (45), pp. 1-14.
- Molina-Castillo, F.-J., and Munuera-Aleman, J.-L. 2009. "The Joint Impact of Quality and Innovativeness on Short-Term New Product Performance," Industrial Marketing Management (38:8), pp. 984-993.
- Mollick, E. 2014. "The Dynamics of Crowdfunding: An Exploratory Study," Journal of business venturing (29:1), pp. 1-16.
- Nunally, J. C., and Bernstein, I. H. 1978. "Psychometric Theory." New York: McGraw-Hill.
- Ordanini, A., Miceli, L., Pizzetti, M., and Parasuraman, A. 2011. "Crowd-Funding: Transforming Customers into Investors through Innovative Service Platforms," Journal of Service Management (22:4), pp. 443-470.
- Ryan, R. M., and Deci, E. L. 2000. "Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions," Contemporary educational psychology (25:1), pp. 54-67.
- Schwienbacher, A., and Larralde, B. 2010. "Crowdfunding of Small Entrepreneurial Ventures,").
- Wixom, B. H., and Watson, H. J. 2001. "An Empirical Investigation of the Factors Affecting Data Warehousing Success," MIS quarterly), pp. 17-41. Yi, Y., and Gong, T. 2013. "Customer Value Co-Creation Behavior: Scale Development and Validation,"
- Journal of Business Research (66:9), pp. 1279-1284.

 Yu-hong, Z., Da-hai, D., and Sheng-nan, L. 2013. "Antecedents and the Outcome of Customer Citizenship Behavior in Consumption Virtual Communities: A Theoretical Model," 2012 First National Conference for Engineering Sciences (FNCES 2012).
- Zheng, H., Yang, T., Chen, D., and Wan, N. 2015. "The Crowdfunding of Innovation Projects: The Value of Sponsors' Citizenship Behaviors," Science Research Management).