

The Influence of Utilitarian Benefits and Perceived Risks on Crowdfunding Intention: The Moderating Roles of Potential Backers and Campaigns

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ABSTRACT**The Influence of Utilitarian Benefits and Perceived Risks on Crowdfunding Intention: The Moderating Roles of Potential Backers and Campaigns****Summary:**

Crowdfunding (CF) is an alternative financing method, while the most popular type is reward-based CF. However, the funding success rate is still low and knowledge regarding backers' reasons to support a project is required. The aims of this work are thus to investigate both positive and negative factors that tend to affect backers' motivation. The moderating impact of a campaign's and a backer's attributes are also examined. Data is collected from 410 people who could be potential backers using an online questionnaire. Utilitarian benefits in terms of monetary savings, product information, and convenience win over negative factors like perceived risks in influencing backers' intention. Backer-related factors i.e., gender and online buying experience significantly moderate the above influences, but campaign-related factors do not. This study guides project creators to expand their targets more to shoppers rather than CF platform users. Utilizing constructs from the e-commerce context and providing evidence to support the effects of gender and online shopping experiences are values uncovered by this study.

Keywords: perceived risks, utilitarian benefits, crowdfunding intention, reward-based crowdfunding, Indiegogo

INTRODUCTION

Crowdfunding (CF) is using the crowd to raise funds by connecting people with ideas or stuff to sell to potential contributors that have the capital to share (Linh, 2019, Zhao et al., 2017). Contributors are also called ‘crowdfunders’, ‘investors’, or ‘backers’. Individuals or small, micro, and medium enterprises, known as ‘project creators’, can acquire money from many people by launching a project in the CF platform and returning them some benefits such as future products or monetary rewards (Liang et al., 2020, Troise, 2020, Sirisawat et al., 2022, Kim et al., 2020, Yang et al., 2019, Thies et al., 2014, Ren et al., 2018). Large enterprises can also launch projects in CF platforms to verify market demand (Liang et al., 2020). It has become vital means for enterprises to solve problems (Liang et al., 2020, Troise, 2020, Kang et al., 2017). CF platforms allow entrepreneurs to step over physical boundaries and reach out to the global masses (Kang et al., 2017, Moon and Hwang, 2018). It thus creates new business opportunities, provides economic benefits, and fuels the economy (Linh, 2019, Liang et al., 2020, Kim et al., 2020, Li et al., 2019). CF has been recognized as an important alternative financing channel by various countries e.g., the USA and China (Li et al., 2016a, Moon and Hwang, 2018).

Four forms of CF are donation-, reward-, lending-, and equity-based (Li et al., 2016a, Liang et al., 2020, Kim and Chang, 2020, Linh, 2019). Reward-based CF is the fastest-growing form of CF and has the largest number of online platforms. In reward-based CF, contributors receive non-monetary rewards for backing a project. Reward types can be copies of a thing, creative collaborations, creative experiences, or creative mementos (Bi et al., 2017, Moon and Hwang, 2018, Zhao et al., 2017). Examples of CF platforms are Kickstarter, Indiegogo, GoFundMe or Circle Up (Linh, 2019), while the two largest ones are Kickstarter and Indiegogo (Liang et al., 2020, Thies et al., 2014, Huhtamäki et al., 2015). Complex elements in CF are crowd, project owners, CF platforms, and funding mechanisms (Huhtamäki et al., 2015). Kickstarter supports reward projects with an All-Or-Nothing (AON) funding mechanism, while Indiegogo supports both reward and donation projects with AON or Keep It All (KIA) funding approach (Huhtamäki et al., 2015). Past literature indicates that backers generally act like consumers in reward-based CF due to its ‘pre-selling’ business model. Their online behaviors are like consumers buying goods (Bi et al., 2017, Gierczak et al., 2014, Gierczak and Nitze, 2015) (Thies et al., 2014). Therefore, reward-based CF is comparable to pre-order e-commerce transactions (Gierczak et al., 2014, Gierczak and Nitze, 2015, He et al., 2016).

Although the CF market has become seemingly promising (Thies et al., 2014) and the amount of CF is expected to soon surpass venture capital (Anglin et al., 2018), past studies indicate that the actual financing success rate is low and decreasing (Liang et al., 2020, Li et al., 2016b, Zhao et al., 2017). Not all CF projects can achieve the desired amount of funding (Kang et al., 2017). Understanding why backers support and identifying the antecedents of their funding intention are therefore crucial (Liang et al., 2020, Li et al., 2019, Zhao et al., 2017). Emerging CF research shares a descriptive understanding of how and when entrepreneurs acquire funds through CF platforms and how crowdfunders support depending on project success and timing (Li et al., 2017, Li et al., 2018b, Ren et al., 2018). Yet to date, current research exploring CF success using the

theories extensively applied in the e-commerce context is limited. Considering both negative and positive factors when buying products from CF, which is less developed than professional e-commerce platforms, is crucial and compelling (Li et al., 2019). Various risks e.g., illegal fundraising, credit risks, platform operational risks, and technical risks could be faced in CF (Liang et al., 2020). Asia is the world's second-largest CF market (Zhao et al., 2017). Consumer decision-making styles in Asian countries are different from those of Western countries (Dash and Sarangi, 2008). Only some such as the study of He et al. (2016) and the study of Wang and Kim (2017) investigates CF performance in China. Prior studies also suggest future research to pay attention to project videos (Li et al., 2017), individuals' past experiences (San Martín et al., 2021), backers' perspectives (Zhao et al., 2017), gender (Mou et al., 2017, Gunawan et al., 2019), CF in emerging countries (Gunawan et al., 2019), and the moderating effects (Liang et al., 2020). In addressing these shortcomings, major research questions of this work include: RQ1: what are the effects of utilitarian benefits (product offerings, product information, monetary savings, convenience) and perceived risks on backers' CF intention? RQ2: how do these impacts vary for distinct backers' aspects (gender and online buying experience) and project details (funding amount raised and product videos)?

LITERATURE REVIEW AND HYPOTHESES

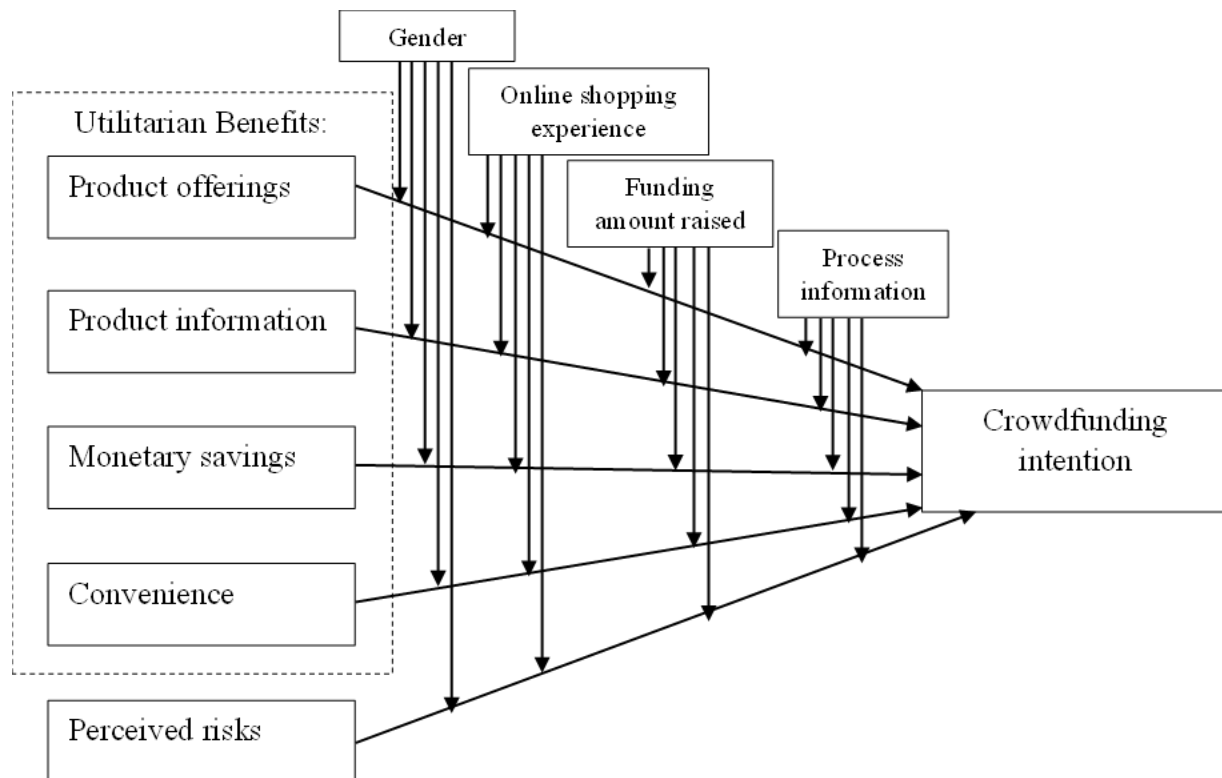


Figure 1: Theoretical framework

Figure 1 shows the research framework. According to Shneor and Munim (2019), an individual's financial-contribution intention significantly leads to his/ her behavior to provide monetary

backing to a CF campaign. The success of a CF depends on the participation of potential sponsors. Therefore, understanding backers' funding intentions and motivations is a fundamental objective of this research area (Wang and Yang, 2019).

Utilitarian Benefits and Crowdfunding Intention

CF platform will get a positive impetus if it is perceived as useful (Jaziri and Miralam, 2019). Perceived benefits by crowdfunders are significantly associated with commitment, which is significantly associated with their funding intention (Zhao et al., 2017). In the B2C e-commerce context, utilitarian values embed utilitarian benefits that are product offerings, product information, monetary savings, and convenience (Chiu et al., 2014). In the context of hypermarket, utilitarian value significantly affects customer satisfaction driving customer loyalty (Zainurrafiqi et al., 2021). Consumers' utilitarian value on online shopping websites significantly increases the cognitive trust that significantly positively impacts their perceived satisfaction and purchase intention (Chang et al., 2016). Sponsor satisfaction with reward-based CF is also positively linked with utilitarian value (Zheng et al., 2017). Dimensions of utilitarian value are product offerings, product information, monetary savings, and convenience. In e-commerce, utilitarian shopping values significantly enhance both customer satisfaction and customer repurchase intention. Utilitarian values also significantly increase repeat purchases (Kumar and Ayodeji, 2021). Omnichannel perceived utilitarian values in terms of quality, monetary savings, and convenience significantly improve consumers' attitudes toward omnichannel shopping, which positively influence their omnichannel continuance intention (Geng and Chang, 2022). In Online Shopping Carnivals (OSC), utilitarian shopping values impacting the intention to participate are positively and significantly affected by monetary savings, selection, and convenience. Utilitarian values, consisting of perceived value, product offerings, monetary savings, and convenience, are positive valences promoting cross-border buyers' repeat purchase intentions (Mou et al., 2017). Overall perceived value driving repurchase intention in Cross-Border E-Commerce (CBEC) is significantly improved by monetary savings, product offerings, and convenience (Mou et al., 2020). Consequently, this study proposes the following hypotheses:

H1: There will be a positive relationship between utilitarian benefits: a) product offerings, b) product information, c) monetary savings, and d) convenience and backers' CF intention.

Perceived Risks and Crowdfunding Intention

According to the risk theory, risk perception negatively impacts the willingness to conduct a risky behavior. Hence, decision-makers tend to make more risky decisions if perceived risks are low (Nicolaou and McKnight, 2006). Crowdfunding involves risks because of the novelty of digital manifestation (Deepika et al., 2019). Perceive risks of funders play a crucial role in their CF participation consideration (Kim et al., 2020). Perceived risks with services, perceived risks with transactions, and plagiarism risk significantly decrease the intention to adopt CF technology (Jaziri and Miralam, 2019). Unlike other CF types, reward-based CF has no well-defined regulations about sponsor protection because of non-monetary returns. However, it exposes backers to some risks (He et al., 2016). Reward CF involves risks of non-delivery, late delivery, or deviating delivery on project owners' promises (Shneor and Munim, 2019). Perceived risks associated with the funding project, the project initiator, and the intermediary are proposed to negatively affect

funding on revocation in reward-based CF (Gierczak et al., 2014). Perceived performance risks and psychological risks of CF have significant impacts on backing intention (Wang and Kim, 2017). Perceived risks of CF reduce the probability of willingness to support a CF project (Khan, 2022). Risks perceived in any CF campaign could be moral hazards. Perceived risks have a negative impact on participation intention in the study of Jaziri and Miralam (2019). Platform risks perceived by individuals in the CF platform have a significant and negative influence on their overall attitude towards CF, which significantly adversely affects their attitude towards the project and intention to fund the project (San Martín et al., 2021). Backers' perceived risks are negatively and significantly associated with funding intention (Zhao et al., 2017). Perceived risks are proposed to negatively affect the intention to visit festival CF services (Kim and Chang, 2020). Past research has found that perceived risks affect backers' funding intention (Wang and Yang, 2019). So, the second hypothesis is:

H2: There will be a negative relationship between perceived risks and backers' CF intention.

A Campaign's Factors as Moderators

Project or campaign in terms of project objectives and elements of a good project is the top attributes relevant to the founders in the future development of CF platforms from the viewpoint of experts (Sirisawat et al., 2022). Project information such as main products, content, method raised, product functions, description, and so on significantly increase the percentage of CF success (Linh, 2019). In the study of Liang et al. (2020), information description i.e., picture count, video count, comment, and update positively affect CF success (Liang et al., 2020).

For project information in terms of funding amount raised, tracking daily funding amounts could help campaign creators as well as contributors (Ren et al., 2018). Crowdfunding success can be driven by the number of backers and the amount that those backers support in a project. In the study of Hörisch and Tenner (2020), the number of funders who invest in a project positively mediates the relationship between a project's environmental orientation and its funding success. The market success of a realized CF project (revenue) is impacted by the funding amount (Aygoren and Koch, 2021). In a randomized field experiment in leading reward-based CF platforms by Zaggli and Block (2019), initial small funding amounts, compared to no initial funding amount, could lead to follow-up contributions by others. A relatively high backing price in a project's reward scheme has a positive effect on its CF performance (Xiao et al., 2014). Accumulative fund amount is significantly related to funding amount and fund count (Kang et al., 2017). The average amount pledged, which is the mean amount contributed by each crowdfunder, significantly positively drives the funding amount collected (Troise, 2020).

A project's CF performance is significantly and positively driven by the frequency of communication activities between project creators and backers (Xiao et al., 2014). The updated content of information affects CF success (Liang et al., 2020). The communication will help inform the project's objectives which will enhance the investors' trust and commitment to investment. Besides texts and pictures, videos show movements and supply audio information. Videos have a sufficient richness to give the necessary information for backers to decide whether the project is worth funding or not (Koch and Siering, 2015). Video information by project creators has a significant and positive impact on funding amount. Videos of product displays or teams are

encouraged to upload by founders (Yao and Zhang, 2014). Crowdfunding literature suggests that project videos are vital for the success of CF (Li et al., 2017). Kickstarter recommends that the key to show project preparation and quality is to include a video. The study of Mollick (2014) also reveal the significant effect of videos on project success. The attractive process of quality signals in terms of videos significantly influences CF success (Li et al., 2018a). Past studies confirm that project descriptions or the provision of videos have a positive effect on the successful funding of campaigns (Koch and Siering, 2015). Having a video (video count) in a reward-based CF campaign significantly enhances funder investment decisions in terms of the number of investment funders (Bi et al., 2017). Video count has a positive impact on CF success in the study by Liang et al. (2020). The availability of a video pitch is significantly related to higher ICO firm valuation (Kolbe et al., 2022). The provision of video material has a significant and positive effect on funding success (Koch and Siering, 2015). Videos showing an entrepreneur's activeness significantly positively raise the number of followers and the ratio of fundraising (Li et al., 2016a). Videos as one of the quality signals attraction processes are proposed to affect the financing results of CF projects (Li et al., 2018a). Perceived product quality, which could be presented through product videos, also positively and significantly improves backers' funding intention (Wang and Yang, 2019). Project information posted by project creators such as videos is a crucial indicator of project quality (Li et al., 2018b). Both videos and images in the project description are positively linked to the funding amount, but the effect of videos is larger compared to images due to their higher level of media richness (Kim and Park, 2017). In this fashion, it could be said that the frequency and quality of the project media and key messages significantly contribute to the project's success. Accordingly, the following hypotheses are proposed.

H3: The funding amount raised in a campaign will moderate the relationship between utilitarian benefits: a) product offerings, b) product information, c) monetary savings, d) convenience, and e) perceived risks and backers' CF intention.

H4: A product video in a campaign will moderate the relationship between utilitarian benefits: a) product offerings, b) product information, c) monetary savings, d) convenience, and e) perceived risks and backers' CF intention.

A Potential Backer's Factors as Moderators

Backers are one of the stakeholder groups in CF. Their motivation, satisfaction, and follow-up attributes are relevant to the future development of CF in the view of experts (Sirisawat et al., 2022).

Gender differences have been long believed to influence the adoption and usage of Internet applications. They have been supported as an instrument in consumer decision-making processes for online shopping and could affect online repurchase intention (Mou et al., 2020). Past research points out a strong interest in the relationship between gender and funding such as funding targets or funding raised in CF platforms (Geiger and Oranburg, 2018). Horvat and Papamarkou (2017) indicate that female entrepreneurs and investors have different success rates than their male counterparts. In their study, female-led campaigns reach a higher target than male-led campaigns, while men fund projects more than women. Research on Kickstarter also shows that female entrepreneurs are more successful than males (Geiger and Oranburg, 2018). Gender, as a control

variable, significantly affects repeat purchase intention in the study by Chiu et al. (2014). Gender (males) negatively affects satisfaction with the philanthropic project in CF compared to females (Zheng et al., 2017). Gender (males) negatively influences the success of fundraising, the pledged amount, the pledged amount divided by the goal amount, and the number of funders (Duan et al., 2020). The risk-taking for investment among gender is also different. In the context of lotteries and risky financial decisions, females are more risk-averse than males (Mohammadi and Shafi, 2018). For an equity-based CF FundedByMe, Mohammadi and Shafi (2018) have found that female investors tend to support in younger firms with high technologies and having a higher percentage of equity offerings, which is consistent with more risk aversion of female versus male funders. The presence of female entrepreneurs significantly decreases venture funding success in the study of Elitzur and Solodoha (2021), but female presence in ventures together with a high number of backers significantly enhances the chance of funding success. Mou et al. (2017) propose that female shoppers could be more or less risk-averse than males, thus future research should consider whether gender moderates the effects' strength. Geiger and Oranburg (2018) explore the moderating impact of gender and reveals that female signatories gain less funding than male signatories when the offering amount increases. Mou et al. (2020) indicate that males are considered more strongly to respond to the utilitarian benefits of online shopping and are more willing to take risks than females. There are significant differences between women and men in their perceptions of positive and negative valences in CBEC (Mou et al., 2020).

Flavián et al. (2019) point out that the perceptions of money savings affecting shopping motivation depend on the type of shopping experience. The compatibility of an online shopping experience with the shopping habits and product evaluation styles of consumers is a crucial factor of e-commerce adoption, whereas shopping enjoyment is a key aspect of consumers' online shopping experiences. Consumers may not want to buy a product through a website because of a bad shopping experience even though the product itself is good (Jiang and Benbasat, 2007). Sensory and emotional satisfaction gained from shopping experiences could increase the purchase intention of hedonic consumers. Consumers' online flow experiences also improve their willingness to revisit websites and increase their purchasing behaviors (Chang et al., 2016). Consumer satisfaction could happen with the shopping experience (Flavián et al., 2019). Consumers with purchase experiences can evaluate actual cost benefits and may not repurchase if actual net utilities are low (Mou et al., 2020). Past experiences with CF make individuals overcome initial barriers and possibly create a positive attitude (San Martín et al., 2021). Inexperienced users on CF platforms may depend on their emotional factors to provide funding support to project creators (Kim and Park, 2017). Internet experience is treated as a control variable for the sponsor satisfaction model (Zheng et al., 2017) and the repeat purchase intention model (Chiu et al., 2014). Consumer familiarity with e-commerce platforms along with prior satisfactory experiences could decrease the uncertainty inherent in e-commerce transactions in the future (Mou et al., 2020). Thus, this study hypothesizes:

H5: The gender of backers will moderate the relationship between utilitarian benefits: a) product offerings, b) product information, c) monetary savings, d) convenience, and e) perceived risks backers' CF intention.

H6: Online buying experience of backers will moderate the relationship between utilitarian benefits: a) product offerings, b) product information, c) monetary savings, d) convenience, and e) perceived risks and backers' CF intention.

METHOD

The target population was potential backers that could be online or offline shoppers, who had or had no experiences in e-commerce. Quota sampling was adopted to collect half of the men and women who had online shopping experiences and not having online shopping experiences equally. The quantitative approach and a structured questionnaire encompassed questions about four utilitarian benefits, perceived risks, and respondents' demographics. Dimensions of utilitarian values included product offerings, product information, monetary savings, and convenience. Utilitarian benefits and their dimensions were measured with twelve questions adapted from Chiu et al. (2014). Perceived risks were measured by three questions modified from Chiu et al. (2014), whereas intention to pledge or CF intention was measured by three questions adapted from Lu and Rastrick (2014). A five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), was employed to solicit answers from potential backers. Questions for demographics included age, average budget to support a CF project, and product categories and payment methods of interest. The introductory part of the questionnaire described the scenario, the product (wallet), its funding goal, total backers, the funding amount raised, a product story, a product video (optional), quality information, design information, pledge options, information about dimensions and materials, monetary savings, founders' stories, production schedule, and warranty & care respectively. This information was acquired from a real project posted on Indiegogo, with permission from the project owner to use it for research purposes. Two additional questions were presented before the formal questions to check whether respondents read about the fund amount raised and watched product videos comparing the product with others in terms of convenient usage. These questions were also used to separate a campaign with some or no funding amount raised and a campaign with product video or not. Online questionnaires were collected voluntarily by research assistants. Finally, out of 456 responses, 410 questionnaires were available for analysis. Some responses were discarded because they wrong answered the two questions. Descriptive statistics were utilized. Instrument validity and reliability were also checked. Hierarchical regression analysis together with simple slope plots and tests using excel sheets provided by Dawson (2014) was conducted to test hypotheses.

RESULTS

Descriptive Statistics

Of all respondents, 211 of them were females and 199 of them were males. In terms of online shopping experiences, 214 respondents had online shopping experiences, while the rest did not. Half of them (205 people) saw zero funding amount raised and another half saw that the project gained some number of support (27,302 USD from 170 backers). Two hundred respondents viewed a product video, which showed the superiority of the product in terms of convenient usage, whereas the remainder did not. Potential backers who shopped online normally purchased goods almost every day (28 times per month) with an average purchase of 25 USD, whereas respondents

who bought products onsite shopped 9 times per month with an average purchase of 23 USD. Table 1 presented the respondents' demographics. The main age group of respondents was 20-24 years old. More than half of them intended to support a CF campaign of around 1-25 USD. Women's/ men's fashion, technology/ electronics, health/ beauty, sports/ travel, and comics/ books/ magazines were the top-five product categories, which potential backers were interested to fund. Transfer funds via automatic bank transfer (ACH) and debit/ credit card via Stripe payment system were the top two interested payment methods.

Table 1: Sample demographic information

Demographic categories	Frequency	Percentage
Age (years old):		
Less than 15	3	0.7
15-19	99	24.1
20-24	283	69
30-34	10	2.4
35-39	3	0.7
40-49	6	1.5
50-59	6	1.5
More than or equal 60	0	0.0
Average budget to support a CF project (USD):		
\$1-\$5	146	35.6
\$6-\$10	116	28.3
\$11-\$25	83	20.2
\$26-\$50	30	7.3
\$51-\$100	21	5.1
\$101-\$500	11	2.7
\$501-\$1000	2	0.5
\$1001-\$5000	1	0.2

Demographic categories	Frequency	Percentage
\$5000++	0	0.0
Interested product categories in the CF platform:		
Technology/ electronics	165	40.24
Women's/ men's fashion	302	73.66
Electrical appliances/ home appliances	56	13.66
Health/ beauty	150	36.59
Children/ toys	20	4.88
Sports/ travel	71	17.32
Automotive	11	2.68
Music/ entertainment media	35	8.54
Arts/ crafts	15	3.66
Comics/ books/ magazines	70	17.07
Interested payment methods:		
Debit or credit card via Stripe payment system	210	51.22
Payment systems such as PayPal	102	24.88
Transfer funds via automatic bank transfer (ACH)	254	61.95
Others	16	3.9

Factor analysis using a principal component analysis with Varimax rotation was performed to align interrelated questions into their related factors. Barlett's test of sphericity ($p < .001$) confirmed the suitability of data for factor analysis with the Kaiser-Meyer-Olkin Measure of Sampling Adequacy test of .910. Six factors including crowdfunding intention, perceived risks, product offerings, product information, monetary savings, and convenience accounted for 71.878% of the total variance. All item loadings were above 0.6 following the minimum acceptable level of Hair et al. (2010) and Malhotra et al. (2006). Table 2 showed correlation coefficients for the research variables that showed significant correlations between dependent and independent variables. Cronbach's alpha values of all factors were more than 0.6, showing the acceptable threshold of reliability. Means and standard deviations of all variables were also presented.

Table 2: Means, standard deviations, Cronbach's alpha, and intercorrelations for study variables.

Variables	Mean	SD	Cronbach's Alpha	1	2	3	4	5	6
1 Crowdfunding Intention	3.2854	.80147	.874	1.000					
2 Perceived Risks	3.2894	.72501	.676	.008	1.000				
3 Product Offerings	3.5098	.61099	.770	.463**	.219**	1.000			
4 Product Information	3.5577	.60654	.785	.495**	.131*	.644**	1.000		
5 Monetary Savings	3.4195	.68130	.841	.654**	.070	.524**	.549**	1.000	
6 Convenience	3.6675	.65661	.764	.483**	.105*	.562**	.589**	.528**	1.000

* $p < .05$, ** $p < .01$, *** $p < .001$

Hierarchical Regression

Table 3: Results of hierarchical regression analysis.

	R^2	R^2 Change	B	SE	Beta
Step 1:	.493	.493***			
Perceived Risks (PR)			-.071	.041	-.065
Product Offerings (UB_PO)			.098	.066	.074
Product Information (UB_PI)			.153	.068	.116*

	R^2	R^2 Change	B	SE	Beta
Monetary Savings (UB_MS)			.559	.054	.475***
Convenience (UB_CO)			.154	.058	.126**
Gender (FM)			-.203	.058	-.127***
Online Buying Experience (OO)			.019	.058	.012
Funding Amount Raised (NBB)			-.083	.057	-.052
Product Video (NCC)			-.100	.058	-.063
Step 2:	.536	.043*			
Perceived Risks (PR)			-.142	.096	-.128
Product Offerings (UB_PO)			.163	.155	.125
Product Information (UB_PI)			.312	.171	.236
Monetary Savings (UB_MS)			.210	.147	.178
Convenience (UB_CO)			.262	.149	.215
Gender (FM)			-.111	.459	-.069
Online Buying Experience (OO)			-.793	.453	-.495
Funding Amount Raised (NBB)			.333	.456	.208
Product Video (NCC)			-.011	.464	-.007
FMxPR			-.050	.083	-.110
FMxUB_PO			-.246	.142	-.549

	R^2	R^2 Change	B	SE	Beta
FMxUB_PI			.187	.141	.423
FMxUB_MS			.278	.119	.613*
FMxUB_CO			-.193	.125	-.451
OOxPR			.230	.083	.501***
OOxUB_PO			-.054	.138	-.123
OOxUB_PI			-.184	.139	-.426
OOxUB_MS			.270	.116	.607*
OOxUB_CO			-.017	.124	-.039
NBBxPR			-.019	.084	-.041
NBBxUB_PO			.228	.137	.509
NBBxUB_PI			-.268	.137	-.607
NBBxUB_MS			-.113	.110	-.247
NBBxUB_CO			.048	.119	.112
NCCxPR			-.036	.083	-.076
NCCxUB_PO			.002	.141	.006
NCCxUB_PI			-.061	.143	-.140
NCCxUB_MS			.155	.118	.341
NCCxUB_CO			-.085	.121	-.203

* $p < .05$, ** $p < .01$, *** $p < .001$

The collinearity problems were analyzed among constructs. The analysis showed all correlation coefficient values were less than 0.8 (Meghanathan and Yang, 2019). Besides, tolerance values and Variance Inflation Factor (VIF) of all constructs were ranging from .493 to .984 and from 1.016 to 2.098 respectively, following the threshold of more than 0.2 and less than 0.5. Thus, no collinearity problems were found.

Table 3 presents hierarchical regression predicting CF intention. The first step, to test the direct impact of independent variables, indicates that monetary savings ($b = .475$, $t(400) = 10.276$, $p < .001$), convenience ($b = .126$, $t(400) = 2.648$, $p < .01$), and product information ($b = .116$, $t(400) = 2.251$, $p < .05$), together with gender (-), significantly and positively affect intention to pledge of potential backers respectively. These constructs explain 49.3 % of the variance. Therefore, *H1b*, *H1c*, and *H1d* are supported. The second step, using factors of projects and potential backers as moderators, shows that the interaction effect of gender and monetary savings ($b = .613$, $t(380) = 2.332$, $p < .05$), the interaction effect of online shopping experience and perceived risks ($b = .501$, $t(380) = 2.776$, $p < .01$), and the interaction effect of online shopping experience and monetary savings ($b = .607$, $t(380) = 2.332$, $p < .05$) on CF intention are significant. The overall model in the second step ($R^2 = .536$) for all dimensions shows a significant difference from the model in the first step ($R^2 = .493$).

Figure 2 shows that the relationship between monetary savings and CF intention is more positive when potential backers are males. A simple slope test reveals that the slope for males is significant ($b = .488$, $p < .001$), but not for the slope for females. Hence, *H5c* is partially supported. Figure 3 presents the relationship between perceived risks and CF intention. The relationship is negative when potential backers have no online shopping experience, but it is positive when they have online shopping experience. However, the results of slope tests are not significant. Figure 4 shows that the relationship between monetary savings and CF intention is more positive for potential backers with online shopping experiences, but more negative for those having no online shopping experiences. The slope test for only online shopping experience is significant ($b = .480$, $p < .001$), so *H6c* is partially supported.

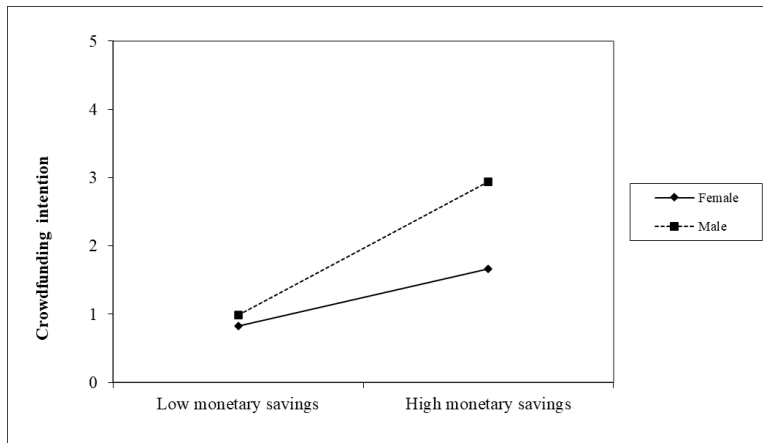


Figure 2: The interactive effect of gender and monetary savings on CF intention.

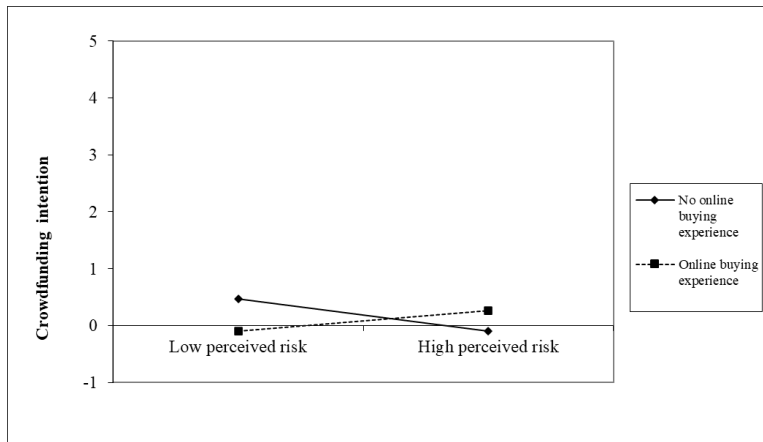


Figure 3: The interactive effect of online buying experience and perceived risks on CF intention.

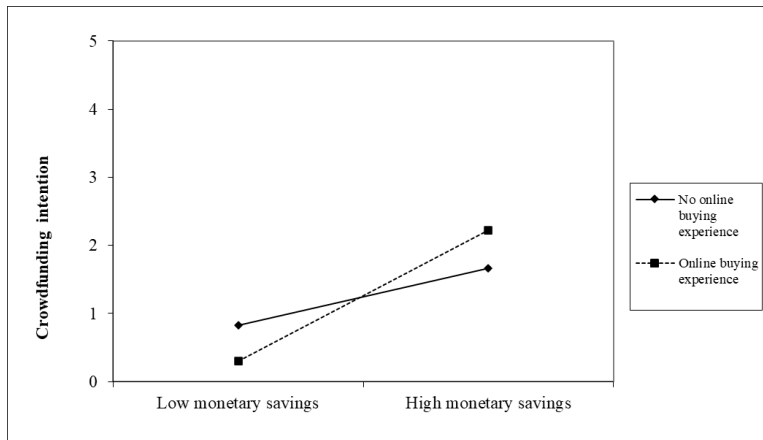


Figure 4: The interactive effect of online buying experience and monetary savings on CF intention.

DISCUSSION

The results confirm the literature review in terms of the direct effects of utilitarian benefits (product information, monetary savings, and convenience) and the moderating impacts of gender and online buying experience of backers on the monetary savings-CF intention relationship. Product offerings, as one of the positive valence, significantly influence repurchase intention in the e-commerce context (Mou et al., 2017), but insignificance in the CF context in this study. Under the CF circumstance, the backers may look for the project with the specific purpose of producing certain products. Having a variety of different products may be perceived as a typical commercialization project where there are a number of alternative businesses or entrepreneurs for the backers (customers) to select from. With this perspective, high number of product offerings may not be significantly influence their intention to fund the project. The insignificant influence of perceived risks could be supported by the study of Kim et al. (2020) revealing that perceived risks of tourism CF do not negatively affect CF participation. It could be hypothesized that ones with limited online

transactions and experience, may perceive risk associated with online exposure. However, this research, shows that perceived risk is at a minimum. This is because the demographic factor helps moderate the perceived risk since the majority of respondents are at a young age, even almost half of respondents have online experience.

Although the study of Mou et al. (2017) and the study of Khan (2022) show no impact of gender (as a control variable) on repurchase intention and the willingness to fund a CF project respectively. Besides, the study of Wang and Yang (2019) indicates that backers' gender does not play a significant role in their funding decisions. Gender significantly affects CF intention in this work. Geiger and Oranburg (2018) also state that only a few studies provide evidence for a relationship between gender and fundraising through the US equity crowdfunding and their results contradict the findings of research on the relationship between gender and funding in reward-based CF platforms. The significant moderating impact of gender (men) on the monetary savings-CF intention relationship conforms to the e-commerce literature specifying that men respond more strongly to utilitarian benefits than women. On the other hand, male consumers are more likely to concern with rational decisions than their female counterparts. When they are prone to functional benefits or observe the cost-benefit trade-off, they are more willing to purchase or repeat purchase goods without physical contact. Past studies also confirm that perceived benefits are strongly related to online repurchase intention among men more than women (Mou et al., 2020). In addition, Horvat and Papamarkou (2017) emphasize that males are more successful investors compared to females.

For insignificant moderating effects of gender and online buying experience on some relationships, gender and CBEC experience are also insignificant variables in the study of Mou et al. (2017). Gender and Internet experience, as control variables, show no impacts on sponsor satisfaction in the study of Zheng et al. (2017). The gender of entrepreneurs does not affect funding success in the study of Kang et al. (2017). Past research about Kickstarter campaigns also shows no differences in funding targets or funding raised between males and females (Geiger and Oranburg, 2018). However, the research shows that online experience significantly moderates the relationship between monetary saving and the backer's intention to fund. This moderating effect can be explained by the notion that when ones have a higher online experience, one will learn to enjoy the saving benefits in different dimensions such as transaction saving and transportation saving.

Considering the insignificant moderating impacts of the funding amount raised and product videos, the number of videos in a project description does not link to CF success in the study of Liang et al. (2020). Videos as a quality signal do not significantly enhance CF financing results (Li et al., 2018a). Besides, video count does not show a significant impact on fund amount in the study of Kang et al. (2017). In this fashion, the video quality can draw attention from the backers but is insufficient to impact their funding intention. Investigation of promotional video regarding key messages promoting product benefits is strongly recommended to ensure that such message is properly designed and addressed to serve their intention for consumption. As the result, the video material does not maximize the communication value with project funding. Accumulative fund amount does not significantly affect fund amount in some model and significantly decrease fund amount in other models in the study of Kang et al. (2017). The minimum starting investment

amount does not play a significant role in backers' willingness to invest and financing efficiency in the work of Li et al. (2018b). Zaggl and Block (2019) also emphasize reverse herding, which could happen when the funding amounts are small (though positive). The number of funders backing a project does not significantly positively mediate between a campaign's social orientation and its funding success (Hörisch and Tenner, 2020). The study of Aygoren and Koch (2021) also shows that the funding amount does not significantly influence market success in terms of higher revenues and ratings of a project.

CONCLUSION

This work investigates the influence of utilitarian benefits as positive factors and perceived risks as a negative factors together with the moderating impacts of both campaigns' and backers' details on CF success in terms of potential backers' intention to fund a project. Constructs from the e-commerce context are employed in this study. An online structured questionnaire is developed to collect data from potential backers with different genders and online shopping experiences. A sample of 410 respondents is valid for further analysis. Hierarchical regression analysis reveals that product information, monetary savings, and the convenience of CF significantly increase backers' intention to support a campaign. Gender and online buying experience are also confirmed to be significant moderators moderating the relationship between monetary savings and CF intention.

Implications for Research and Practice

For theoretical implications, previous studies have focused on the influential factors of CF success from a project's or a project creator's perspectives. However, several studies neglect to provide a comprehensive view by investigating a campaign's and a backer's factors as moderators, which are explored in this study. The empirical results of this research also make a significant contribution to CF literature by utilizing and confirming that utilitarian values or benefits from the e-commerce literature can be applied to predict CF success. Both positive and negative factors are examined in this work while exploring both drivers and obstacles to CF success are still limited. However, the findings confirm only the positive impacts of product information, monetary savings, and convenience on potential backers' intention to support a CF project on Indiegogo. Unlike several past studies, gender is confirmed as a significant predictor and also a significant moderator. Besides, the online shopping experience significantly moderates a utilitarian benefit-CF intention relationship. This empirical evidence provides support for investigating the attributes of potential backers further. In addition, this study explores from a CF context on a famous CF platform (Indiegogo) in Thailand, which is noteworthy since the Asian market is the second-largest CF market, and past research is commonly done in western environments.

This study provides practical guidelines for campaign creators as follows. First, monetary savings are the most influential factor for backers' intention to pledge. Project initiators should make young potential backers feel that they can save more money by buying inexpensive or cheaper products through funding a CF project. There are two major attributes associated with this factor. Firstly, monetary savings can help minimize the perceived risk associated with online transactions through CF and the likelihood of products becoming defective. Secondly, since the majority of those, who

are willing to back a project, are young generations, they might be subject to spending limitations. The detail about monetary savings should be made highly visible as a part of the campaign/ product description or introduction. If the video material addressed this attribute, it may create a positive impact on the decision to support the project. Second, convenience is also the key to enabling potential backers to support a campaign. Project creators should choose a platform that provides or supports funding conveniently to allow contributors to pledge anywhere anytime as same as they buy products from professional e-commerce platforms. Apparently, omnichannel may be implemented to make the project and products available to different groups of backers since each of the backer groups has a diverse background leading to different preferences. Third, potential backers need information about product features, technical specifications, or product attributes. Therefore, project creators should provide sufficient and updated information, particularly for investors who have no prior experience with CF platforms or e-commerce platforms. Forth, interestingly, young male potential backers tend to show more intention to support inexpensive or value-for-money products than females. Products for men in categories i.e., fashion, technology/ electronics, health, sports/ travel, and comics/ books/ magazines should be introduced more on the CF platform. Last, online shopping experiences could improve the effectiveness of monetary savings on young backers' CF intention. Thus, campaign initiators should advertise their products to e-commerce users, who may expect the same value (monetary savings) from CF platforms and persuade them to try CF. Online shoppers also buy products far more frequently than offline shoppers in the close shopping amount each time. Last, project owners should incorporate payment technology to provide easy and familiar payment channels for potential backers such as bank transfers or debit/ credit cards.

Limitations and Future Research Directions

Scholars should be cautious in generalizing the results to other Asian countries, which vary in cultures and contexts. This study only focuses on one reward-based CF platform which could also limit the generalization of findings. Future research should apply the framework to other platforms or other CF forms in addition to reward-based CF in other Asian countries. Only some campaign-related and backer-related factors are explored. Future studies should investigate more of those factors as other moderating variables e.g., backers' age or innovativeness. Only a product video showing the superiority of the product convenience is used and the results are insignificant. Future studies should try other types of videos and deeply explore video content to expand the research findings. A real product from one category is employed in the scenario to help respondents understand the CF platform and its underlying products. Other researchers should apply the research model to other categories such as fashion or investigate from the real CF platforms. This study does not utilize the actual behaviors of crowdfunders since the target population is potential backers. But future research could use the same model to collect data more from real investors to compare the influential factors among adopters and non-adopters.

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