

# An Empirical Study on Reward Crowdfunding Backers Intention and Behaviour

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## Abstract:

Previous research on the broad adoption of crowdfunding has included social psychology, trust, signaling, and well-being theories. Despite its enormous appeal and practical applicability, the TAM can only explain a portion of the uptake of crowdfunding platforms. The current study compares the utility of the original TAM1 and enhanced TAM2 frameworks. Analyses of the 200 observations support all the hypotheses underlying both TAM frameworks. To begin, this study broadens the applicability of TAM to the crowdfunding context and donor-giving behaviors. Second, it shows that backers' assessments of the platform's usefulness and simplicity significantly predict their donation behavior in crowdfunding campaigns. The former has a more substantial effect than the latter. The study found a linear relationship between perceived ease of use, demonstrability, Task relevance, Output quality, Favorable subjective norms, and Backer's image and perceived usefulness. The study provides a more sophisticated knowledge of the elements that influence the motivations and actions of crowdfunding donors. These findings' explanations and implications for future research and therapeutic application are examined.

**Keywords:** TAM, perceived Usefulness, CrowdFunding

## Introduction

"Reward crowdfunding," in which backers are rewarded with anything other than monetary compensation, has become an increasingly common method of raising funds online. In this regard, it is similar to e-commerce (online shopping), with two key differences. To begin, there is a risk of non-delivery or delivery of outcomes that differ from the initial promises made in the fundraising campaign regarding rewarding crowdfunding because it often involves pre-sales of incomplete products rather than finished ones (Shneor and Torjesen, 2020). Reward crowdfunding, however, is the "model that the general public is most familiar with when discussing crowdfunding activities" (Ziegler et al., 2020) due to its ability to facilitate market acceptance, awareness generation, promotional reach, idea testing, and collaborative concept development (Nucciarelli et al., 2017; Mollick and Kuppaswamy, 2014). Research on the subject has increased, as was to be expected (Short et al., 2017), emphasizing the causes that motivate donors' kindness.

**Shneor and Munim (2019), Baber (2022), and Shneor et al. (2021)** are just a few of the research that builds on social psychology by investigating the cognitive underpinnings that underpin backer intentionality and behavior. Some researchers have concentrated on applying signaling theory to bridge the information gap between donors and fundraisers, influencing donors' decisions. According to a third

argument, people will only donate to crowdfunding campaigns if they stand to gain personally from doing so. A fourth school of thought has developed, using trust theory as a foundation, to explore what factors in marketing campaigns, user interactions, and community dynamics lead to developing trustworthy relationships.

Crowdfunding platforms have been identified as one of the three main actors in the crowdfunding process and as the providers of "rules of the game" for backers and entrepreneurs by enforcing codes of conduct (Odorovic and Wenzlaff, 2020) and guaranteeing due diligence (Belleflamme et al., 2015). Since consumer acceptance of platform technology influences online shopping behavior (**Pavlou, 2003**), this research investigates the factors that motivate people to use crowdfunding sites. In particular, we investigate whether backers' contribution behavior—a proxy for acceptance—will be affected by established predictors following the TAM frameworks.

When it comes to predicting correlations between variables and crowdfunding acceptability, other theoretical articles lack empirical support and present untested theories. In (Hoegen et al.'s, 2018) study, platform affordances, general characteristics, and functionality, such as which and how campaigns are graphically displayed to potential investors, affected donors' actions. Furthermore, evidence from the sustainability, cultural, and arts sectors indicates that a fund-seeker selects a crowdfunding platform as funding technology is more complex and should not be based on intuitions (Maehle, 2020; Rykkja et al., 2020). This is due to the influence these sites have on users' routines, such as the giving patterns of platform backers.

Despite this, study regarding the acceptance of crowdfunding has been limited, with a primary focus on reward crowdfunding. Furthermore, these studies only examined a subset of the technology acceptance model, which may have resulted in underestimating key variables (**Djimesah et al., 2022**). Whether or not backers' acceptance of the platform affects their donation intentions and behavior in reward crowdfunding is thus critical.

To address this shortcoming, the study examined a more detailed version of the Technology Acceptance Model (**TAM; Venkatesh and Davis, 2000; Davis et al., 1989**) for anticipating incentive crowdfunding contribution intents and behavior.

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## Literature Review

Extensive research has been conducted on the factors that attract crowdfunding contributors. Several studies have investigated the relative importance of intrinsic and extrinsic motivations, with some focusing on well-being enhancement. Some research discovered links between positive attitudes, perceived behavioral control, self-efficacy, subjective and social norms, and the intention and behavior to donate to crowdfunding campaigns.

Other research has stressed the relevance of risk mitigation by identifying signals that successfully lower the information imbalance between backers and fundraisers in backers' decision-making processes in crowdfunding. Numerous studies have focused on the improvement of trustworthy relationships.

Even if a campaign is well-planned and the fundraiser has established credibility, the crowdfunding platform still plays a role in determining whether or not contributors would contribute. According to **(Lacan and Desmet, 2017)**, platforms can positively and negatively affect contributors' intentions to contribute. Multiple features of the platform have been highlighted in reviews of prior studies as essential to a campaign's effectiveness. Campaign success can be affected by several elements beyond the candidate's control, including the platform's design, governing policies, and other hidden affordances.

**(Davis et al., 1989; Koufaris, 2002)** have drawn on concepts from psychology and human behavior in their research on proper IT design and affordances. Such strategies can help better understand and forecast website traffic and client habits **(Pavlou, 2003)**. The widespread usage of crowdfunding platforms is expected to alter the motivations and actions of donors in this context. As a result, we offer numerous hypotheses for how TAM explains the motivations and actions of crowdfunding funders.

## Theoretical Framework

### TAM Model

Multiple comprehensive literature reviews and meta-analyses (Yousafzai et al., 2007a, b; Marangunic and Granic, 2015) attest to the TAM models' reliability and validity in a variety of information systems settings. There has been limited use of these models to analyze the motivations and actions of crowdfunding backers. In other circumstances, the original and constrained TAM model is still used (Djimesah et al., 2022). The first TAM model (henceforth "TAM 1") proposes that an individual's evaluations of the system's ease of use and utility are the two most important factors in system adoption (Davis et al., 1989). According to TAM, perceived ease of use has been demonstrated to affect judgments about an information system's utility positively. It has been proposed that a person's willingness to use a crowdfunding platform is closely tied to their view of its usability and usefulness. Finally, TAM believes that the perceived usefulness of a crowdfunding platform moderates the impact of perceived ease of use on platform usage intentions.

Several conceptual and empirical studies on TAM have found that people's intentions are related to their actions (Davis et al., 1989; Venkatesh and Davis, 2000; Pavlou, 2003). The link between goals and actions has been validated by research using alternative frameworks, including the theory of planned behavior (Ajzen, 2011).

### **Cognitive instrumental processes**

According to TAM 2, the perceived usefulness of a system rises when its users can readily identify its positive effects. This is because users believe the system is getting better at displaying the results of its application. In the context of crowdfunding, potential supporters are more likely to view platforms as helpful for their decision-making and social information-sharing activities if they allow for easy monitoring, analysis, and sharing of campaign outcomes. Crowdfunding supporters' actions are influenced by the campaign's current goal attainment status (Colombo et al., 2015), with consequences including herding (Clauss et al., 2018; Belleflamme et al., 2015) and reverse herding (Zaggl and Block, 2019).

Furthermore, people's perceptions of the system's usefulness are influenced by their belief that the system will assist them in achieving their task-related goals (Venkatesh and Davis, 2000). (Beach and Mitchell, 1978) offered a theory in which one selects a system consistent with the aim after removing others deemed unrelated. Previous studies examined task relevance in a crowdfunding setting through the lens of backers' well-being, which includes positive functioning, meaningful activities, and attainable goals attained through crowdfunding. These factors influence backers' contribution decisions.

The perceived usefulness of a system is influenced not only by its task relevance but also by the quality of its output, which includes the user's assessment of the system's performance on that task (Venkatesh and Davis, 2000). A crowdfunding platform's credibility as a provider of excellent services to prospective supporters is crucial. Assume the services a crowdfunding platform provides to ensure the security of transactions, the confidentiality of user data, the high quality of accepted campaigns, and the prompt delivery of required data are subpar. Donors have various alternatives for making pledge payments, including electronic payment systems and wire transfers. The trustworthiness of platforms has been studied (Ferreira et al., 2022) and is positively connected with backer intentions (Alharbey and Van Hemmen, 2021) and behaviors (Zhang et al., 2020). This is because platforms with high levels of output quality are more likely to attract and retain backers.

### **Social influence processes.**

(Algesheimer et al., 2005) People are influenced by social contacts, especially social pressures, when purchasing online. People are more inclined to donate to crowdfunding campaigns when they receive support from friends and family. crowdsourcing platforms benefit backers who wish to act in ways consistent with the preferences of their social settings to the extent that subjective social norms favor crowdsourcing.

According to Venkatesh and Davis's expanded TAM model (2000), subjective norms affect the perception of usefulness and the motivation to act. A person's conviction in the usefulness of a system increases as they come to trust a referent (an important individual in their social context), internalise the referent's belief in the system, and put the system to use. These connections have not been investigated in the literature on TAM crowdsourcing.

### **Hypothesis**

**H1:** A backer's perceived ease of use of a crowdfunding platform positively influences their perceived usefulness of a platform

**H2:** The result demonstrability of a crowdfunding platform positively influences a backer's Perceived usefulness of the platform.

**H3:** Task relevance of a crowdfunding platform positively influences a backer’s perceived usefulness of the platform.

**H4:** Output quality of a crowdfunding platform positively influences a backer’s perceived usefulness of the platform

**H5:** Favorable subjective norms positively influence a backer’s perceived usefulness of a crowdfunding platform.

**H6:** Backer’s image positively influences the perceived usefulness of crowdfunding a platform

**Methods**

The study is exploratory. Data was collected from the reward-based crowd-based platform. A convenient random sampling method is used for the selection of the sample. A sample of 200 is considered for the study. The survey contained a list of English-language questions and objects. Each item was graded on a five-point Likert scale, with 1 representing "completely disagree with the statement" and 5 representing "completely agree with the statement." To get more people to complete the survey, lottery gift cards were given as an incentive. The perceived usefulness of a crowdfunding site is studied using a multiple regression model that accounts for the impact of factors such as perceived ease of use, demonstrability, task relevance, output quality, positive subjective norms, and Backer's image. Table 1 displays descriptive data for the study's variables.

**Table 1: Descriptive Statistics**

	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
<b>Perceived Usefulness</b>	2.87	0.91	200
<b>Subjective Norm</b>	2.35	0.92	200
<b>Image</b>	2.91	1.03	200
<b>Task Relevance</b>	3.25	1.06	200
<b>Output Quality</b>	3.18	1.05	200
<b>Demonstrability</b>	2.67	0.98	200
<b>Perceived Ease of Use</b>	3.07	0.90	200

The model's summary table shows that variables perceived ease of use, demonstrability, Task relevance, Output quality, Favourable subjective norms, and the Backer's image are positively correlated with one another (R=0.792). The R<sup>2</sup> score of 62.7% implies that the other factors can account for 62.7% of the variance in the dependent variable. Autocorrelation is not present, as shown by the Durbin-Watson test.

**Table 2: Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>	<b>Durbin-Watson</b>
1	.792 <sup>a</sup>	.627	.623	.56055	2.040

The p-value for the regression model predicting Perceived Usefulness is less than 0.05, as shown in the Analysis of Variance table. Therefore it can be concluded that there is a significant relationship between

perceived usefulness and ease of use, demonstrability, task relevance, output quality, positive subjective norms, and the image of the backer.

**Table 3: ANOVA**

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	317.936	6	52.989	168.637	0
	Residual	189.476	603	.314		
	Total	507.412	609			

The perceived ease of use, demonstrability, task relevance, output quality, favorable subjective norms, and Backer's image are all independent variables that can be used to predict the perceived usefulness in the Coefficient Table. P-values less than 0.05 indicate statistical significance for all independent variables, including perceived ease of use, demonstrability, task relevance, output quality, positive subjective norms, and supporter's image. We can therefore conclude that the perceived usefulness is linearly related to the perceived ease of use, the demonstrability, the task relevance, the output quality, the favorable subjective norms, and the image of the backer.

**Table 4: Coefficient Table for Perceived Usefulness**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.136	.095		1.440	.150		
Subjective Norm	.276	.029	.276	9.661	.000	.757	1.321
Image	.116	.037	.130	3.147	.002	.361	2.773
Task Relevance	.221	.038	.257	5.869	.000	.324	3.090
Output Quality	.063	.030	.073	2.125	.034	.529	1.891
Demonstrability	.117	.029	.125	3.989	.000	.634	1.578
Perceived Ease of Use	.171	.036	.168	4.728	.000	.490	2.042

**Conclusion**

The study found that users rated the product higher when they believed it would be easy to use. It was found that demonstrability increased the perceived effectiveness of cognitive instrumental processes. A considerable positive correlation was found between task relevance and perceived usefulness. Similarly, it was discovered that users placed a higher value on high-quality output. Understanding the elements that encourage contributors to make contributions is critical for the success of crowdfunding. This study is the first to empirically examine the applicability of the enlarged TAM 2 model in reward crowdfunding and its application in a small-open-economy country setting, filling a gap in the literature

on crowdfunding behavior from both cognitive and social effect perspectives. The findings also have real-world implications.

First and foremost, a crowdfunding platform's ability to draw in new financial backers depends on how appealing the platform itself is to potential backers. If platform owners want more positive feedback, they should focus on developing features that clarify how their platforms can help them. Since research has demonstrated that social connection and user image enhancement are significantly relevant in determining perceived utility, platform operators may seek to build features that stimulate more meaningful social involvement.

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