Effects of Online Crowdfunding on Consumers’ Perceived Value and Purchase Intention

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ABSTRACT The emergence of online community services and virtual transaction tempest Crowd funding for purchasing products in advance. Global crowdfunding platforms, with abundant and diverse styles, will lead the new-style internet startup. For this reason, this study tends to explore the effects of online consumers’ crowdfunding behaviors on perceived value and purchase intention as well as the mediating effects of perceived value on the correlations between crowdfunding and purchase intention. The users of Taiwanese Crowdfunding platforms, Flying V, zeczec, and WeProject, were distributed 300 copies of questionnaires. Having deducted invalid and incomplete ones, total 153 valid copies were retrieved, with the retrieval rate 51%. The research results show: 1. the significant affects of crowdfunding on perceived value, 2. the significant effects of perceived value on purchase intention, 3. the significant effects of crowdfunding on purchase intention and 4. the significant mediating effects of perceived value on the correlations between crowdfunding and purchase intention.

INTRODUCTION

Relative to large-scale enterprises, medium-and small-scale enterprises are generally lack of techniques, talents, information, and capitals. For micro-enterprises, the acquisition of capitals is even more difficult. The emergent Crowdfunding therefore is booming when micro-enterprises and individual startups become popular. Crowdfunding started from cultural creators in the USA and the UK, with insufficient budgets and difficulty in acquiring capitals from banks and the governments, being forced to fund from the crowd through online platforms. Afterwards, any individuals or enterprises with creation or commodities could fund capitals with such a model. Since Kickstarter created the brilliant result in Pebble Smart Watch for asking for ten thousand, giving ten million in two month in 2012, Crowdfunding becomes the global focus. The Technology Review of Massachusetts Institute of Technology listed it in ten breakthrough technology, and Forbes exclaimed it as the focus in the doldrums and predicted the popularity in 2013. Reviewing the major milestone in 2012, European Union called a European JOBS conference after the USA signed Jumpstart Our Business Startups Act (JOBS), and Crowdfunding platforms were largely established in Taiwan, China, and Hong Kong.

Enterprises or individual entrepreneurs apply Crowdfunding by putting the products or startup ideas on the platforms to striving for the identity of potential consumers who further pay for the funds (Liu et al. 2014). In such a consumption model, consumers are attracted to the products and the group dynamics of other participants to enhance the social value of the products. In this case, this study aims to discuss the effects of Online Crowdfunding behaviors on consumers’ Perceived Value and Purchase Intention of products.

Research Definition and Hypothesis

Correlations between Online Conformity Behavior and Crowdfunding

BumKrant and Cousineau (1975) defined Conformity Behavior as (1) the opinion tendency to establish group rules, for example, group rules setting the member behaviors in the expected range and (2) the tendency of an individual con-
forming to group rules, that is, consumers changing the ideas of a product/service and purchase behaviors and intention because of referring to the group evaluation, opinions, and purchase behaviors on the product/service. From the aspect of marketing, Lascu and Zinkhan (1999) integrated the ideas of various researchers and regarded conformity behavior as an individual changing the original purchase intention and purchase behaviors by referring to the group expectation. An individual would accept the group influence to change the personal opinions and behaviors because of voluntarily or involuntarily obeying the opinions of the majority. Banerjee (1992) discovered that online investors indeed presented Conformity Behavior. Froot et al. (1992) and Hirshleifer et al. (1994) revealed that online investors would follow the design and creative works with the same or similar value and have the crowd with interests in supporting, participating, and purchasing, through Crowdfunding platform, complete the plan, design, or dream by spreading them through Online Conformity Behavior so that a lot of creative projects could be noticed by more people and the Online Crowdfunding behaviors could rapidly yield positive results.

Crowdfunding

The concept of Crowdfunding can be seen as a part of the broader concepts of crowdsourcing, which refers to using the “crowd” for obtaining ideas, feedback and solutions in order to develop corporate activities (Howe 2008). Kristof et al. (2012) stated that Crowdfunding could be defined as a collective effort of many individuals who networked and pooled their resources to support efforts initiated by other people or organizations. This was usually done via or with the help of the Internet. Individual projects and businesses were financed with small contributions from a large number of individuals, allowing innovators, entrepreneurs and business owners utilizing their social networks for raising capital. Gerber, et al. (2012) emphasized 3 dimensions on Crowdfunding as following.

1. Peer-to-Peer Lending: Lin et al. (2009) pointed out Crowdfunding being related to peer-to-peer lending in which individuals bade on microloans sought by individual borrowers.

2. Online Social Communities: Crowdfunding platforms depend on an online social community. Drawing on the social science, scholars propose how to get such a community started, integrate newcomers encouraging the commitment, regulate behaviors when there are conflicts, motivate contributions, and coordinate those contributions to maximize benefits for the community (Resnick and Kraut 2010).

3. Motivations for Giving: Liu and Aake (2008) stated that people would ultimately donate more money to a charity when they were first asked the time they would like to donate (versus the money they would like to donate).

Collectively, this research suggests that the motivation for giving is related to interpersonal connections between the giver and the requester and communication styles.

Perceived Value

Swait and Sweeney (2000) indicated the distinct effects of consumers with various Perceived Value levels on consumer behaviors. Lovelock (2001) considered Perceived Value as the comparison between the total perceived benefits and the total perceived costs. Perceived value is even more abstract and comprehensive than perceived quality (Sanchez-Fernandez and Iniesta-Bonillo 2007; Tiilikainen 1998; Zeithaml 1988). Petrick (2002) divided perceived value into quality, emotional response, monetary price, behavioral price and reputation and pointed out the significantly positive relationship between these five aspects and the willingness to buy. Chen and Dubinsky (2003) pointed out perceived value as the sum of transactional costs and expected profits or losses. Sirdeshmukh et al. (2002) regarded perceived value as the difference between acquired profits and paid costs when a consumer tended to maintain the continuous relationship with the service provider. Sweeney and Soutr (2001) proposed the dimensions for the product basis, including 1. Emotional Value, a consumer’s perception of the product or service in the consumption process, 2. Social Value, a consumer’s cognition of the product or service in the social image, and 3. Quality Function Value, the measurement of the product quality and the acquired performance.

Purchase Intention

Schiffman and Kanuk (2000) pointed out purchase intention as to measure the possibility of a consumer purchasing certain products that the
higher purchase intention showed the higher purchase probability. Hellier et al. (2003) referred Purchase Intention to a consumer’s judgment on repurchasing specific services of an enterprise by considering the current situation and the possible situation. Blackwell et al. (2001) considered that asking a consumer’s requirement could predict the behaviors. Intention was the subjective judgment on the future behaviors, and purchase intention stood for what people intended to purchase in the future. Shao et al. (2004) referred Purchase Intention as the intention of a consumer purchasing certain products or visiting the shops with certain services. Spears and Singh (2004) regarded purchase intention as the effort of an individual consciously planning to purchase commodities with certain brands, and the judgment or opinion of an individual repurchasing specific commodity from the same enterprise under the premise of current or possibly occurred situations. Zeithaml et al. (1996) indicated that behavioral intention could be regarded as the indicator of a customer continuously staying or leaving the enterprise. Ho and Hu (2009) defined purchase intention as certain transactional behaviors after a consumer evaluating the products, that is, the attitudes towards the purchase behavior.

Engel et al. (2001) argued that intention was changeable and a consumer could not be controlled to act as the intention. According to the above literatures, purchase intention is regarded as the indicator to predict a consumer’s purchase decision. Purchase intention proposed by Heskett et al. (1994) therefore is referred to measure consumers’ purchase intention of the products on crowdfunding platforms.

**Research Hypothesis**

Dumana and Mattil (2005), Petrick (2003), Brady and Cronin (2001), and Sweeney and Soutar (2001) proposed the correlations between Perceived Value and consumers’ emotional responses and consumption experiences, which further affected the purchase behaviors. Monroe and Krishman (1985) pointed out the effects of perceived value on consumers’ purchase intention. Salter (1997) and Parasuraman (1997) also regarded the importance of Perceived Value in customer behaviors. Lin and Chen (2013) mentioned the significant effects of Crowdfunding on consumers’ perceived value and purchase intention. Tsai (2013) indicated that Crowdfunding would bring benefits in public welfare and innovative energy through the success of creation or commodities and present positive effects on consumers’ perceived value and purchase intention. The following hypotheses therefore are proposed in this study.

**H1:** Crowdfunding presents significant effects on perceived value.

**H2:** Perceived Value shows significant effects on purchase intention.

**H3:** Crowdfunding reveals significant effects on purchase intention.

**H4:** Perceived value appears significant mediating effects on the correlations between Crowdfunding and purchase intention.

![Fig. 1. Conceptual framework](image-url)
Conceptual Framework for this Study

To summarize the above literatures, the conceptual framework is drawn (Fig. 1) to explore the correlations among crowdfunding, perceived value, and purchase intention.

RESEARCH METHODOLOGY

Research Dimension

1. Crowdfunding

Based on the dimensions for Crowdfunding proposed by Gerber et al. (2012), three factors are extracted with factor analysis, including peer-to-peer lending (eigenvalue=2.466, $\alpha=0.80$), online social communities (eigenvalue=1.375, $\alpha=0.85$), and Motivations for Giving (eigenvalue=1.189, $\alpha=0.86$). The cumulative variance explained achieves 72.681%.

2. Perceived Value

Based on the dimensions for perceived value proposed by Sweeney and Soutar (2001), three factors are extracted with factor analysis, containing emotional value (eigenvalue=3.122, $\alpha=0.88$), social value (eigenvalue=2.667, $\alpha=0.84$), and quality function value (eigenvalue=2.391, $\alpha=0.87$). The cumulative variance explained reaches 85.942%.

3. Purchase Intention

Applying Purchase Intention proposed by Heskett et al. (1994) to measuring consumers’ purchase intention, the cumulative variance achieves 87.534% with factor analysis (eigenvalue=3.388, $\alpha=0.90$).

Research Subject

Total 300 copies are distributed to the users of Taiwanese Crowdfunding platforms, Flying V, zeczec, and WeProject. Having deducted invalid and incomplete ones, 153 copies are valid, with the retrieval rate 51%. The development of Crowdfunding in Asian countries is comparatively late, when a lot of platforms were established in 2011-2012, that there are merely Flying V, zeczec, and WeProject in Taiwan. They are therefore sampled and studied.

Analysis Approach

Regression Analysis is utilized for understanding the correlations among Crowdfunding, Perceived Value, and Purchase Intention.

ANALYSIS AND DISCUSSION

Regression Analysis of Crowdfunding and Perceived Value

Multiple regression analysis was used for testing the hypotheses and the theoretical framework in this study. The analysis results revealed the first regression equation achieving the significance ($F=33.581$, $p<0.001$), (Table 1). Crowdfunding presented significant effects on emotional value, where online social communities and motivations for giving in Crowdfunding showed significantly positive effects on emotional value (Beta <0.182, $p<0.05$, Beta <0.175, $p<0.05$). The analysis results showed the second regression equation reaching the signif-

Table 1: Regression analysis of crowdfunding and perceived value

| Independent variable ↓ | Perceived value | | | |
|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                        | Emotional value | Social value     | Quality function value |
| Crowdfunding           | Beta | $\bar{R}$ | Beta | $\bar{R}$ | Beta | $\bar{R}$ |
| Peer-to-peer lending    | 0.136 | 0.275 | 0.152* | 0.046 | 0.201** | 0.006 |
| Online social communities | 0.182* | 0.023 | 0.194* | 0.012 | 0.166* | 0.041 |
| Motivations for giving  | 0.175* | 0.034 | 0.211*** | 0.000 | 0.187* | 0.020 |
| F                      | 33.581*** | 42.948*** | 46.734*** | | | |
| P                      | 0.000 | 0.000 | 0.000 | | | |
| R²                     | 0.127 | 0.185 | 0.211 | | | |
| Adjusted R²            | 0.038 | 0.042 | 0.051 | | | |

Note: * stands for $P<0.05$, ** for $P<0.01$, *** for $P<0.001$. 
Crowdfunding revealed significant effects on social value, where peer-to-peer lending, online social communities, and motivations for giving in crowdfunding appeared significantly positive effects on social value in perceived value (Beta<0.152, p<0.05, Beta<0.194, p<0.05, Beta<0.211, p<0.01). The analysis results revealed the third regression equation achieving the significance (F=46.734, p<0.001), Table 1. Crowdfunding presented significant effects on quality function value, where peer-to-peer lending, online social communities, and motivations for giving in crowdfunding showed significantly positive effects on quality function value in perceived value (Beta<0.201, p<0.01, Beta<0.166, p<0.05, Beta<0.187, p<0.05). H1 therefore was partially supported.

**Regression Analysis of Crowdfunding, Perceived Value and Purchase Intention**

Multiple regression analysis was applied to testing the hypotheses and the theoretical framework in this study. The analysis results revealed the first regression equation achieving the significance (F=25.465, p<0.001), Table 2. Crowdfunding appeared significant effects on purchase intention, where peer-to-peer lending, online social communities, and motivations for giving in crowdfunding revealed significantly positive effects on purchase intention (Beta<0.233, p<0.01, Beta<0.188, p<0.05, Beta<0.167, p<0.05). H3 therefore was supported. The analysis results showed the second regression equation reaching the significance (F=28.337, p<0.001), Table 2. Perceived value appeared significant effects on purchase intention, where emotional value, social value, and quality function value in perceived value showed significantly positive effects on purchase intention (Beta<0.173, p<0.05, Beta<0.213, p<0.01, Beta<0.237, p<0.01). H2 therefore was supported.

**Table 2: Regression analysis of crowdfunding and purchase intention**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Beta</th>
<th>ñ</th>
<th>Beta</th>
<th>ñ</th>
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</thead>
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<tr>
<td>Purchase intention</td>
<td>Crowdfunding</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Peer-to-peer lending</td>
<td>0.233***</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online social communities</td>
<td>0.188*</td>
<td>0.014</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Motivations for giving</td>
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<tr>
<td>Emotional value</td>
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<td></td>
<td></td>
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<tr>
<td>Social value</td>
<td>0.213***</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality function value</td>
<td>0.237***</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>25.465***</td>
<td>28.337***</td>
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<tr>
<td>P</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.233</td>
<td>0.251</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.017</td>
<td>0.023</td>
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</tbody>
</table>

*Note: * stands for P<0.05, ** for P<0.01, *** for P<0.001.

**Table 3: Hierarchical regression of crowdfunding, perceived value, and purchase intention**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Beta</th>
<th>ñ</th>
<th>Beta</th>
<th>ñ</th>
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<td>Purchase intention</td>
<td>Crowdfunding</td>
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<tr>
<td>Peer-to-peer lending</td>
<td>0.233***</td>
<td>0.000</td>
<td></td>
<td>0.215***</td>
<td>0.000</td>
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<tr>
<td>Online social communities</td>
<td>0.188*</td>
<td>0.014</td>
<td></td>
<td>0.146</td>
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<td>Motivations for giving</td>
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<td>0.036</td>
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<td>0.137</td>
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<tr>
<td>Perceived value</td>
<td>0.184*</td>
<td>0.019</td>
<td></td>
<td></td>
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<tr>
<td>Social value</td>
<td>0.224***</td>
<td>0.000</td>
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<tr>
<td>Quality function value</td>
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<tr>
<td>F</td>
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<td>47.895***</td>
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<tr>
<td>P</td>
<td>0.000</td>
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</tr>
<tr>
<td>R²</td>
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<td>0.417</td>
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<tr>
<td>Adjusted R²</td>
<td>0.017</td>
<td>0.053</td>
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</tr>
</tbody>
</table>

*Note: * stands for P<0.05, ** for P<0.01, *** for P<0.001.*
Mediating Effects of Crowdfunding on the Correlations between Perceived Value and Purchase Intention

The mediating effects of perceived value in this study were showed with hierarchical regression analysis, Table 3. Crowdfunding presented significant explanation on purchase intention ($F=25.465, p<0.001$). In consideration of the effects of Crowdfunding and perceived value on purchase intention, Model 2, to explore the mediating effects of perceived value, it was found that the Beta value of peer-to-peer lending significantly dropped from 0.233 ($p<.01$) down to 0.215 ($p<.01$), presenting that perceived value would reduce the direct effects of peer-to-peer lending on purchase intention. Moreover, the Beta value of online social communities significantly dropped from 0.188 ($p<.05$) down to 0.154 ($p<.05$), revealing that perceived value would reduce the direct effects of online social communities on purchase intention. Finally, the Beta value of motivations for giving significantly dropped from 0.167 ($p<.05$) down to 0.137 ($p>.05$), showing that perceived value would reduce the direct effects of motivations for giving on purchase intention. According to the research results, perceived value appeared partially mediating effects on the correlations between crowdfunding and purchase intention that H4 was supported.

CONCLUSION

The research results reveal the correlations among the three variables in this study consistent with the past studies that Crowdfunding would positively affect perceived value and perceived value could influence purchase intention. The direct effects of Crowdfunding on purchase intention present the most significant, while perceived value appears mediating effects on the correlations between Crowdfunding and purchase intention. It reveals that, under the impact of global economic depression, individuals or entrepreneurs, newly established companies, and medium- and small-scale enterprises can hardly acquire loans from financial institutes because of insufficient guarantee or contact with venture capitals or business angels. A Crowdfunding platform therefore provides an easy access with simple concept presentation and capital investment to cover up the funding gap, cross the regional restrictions, and directly connects creation dreamers, entrepreneurs, and capital funders to test various creative ideas in the market. It not only reduces the transactional and early failure costs, but could also enhance the development of innovation, commoditization, and startups. More investors therefore would like to change the investment habits of consumers or investors to invest in creative, fictionalized, or customized products and services.

RECOMMENDATIONS

Aiming at the research results of Crowdfunding, perceived value and purchase intention, the following suggestions are proposed in this study.

1. **Startup Platform:** Crowdfunding undoubted develops a new loan channel for newly established enterprises or medium- and small-scale enterprises and directly connects the public with unlisted enterprises so that the companies could acquire the support of cash flow to overcome the early development predicament, enhance the market exposure, and allow potential investors discovering the value of such companies. Consequently, the government is suggested to mirror the startup platform established by the US Crowdfunding Act to construct a perfect early funding environment for micro-enterprises or newly established businesses so as to ensure the development of Crowdfunding platforms in Taiwan.

2. **Monetary Regulation and Legislation:** There has not been a regulation for domestic Crowdfunding platforms that the operation model would be affected and the scale could not be effectively enlarged. The government therefore should actively work on monetary regulation and legislation, stimulate the market transparency, enlarge the financial acquisition channel for medium- and small-scale enterprises, avoid phishing, and protect the investors’ rights so as to enhance the consumer motivation on Crowdfunding platforms.

3. **Third-Party Payment:** There are not many businesses providing third-party payment. In comparison with PayPal in foreign countries and Alipay in China, third-party payment has been widely developed interna-
tonally. Executive Yuan has recently loosened the regulations of third-party payment that micro-shops or individual sellers could accept credit cards, through third-party payment services, to complete the transaction. Considering the risk, Bank of Taiwan does not reveal high intention on undertaking third-party payment. It is therefore suggested that the government could establish the third-party payment department. With the credibility and fairness, peer-to-peer lending in crowdfunding could be promoted to enhance consumers’ perceived value and purchase intention.

REFERENCES


