

The effectiveness of a training program in increasing crowd funding awareness

¹ Suliman A El Talla, ² Mazen J Al Shobaki, ³ Samy S Abu Naser, ⁴ Youssef M Abu Amuna

¹ College of Intermediate Studies, Al-Azhar University, Gaza, Palestine

^{2, 3, 4} Department of Information Technology, Faculty of Engineering and Information Technology, Al-Azhar University, Gaza, Palestine

Abstract

The current study tries to verify the effectiveness of a training program in increasing Crowdfunding awareness. The sample was (50) students in CIS, who were purposively selected and distributed equally into a treatment and control group. The researchers designed the study tools (a training program to increase Crowdfunding awareness). The study findings revealed the existence of statistically significant differences between the treatment and control groups in favor of the former. Furthermore, there were statistically significant differences between the pre and the post measures of the treatment group in favor of the post measures. Furthermore the current study is unique by the virtue of its nature, scope and way of implied investigation, as it is the first study for Crowdfunding training program in Arabic world.

Keywords: crowdfunding, training program, students, al-azhar University, Gaza Strip

1. Introduction

Entrepreneurship requires innovation and changing that might take different forms. Arab world is full of young talents and creative ideas, but those ideas often do not see the light for several reasons, the important one is lack of financial support from relatives, government agencies or business institutions.

Crowdfunding is a modern and vitality topic in management science and entrepreneurship. It facilitate seeding financial support for individuals through funding opportunities by Crowdfunding platforms.

Crowdfunding is one of financial methods that play an increasing significant role in helping the individual to meet the challenges and difficulties of life and the lack of employment and unemployment in the Palestinian society, especially graduated students of technical colleges.

Helping those graduated students to take advantage of such opportunities can only be done through increasing awareness of Crowdfunding programs and their importance in converting creative ideas into reality. Also this resolve partially the unemployment phoneme and provide employment opportunities for young people.

In view of the literature review, the study raises the question of

- Q1.** Are there any differences between experimental group and the control group in post measures for Crowdfunding awareness?
- Q2.** Are there any differences between experimental group and pre and post measures for Crowdfunding awareness?
- Q3.** Are there any differences between treatment group and both post and tracking measures for Crowdfunding awareness?

The novelty of the study came from measuring the effectiveness of training program to improve the awareness in Crowdfunding and it is models. The training program was designed by authors. It is a set of specialized services, including a variety of activities and training provided by the

researchers for a group of students in intermediate college (CIS) at Al-Azhar University in order to assist them in developing their knowledge of collective funding, the various models, and the requirements of Crowdfunding campaign.

2. Literature Review

Crowdfunding has been defined under different terms, from different points of view. In simple terms, Crowdfunding relies on the meeting of non-professional investors and entrepreneurs via internet platforms.

It is one of the most important funding resources in internet era which contributes to the activation of the sources of funding for economic foundation, especially start-up projects. Also it is considered an alternative to bank financing that does not fit often with the status of small and medium enterprises at the beginning of the evolution of its activity (Attuel-Mendes, 2016, Sharma and Lertnuwat, 2016) ^[3, 17].

With the development of technology and the transition to the age of knowledge and digital economy, and the proliferation of online and high-tech smart phones, there has been a contemporary twist on the types of funding and Crowdfunding started to take another turn.

The World Bank defines Crowdfunding as "enabling companies and business organizations relying on the Internet to collect the necessary funds, whether voluntary or investment by many individuals" (InfoDev, 2014) ^[11].

As defined by Ahlers *et al.* as "a broad term used to describe the increasing spread of the fundraising process is done through the Internet, where there are groups of individuals who own the money make small contributions to achieve a particular goal" (Ahlers *et al.*, 2015, Sharma and Lertnuwat, 2016) ^[1, 17].

The alternative finance industry come into force after 2008 crisis, early stage finance problem faced by the artists, entrepreneur and start-ups because banks or financial institutions recognized as a traditional financial sources are unwilling to lend money or charge with an high interest rates.

That give birth to the new financial market called as "Crowdfunding". The financial crisis and technological innovation is the two major factors for the growth of Crowdfunding.

Currently Crowdfunding market is \$16 billion in 2014, with 2015 to grow to over \$34 billion.

3. Crowdfunding Models

Crowdfunding is characterized by its flexibility on the one hand, and its ability to adapt to environmental changes around it to fit with the objectives and policies of each country, and with the patterns of entrepreneurial projects prevailing in each country.

There are four main categories of Crowdfunding: Equity, Debt or Peer to Peer lending (financial models), Reward and Donation based Crowdfunding (non-financial models).

i) Reward Model

This type of financing is common in financing a product or project which is still being developed. A form of compensation for the financier is the right to pre-order the product or get the product sent when it is finished. An advantage of this form of financing is that it is an alternative market research; if the investors are not willing to invest, they are not interested in the product or project (Arets *et al.*, 2014)^[2]. Reward model use two types of financing: (AON) and (KIA). The first type (AON) called "all or nothing" or "fixed funding", owner of the project does not receive any funding only if it has reached the amount required during the permitted time period for the campaign. In case the required amount did not reach what is required, the project owner does not receive any amount and lose the site fees. One of the famous sites is (Kickstarter).

The second type of financing (KIA) and the so-called "retention of what has been collected" or "flexible funding", and allows the entrepreneur to obtain any amounts collected during the campaign period even if they have not attained the desired goal. Among the most famous sites that use this model (Indiegogo) site; furthermore, (AON) model is also used (Cumming, and others, 2014)^[7].

ii) Donation Model

This model is called (Donation-Based), where individuals financiers donate to the project without expecting any financial return or percentage of the profits from the project owner (Lehner, 2013)^[14], (Sharma and Lertnuwat, 2016)^[17].

However, although the contributor's motive is charitable, the recipient's need not be donations can fund for-profit enterprises. A site that provides this service is (Justgiving).

iii) Lending Model

This model is called (Lending-Based) or (Peer-to-Peer). The idea behind this type of Crowdfunding is to cut out the middle man and get cheaper loans or as an investor, get better interest rates. Crowdfunding based on lending is for both the entrepreneur as for the investor an easily accessible form because the entrepreneur doesn't have to sell equity in his firm or initiative which reduces legal and administrative costs (Freedman and Nutting, 2015)^[9].

Through this model, good capital for small and medium enterprises can be formed even for big enterprises (Bruton and others, 2015, Sharma and Lertnuwat, 2016)^[5, 17].

Lending platforms work as an intermediary between microfinance institutions (MFIs) and lenders. This is mostly crowd-to-business platforms as opposed to real peer-to-peer lending (Attuel-Mendes, 2016)^[3].

The banking business in this model is not clear for the individual investor and may be exposed to the possibility of loss of the investment if he did not repay the loans. Among the most famous loan sites is (Kiva).

vi) Equity Model

This model is called (Equity-Based), and in this model the financiers have part of the property rights or participate in the profits or management, as previously agreed with the owner of the project. This model can achieve a high financial gain, and capital can be increased significantly as a result of attracting a large number of investors who are looking for shares in a company or a successful project outside the restrictions of stock market, brokers and do not have large amounts of money to speculate in the stock market (Deffains-Crapsky *et al.*, 2014, Sharma and Lertnuwat, 2016)^[8, 17].

This model also carries a risk to the owner of the project where the creditor turns in the case of bankruptcy of the project, and the guarantees related to investment may be a bit complicated in some countries, especially with regard to nationality and transfer of funds (Arets *et al.*, 2014)^[2]. Among the most famous investment sites are (Crowdcube) and (Seedinvest).

4. Crowdfunding Requirements

4.1 Regulations and Legislation

Conditions for investment, policies and regulations for entering the field of entrepreneurship (InfoDev, 2014)^[11], cost of startup new businesses, bureaucracy, flexibility of the legal system. Also bankruptcy proceedings should be acceptable and uncomplicated allowing for a leading business risk and lack of fear of failure and bankruptcy (Valanciene and Jegeleviciute, 2013)^[18]. Money transfer and money exchange electronically is an important issue, with the ability of governments to control money laundering and terrorist financing operations (Schwartz, 2013)^[16]. Protect investors from fraud, swindling, deception, and impose strict restrictions regarding cybercrime that poses a threat to the contemporary business models. (Hazen, 2012)^[10]. As for intellectual property rights and patents, Crowdfunding sites often disclaim any fraud or violation of the right to property and the project owner is required to obtain a patent or intellectual property rights.

4.2 Social Media

Technology helps in establishing the contemporary business models that depend on the Internet, and helps facilitate government regulatory actions on those systems and get accurate information (Moissejev, 2013)^[15], (Calic and Mosakowski, 2016)^[6].

Technology is also working in these models as the role of mediator between the financier and the owner of the project. It contributes to the idea of participatory economy and easing formalities for traditional financing.

Social Networks like (Facebook), (Linkedin) and (Twitter) and others play key role in Crowdfunding models. The more in the circle of acquaintances and friends the more the owner of the project can promote his idea effectively, with little effort

and without costs (Balboni and others, 2014) ^[4], (Kuppuswamy and Bayus, 2017) ^[13].

4.3 The Culture of Entrepreneurship

Crowdfunding depends on the existence of entrepreneurial culture within the country, and studies on the subject show that factors such as culture, legal environment and economic incentives have an impact on the development and success of entrepreneurship.

These factors are either restricts or enables stimulating entrepreneurship projects, and therefore governments should encourage entrepreneurial culture by supporting entrepreneurship, business incubators and business accelerators (InfoDev, 2014, Josefy and others, 2016) ^[11, 12].

5. The Training Program

The researchers have built a training program to aware students on Crowdfunding using the following steps:

- Viewing the Crowdfunding literature such models and various literature on Crowdfunding as well as access to the literature of previous studies related to the search topic.
- Visit platforms of Crowdfunding in Gaza Strip to identify the nature of their work.
- Conduct interviews with a sample of 40 students (CIS) college in order to identify the degree of awareness of Crowdfunding and its models.

The Training Program Common Objectives

Develop awareness of Crowdfunding among (CIS) students and the following aspects of studies: (Crowdfunding concept, Crowdfunding models, Crowdfunding requirements).

The Training Program Common Special Objectives

The researchers are expected after the completion of the implementation of training procedures, that the students are able to achieve the following:

- Introduce participants to the Crowdfunding concept, Crowdfunding models, and Crowdfunding requirements.
- Develop the capacity of the participants to generate entrepreneurial ideas and turn them to reality through Crowdfunding campaigns.
- Familiarize participants with business incubators and platforms collective existing funding locally, regionally and internationally.
- Develop the capacity of the participants to diversity in solving the problems facing the Crowdfunding campaigns.
- Develop the ability to make informed decisions to face the crisis.

The Training Program Importance

The importance of the design of the training program that it contributes to dealing with a dynamic and realistic problem emerged from the increasing rate of unemployment among youth, the siege imposed on the Gaza Strip, and the state of frustration and despair prevailing in the Gaza Strip, facing the Palestinian people in general and students of educational institutions in particular, all of that reflected negatively on students in the absence of a horizon for jobs both in the public or private sector, so the program was to contribute to the reduction and to increasing the availability of employment opportunities through the conversion of creative ideas and the entrepreneurial college students to the reality among

Crowdfunding campaigns.

The Training Program Fundamentals

The training program is based on a group of fundamentals including:

1. Taking into account the flexibility of human behavior, and its ability to adjust and change.
2. Taking into account individual differences among the participants in the mental capacity, and creative.
3. Taking into account the exceptional circumstances of the Gaza Strip, and influences prevailing.

The Training Program Boundaries

- **Human boundaries:** The training program was applied to a sample of (25) students from College of Intermediate Studies (CIS): Al-Azhar University.
- **Place boundaries:** the training program carried out on members of the target group, and in group sessions, in CIS.
- **Time boundaries:** the training program implemented in the year (2017).

The Training Program Techniques and Methods

The researchers have been using a number of methods and technicians that suitable for the purpose of training program, like: lectures, discussion and dialogue, brainstorming, visual display, videos, and realistic examples across the Web.

The Training Program Assessment

- **Pre-assessment:** by applying the Crowdfunding measurement, on both of the experimental group and control group before starting the implementation of the training program to verify the homogeneity of the groups.
- **Post-assessment:** by applying the Crowdfunding measurement on the experimental group and control group, after applying the training program, to make sure that it has achieved the desired objectives.
- **Tracking-assessment:** After the completion of applying the training program in about two months the researchers applied the study tools on the experimental group, in order to follow-up the continuity of the program's impact.

6. Research Hypotheses

H1: There were statistically significant differences between the mean of the experimental group and the control group in post measurement on the Crowdfunding questionnaire for the experimental group.

H2: There are statistically significant differences between the mean of the experimental group in both pre and post measurement on the Crowdfunding for post-measurement.

H3: There are no statistically significant differences between the mean of the experimental group in both post and tracking measurement on the Crowdfunding.

7. Research Design

Study Population and Sampling

The researchers used the experimental method, which relies on (pre, post, and tracking test) for each of the experimental group and the control group, in order to identify the effectiveness of the training program to raise awareness of the Crowdfunding in the College of intermediate studies (CIS) at Al-Azhar University.

The study population consisted of all students in CIS: (2620 students) (Academic Affairs: CIS).

The researchers applied the Crowdfunding measure on sample consists of (350) students in CIS from computer and

management sciences programs, to determinate the lowest degree in Crowdfunding awareness, then they choose (50) students and they divided them in two equal groups: control group: (25) students, experimental group (25) students.

Table 1: significance of differences among the mean ranks of the experimental and control groups in the pre measurements on Crowdfunding measure using Mann-Whitney test

Crowdfunding measure	Dimensions	Control Group N= 25		Experimental Group N= 25		U Value	Z Value	Sig.
		Ranks mean	Ranks Sum	Ranks mean	Ranks Sum			
	Crowdfunding concept	22.94	573.50	28.06	701.50	248.50	-1.248	Not Sig.
	Crowdfunding models	23.98	599.50	27.02	675.50	274.50	-0.741	Not Sig.
	Crowdfunding requirements	22.44	561.00	28.56	714.00	236.50	-1.493	Not Sig.
	Total Degree	22.10	552.50	28.90	722.50	227.50	-1.654	Not Sig.

It is seen from the above table that there were no statistically significant differences between the ranks mean of the control group and the experimental group in the pre measuring on the Crowdfunding measure.

Research Instrument

The researchers were build Crowdfunding awareness measurement in the following steps:

1. Reviewing the literature and previous studies dealt with the concept of Crowdfunding.
2. Reviewing a set of measurements, which focused on measuring the concept of Crowdfunding.
3. The researchers visited and met with students to identify entrepreneurial ideas to students and the difficulties they face in their application on the ground.
4. As the researchers select sub-dimensions of the Crowdfunding, and determining operational definition for each dimension of the measurement dimensions, and determinate its paragraphs.
5. Crowdfunding measurement consists of (30 paragraphs) distributed among three sub-dimensions: the concept of Crowdfunding, Crowdfunding models, Crowdfunding campaign requirements of (10) paragraphs for each dimension.
6. The researchers viewed the measurement on a group of university professors and specialists in management and entrepreneurship, to make observations about the

measurement and its dimensions paragraphs, and they were taking all notes.

Table 2: Research instrument

Dimension 1: Crowdfunding	No. of statements
Sub-d1 : Crowdfunding concept	10
Sec-d1 : Crowdfunding models	10
Thrd-d1 : Crowdfunding campaign requirement	10

Reliability and validity

The researchers applied the measurement on pilot study sample consists of (25) students from study population to verify Crowdfunding measurement fitting through calculated the validity and reliability using appropriate statistical ways.

Structural Validity (internal consistency)

The researchers calculated the internal consistency of the Crowdfunding measurement through calculated the correlation coefficients between each paragraph and its dimension. All three sub-dimensions showed that the correlation values are statistically significant in research instruments dimension with the total degree of each sub-dimension (sig < 0.05).

According to that, the researchers have realized that the measurement is characterized by a high degree of validity.

Measurement Reliability

To check the measurement reliability, the researchers using the following methods:

i) Half Split Method

Table 3: the reliability factors of Crowdfunding measurement in half split method

No	Dimensions	Paragraphs no.	R	Sig. level
1	Crowdfunding concept	10	0.629	0.01
2	Crowdfunding models	10	0.808	0.01
3	Crowdfunding requirements	10	0.490	0.05
	Total degree	30	0.802	0.01

The above table clear that the reliability coefficients using half split method are statistically significant, suggesting that the measurement has a good degree of reliability.

ii) Alpha Cronbach Method

Table 4: the reliability factors of Crowdfunding measurement in alpha cronbach method

No	Dimensions	Cronbach's Alpha
1	Crowdfunding concept	0.453
2	Crowdfunding models	0.667
3	Crowdfunding requirements	0.496

The above table clear that the reliability coefficients using alpha cronbach method are statistically significant, and total reliability coefficient was (0.755) suggesting that the measurement has a good degree of reliability.

Statistical Procedures

Several statistical tools were used for data analysis and hypotheses testing, including reliability Correlation using Cronbach's alpha, "ANOVA", Mann-Whitney test and Wilcoxon test.

Also the researchers used tow tolls for the research which are the training program and Crowdfunding awareness instrument.

8. Data Analysis and Discussion of Results

First hypothesis Answer which states: There were statistically significant differences between the mean of the experimental group and the control group in post measurement

on the Crowdfunding questionnaire for the experimental group.

To answer this hypothesis the researchers was used the Mann-Whitney test, as in the table 4.

Table 5: differences in the averages of the ranks and the total ranks among the members of the experimental group and the control group in the post measurement using the Mann Whitney test

Dimensions	Sample	No.	Rank mean	Rank sum	U	Z	Sig.
Crowdfunding concept	experimental	25	37.04	926.00	24.00	-5.605	0.000
	control	25	13.96	349.00			
Crowdfunding models	experimental	25	36.34	908.50	41.50	-5.268	0.000
	control	25	14.66	366.50			
Crowdfunding requirements	experimental	25	36.74	918.50	31.50	-5.466	0.000
	control	25	14.26	356.50			
Total degree	experimental	25	37.50	937.50	12.50	-5.824	0.000
	control	25	13.50	337.50			

Table Z value on free degree (24), and signification level (0.05) = 2.04

Table Z value on free degree (24), and signification level (0.01) = 2.73

We note from the previous table, that no statistically significant difference between the control and experimental groups in the post measurement differences in favor of the experimental group and this validates the hypothesis.

Second Hypothesis Answer Which States: There are

statistically significant differences between the mean of the experimental group in both pre and post measurement on the Crowdfunding for post-measurement.

To answer this hypothesis the researchers was used the wilcoxon test, as in the table 6.

Table 6: Wilcoxon test results, and Z value for differences in the mean ranks and the total ranks among the members of the experimental group in the pre and post measurement using the wilcoxon test

Dimensions	Ranks	No.	Rank mean	Rank sum	Z	Sig.
Crowdfunding concept	Negative ranks	1	3.00	3.00	-4.292	0.000
	Positive ranks	24	13.42	322.00		
	Ties	0				
Crowdfunding models	Negative ranks	3	3.33	10.00	-4.104	0.000
	Positive ranks	22	14.32	315.00		
	Ties	0				
Crowdfunding requirements	Negative ranks	2	3.50	7.00	-4.184	0.000
	Positive ranks	23	13.83	318.00		
	Ties	0				
Total degree	Negative ranks	1	1.00	1.00	-4.346	0.000
	Positive ranks	24	13.50	324.00		
	Ties	0				

We note from the previous table, that there are statistically significant differences between pre and post measurement in

the experimental group in favor of the post measurement and this validates the hypothesis.

Table 7: illustrates the value of Z, eta squared and the training program impact of Crowdfunding measure dimensions using ETA square (η^2)

Dimensions	Z	ZZ	(η^2)	Impact Size
Crowdfunding concept	-4.292	18.42126	0.957	large
Crowdfunding models	-4.104	16.84282	0.725	large
Crowdfunding requirements	-4.184	17.50586	0.948	large
Total degree	-4.346	18.88772	0.980	large

To find out the size of the impact of the independent variable (training program) in the Crowdfunding awareness (the dependent variable) researchers used the (η^2) that has been shown a large size impact, demonstrating the effectiveness of the training program.

Third Hypothesis Answer Which States: There are no

statistically significant differences between the mean of the experimental group in both post and tracking measurement on the Crowdfunding.

To answer this hypothesis the researchers was used the wilcoxon test, as in the table 8.

Table 8: wilcoxon test results, and Z value for differences in the mean ranks and the total ranks among the members of the experimental group in the post and tracking measurement using the wilcoxon test

Dimensions	Ranks	No.	Rank mean	Rank sum	Z	Sig.
Crowdfunding concept	Negative ranks	13	12.58	163.50	-1.674	0.094
	Positive ranks	8	8.44	67.50		
	Ties	4				
Crowdfunding models	Negative ranks	12	15.13	181.50	-1.329	0.184
	Positive ranks	11	8.59	94.50		
	Ties	2				
Crowdfunding requirements	Negative ranks	11	10.63	114.00	-0.407	0.684
	Positive ranks	11	12.64	139.00		
	Ties	3				
Total degree	Negative ranks	18	12.75	229.50	-1.804	0.071
	Positive ranks	7	13.64	95.50		
	Ties	0				

We note from the previous table, that there are no statistically significant differences between post and tracking measurement in the experimental group and this validates the hypothesis

9. Conclusion

- New concepts always need more attention from community leaders and institutions. Academic institutions play a main role in increasing the awareness of new phonemes. Crowdfunding as a new concept needs more attention and declaration to the community, especially in poor communities where there are high unemployment and less work opportunities.
- Crowdfunding as a new financing tool benefits are uncountable and including all kind of projects, beginning from charity goals to technology inventions.
- The results of the research showed that differences between the treatment and control groups is exist. Also there were statistically significant differences between the pre and the post measures of the treatment group in favor of the post measures.
- Those results indicate the need of more orientation toward declaration about Crowdfunding in the community, more workshops, training programs, events, ...
- Also this step need to provide participants from students with physical and moral incentives, help them to get used from each chance they can, encourage them to innovate and to be creative.
- Microfinance has become a tool of democratisation of entrepreneurship funding, while Crowdfunding potentially opens entrepreneurship funding to masses. Combining both Crowdfunding and microfinance can lead to an acceleration of poverty eradication.

4. References

1. Ahlers Gerrit KC. Cumming, Douglas, Günther, Christina, Schweizer, Denis Signaling in Equity Crowdfunding, York University, Ontario, Canada, 2015, 1-45.
2. Arets M, Kleverlaan R, Lutgendorff M, Vliet K. Crowdfunding: beyond the hype, Eburon Academic Publishers, Netherlands, 2014.
3. Attuel-Mendes L. Crowdfunding and Crowdmicrofinance, an Evolution of Models for Entrepreneurship of the Poor, Open Access Library Journal. 2016; 3:1-7.
4. Balboni Bernardo, Kocollari Ulpiana, Pais Ivana. How Can Social Enterprises Develop Successful Crowdfunding Campaigns?, 14th EURAM Conference, Waves And Winds Of Strategic Leadership For Sustainable Competitiveness, Valencia, 2014; 4-7:1-23, Italy.
5. Bruton Garry, Khavul Susanna, Donald Siegel, Wright Mike. New Financial Alternatives in Seeding Entrepreneurship, Entrepreneurship Theory and Practice, 2015; 39(1):9-26.
6. Calic G, Mosakowski E. Kicking Off Social Entrepreneurship: How A Sustainability Orientation Influences Crowdfunding Success, Journal of Management Studies. 2016; 53(5):738-767.
7. Cumming Douglas J, Leboeuf Gael, Schwienbacher Armin. Crowdfunding Models: Keep-it-All vs. All-or-Nothing, Faculté de Finance, Université Lille Nord de France, 2014, 1-33.
8. Deffains-Crapsky Catherine, Sudolska Agata. Radical Innovation and early Stage Financing Gaps: Equity-Based Crowdfunding Challenges. Journal of Positive Management. 2014; 5(2):3-19.
9. Freedman D, Nutting M. equity crowdfunding for investors, Wiley & Sons, 2015.
10. Hazen Thomas. Crowdfunding or fraudfunding?, North Carolina Law Review, 2012; 90:1735-1770.
11. InfoDev. Crowdfunding's Potential for the Developing World, Finance and Private Sector Development Department. Washington, DC: World Bank, 2014.
12. Josefy M, Dean T, Albert L, Fitza L. The Role of Community in Crowdfunding Success: Evidence on Cultural Attributes in Funding Campaigns to Save the Local Theater, Entrepreneurship Theory And Practice, 2016; 11(16):1042-2587.
13. Kuppuswamy V, Bayus B. Does my contribution to your Crowdfunding project matter?, 2017; 32:72-89.
14. Lehner Othmar M. Crowdfunding social ventures: a model and research agenda, Venture Capital. An International Journal of Entrepreneurial Finance. 2013; 15(4):1-23.
15. Moissev Alexey. Effect of Social Media on Crowdfunding Project Results, University of Nebraska – Lincoln, 2013, 1-45, USA.
16. Schwartz Andrew. Crowdfunding Securities, Notre Dame Law Review, 2013; 88(3):1457-1489.

17. Sharma S, Lertnuwat L. the financial crowdfunding with diverse business models. Journal of Asian and African Social Science and Humanities. 2016; 2(2):74-89.
18. Valanciene Loreta, Jegeleviciute Sima. Valuation of Crowdfunding: Benefits and Drawbacks, Economics and Management, 2013; 18(1):39-48.