

# A Research Framework of Crowdfunding Platform Usage

*Emergent Research Forum papers*

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## Abstract

In this paper, we define the crowdfunding platform (CFP) a virtual place where project creators document their projects for gaining awareness or social support for making the project proceed. By doing so, project teams can voice the propositions they have worked on or they may also speak out on one party's behalf for seeking advices. This paper proposes a research framework that targets the issue of CFP in investigating usage behavior in the project teams' perspectives. It aims at filling the research gap as there is no clear link has been made in understanding how project teams keep up with the usage of CFP in terms of making progresses of proposed projects. In doing so, we believe the power of enormous crowds as project teams can be probably gathered and managed. Moreover, the administrations of CFP can be correctly directed for opening up opportunities for new start-ups.

## Keywords

Crowdfunding platform, task-technology fit, knowledge sharing, system usage.

## Introduction

Studies about the issue of crowdfunding are in the early stage of development in MIS (Chiu *et al.*, 2014). However, a number of studies have been done in the economists and new business venturing in management science (Gerber *et al.*, 2012). Mollick (2014) define crowdfunding as a means that allows founders of for-profit, artistic, and cultural ventures to fund their efforts by drawing on relatively small contributions from a relatively large number of individuals using the Internet, without standard financial intermediaries. There are four roles played in this domain: founder (project creator), funder (backer), viewers (the large number of individuals who using the Internet) and the administrator of crowd-funding platform (e.g. Kickstarter in U.S., Indiegogo in India, etc.). In this study, we define the crowdfunding platform a place where project creators share their knowledge and document their projects for gaining awareness or social supports for making the project proceed. By doing so, project teams voice the propositions they have worked on or they may also speak out on one party's behalf for seeking advices. The role played by the project team is to present messages that picture their ideal plan for aiming a better life as well as seeking solutions for unsolved matters. This study aims at exploring the crowdfunding platform usage intentions out of the concerns of the project teams. By referring to the related literature about and crowd-collective works, we believe that the current state of literature and results cannot all be applicable in the case of crowdfunding platform (CFP) usage and there are lots of works should be done for filling the research gap. The emergent research forum paper is composted into three parts: literature background; the proposed research model will be documented in the section 3; the research method as well as the discussions will be made in the last.

## **Literature Background**

### **Crowdfunding**

The concept of crowdfunding is derived from crowdsourcing (Zheng *et al.*, 2014). CFP literature in IS domain can be classified in types of: (1) Exploring the social behavior in crowdsourcing communities (Shen, 2014); (2) the impacts of crowdsourcing in terms of group collective works (Chiu *et al.*, 2014); (3) behavior of crowdfunding (Burtch *et al.*, 2013, 2014; Mollick, 2014; Gerber *et al.*, 2012; Xiao, 2014; Zheng *et al.*, 2014); (4) the trend of CFP usage as well as its impacts on project progresses (Greenberg and Gerber, 2014).

### **Social exchange theory (SET)**

Social exchange theory (SET) (Emerson, 1976; Westphal and Zajac, 1997) defines that the exchange relationship between people is the foundation of the society. The same notion is applied in the domain of knowledge management (KM) as Alavi and Leidner (2001) point out that the social factor created by and inherent in collective actions of a group is important in KM. Belleflamme *et al.* (2014) state that funders enjoy community benefits that increase their utility in achieving the goal of project fund raise. It reveals the importance of crowd power in terms of sharing knowledge and willingness to provide funds for the projects raised over the CFP. Social factors are revealed important in a number of Internet applications as social commerce (Liang *et al.*, 2011).

### **Adaptive structuration theory (AST)**

Adaptive structuration theory (AST) is proposed by DeSanctis and Poole (1994) for absorbing the understandings about how organizations adopt an advanced technology use. It is stated that the structures (of an organization) that actually emerge in human action as people interact with technologies, such as electronic messaging systems, executive information systems or collaborative systems. Jones and Karsten (2008) extend the notion of structuration theory proposed by Giddens (1983 and many others: Jones and Karsten, 2008: 154) with the IS research. It is pointed out that IS are considered to exist within a significant social context such as group decision support system and knowledge management. These two factors coincide the CFP context as it is an information-based platform for assisting project creators to share their ideas, learn from other projects, interacting with fund raisers and many others who pay attentions to their projects.

### **Task-technology fit (TTF)**

Task-technology fit (TTF) was initially proposed by Goodhue and Thompson (1995) that links information systems with individual performance. It has been tested in cases of group support systems' effectiveness (Zigurs and Buckland, 1998), the adaptation of wireless technology (Yen *et al.*, 2010), users' adoption of mobile banking (Zhou *et al.*, 2010), knowledge management systems (Lin and Huang, 2008), online auctions (Chang, 2010), e-procurement systems (Chang *et al.*, 2008) and e-learning system (Lin, 2012). However, it is argued that the combination of AST and TTF should be considered for taking the social context into account for have broader picture of information system usage behavior (Im, 2014). The crowdfunding platform should be one of the case.

## **Research model, hypothesis and research methodology**

### **Research model**

This study combine theories of social exchange; adaptive structuration and task-technology fit in the sense that project teams adopt CFP for sharing their project ideas for exchanging social supports from the crowds. In the followings, details of these applied theories and the research hypotheses are illustrated.

## Project Characteristics and their associations with system usage intentions

It is illustrated that project type is related to the successful fundraising (Mollick, 2014). Based on Sykes et al. (2014), types of advice network running over an organization are: (1) advice seeking and (2) advice giving. By observations, features of crowdfunded projects have high similarities with how collective wisdom runs in an organization. A majority of proposed projects tend to obtain ideas, feedbacks or solutions from customers or business partners. And the rest of projects give advice for certain problems in the sense to promote an ongoing program in solving problems. In other words, project characteristics of these two can be used to pertain the main intentions out of the concerns of project teams that put forth projects in CFP. And we believe that these two project characteristics should have associations with CFP system usage intentions. Therefore, the following research hypotheses are proposed:

H1a: The project characteristic of advice seeking is associated with system usage intentions.

H1b: The project characteristic of advice giving is associated with system usage intentions.

## Personal factors and their associations with knowledge sharing and system usage

Commitment is proven valid in the collective intention in the case of Wiki (Shen *et al.*, 2014) and social commerce (Liang *et al.*, 2011). While the perceived benefits are reviewed as important in affecting people to share their information on social network services based on cost-benefit theory (Bock *et al.*, 2005). Therefore, the following research hypotheses are proposed:

H2a: Commitment to the society is associated with system usage intentions.

H2b: Perceived benefits are associated with system usage intentions.

## Social factors and their associations with knowledge sharing and system usage

Social factors are denoted as important in knowledge sharing in project success (Bresnen *et al.*, 2003). While users are connected over the Internet and the CFP platform, the social factors should be link with the system usage as well. The consensus on appropriation proposed by Salisbury *et al.* (2002) and been defined as the extent to which group participants perceive that they have agreed on how to adopt and use a technology. We adopt the notion and tend to test it in the case of CFP. TTF is defined as the correspondence between task requirements, individual characteristics, and the functionality of the CFP technology. It measures the project creators' beliefs about the extent to which CFP platform meets the requirements of users' tasks and assists an individual in performing their tasks (Im, 2014). Therefore, the following research hypotheses are proposed:

H3a: Consensus on appropriation is associated with system usage intentions.

H3b: Task-technology fit is associated with system usage intentions.

## Research method

### Construct definition and measurement development

All the constructs applied in this study are adopted from the literature but been amended if it is required to better suite our topic in the context of CFP. In Table1, it represents the constructs with its definition and measurement.

Construct	Definitions	References
Advice seeking	Knowledge acquisition related to new ideas or possible solutions for a raised problem	Sykes et al., 2014
Advice giving	Proposing a solution for a raised problem	Sykes et al., 2014
Commitment	Commitment to the society, especially the project backers and many viewers	Shen et al., 2014; Wu and Lu, 2014
Perceived	Tangible as well as intangible benefits	Lee et al., 2013

benefits	obtained over the CFP usage	
Consensus on appropriation	The extent to which group participants perceive that they have agreed on how to adopt and use a technology	Salisbury et al. 2002; Im, 2014
Task-technology fit	Project creators' beliefs about the extent to which CFP platform meets the requirements of users' tasks and assists an individual in performing their tasks	Goodhue and Thompson 1995; Lin, 2012; Im, 2014
System usage Intentions	The frequency of CFP usage	Im, 2014

**Table 1. Measurement Development****Samplings**

This study will target project proposers who are engaged in taking part as proposing projects in crowdfunding sites (CFS) of FlyingV and Zeczek that are popular in the Taiwanese or Chinese-spoken world. And an empirical study of survey will be conducted. The successful-funded projects will be selected as the sample subjects. A randomized method will be applied. By doing so, this can establish generalizability and allow for statistical power. The research method will follow the arguments made in the literature (Pinsonneault and Kraemer, 1993).

**Conclusion**

This research framework targets the issue of CFP in investigating usage behavior in the project teams' perspectives. It aims at filling the research gap as there is no clear link has been made in understanding how project teams keep up with the usage of CFP in terms of making progresses of proposed projects. In doing so, we believe the power of enormous crowds as project teams can be probably gathered and managed. Moreover, the administrations of CFP can be correctly directed for opening up opportunities for new start-ups.

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