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The role of motivation and social network on crowdfunding sites in Indonesia

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Abstract

This study aims to determine the role of motivation and social networking in mediating the influence of collective culture on investment in crowd funding sites in Indonesia. The population is all investors who have invested during 2017-2018 on sites that have been registered and monitored by the Financial Services Authority. The data analysis technique used was SEM PLS and primary data were collected through a questionnaire. Results of the analysis found that collective culture influences motivation, social networking, and investment positively and significantly; social networking significantly influences motivation; there is no influence of social networks on investment.

Keywords: Collective culture, Investment, Motivation, Social networking.

El papel de la motivación y la red social sobre inversiones en sitios de financiamiento en Indonesia

Resumen

Este estudio tiene como objetivo determinar el papel de la motivación y las redes sociales en la mediación de la influencia de la cultura colectiva en la inversión en sitios de financiación colectiva en Indonesia. La población son todos los inversores que han invertido durante 2017-2018 en sitios que han sido registrados y monitoreados por la Autoridad de Servicios Financieros. La técnica de análisis de datos utilizada fue SEM PLS y los datos primarios se recopilaron mediante un cuestionario. Los resultados del análisis encontraron que la cultura colectiva influye en la motivación, las redes sociales y la inversión de manera positiva y significativa; las redes sociales influyen significativamente en la motivación; no hay influencia de las redes sociales en la inversion.

Palabras clave: Cultura colectiva, Inversión, Motivación, Redes sociales.

1. INTRODUCTION

In developing creative ideas, startups need funding. The Indonesian government has tried to provide a variety of formal and informal funding, but in practice there are still many startups facing difficulties accessing funding, among others due to strict regulations, the number of needs is not appropriate, capital costs are too high, the period is too long, limited access to information, the number and system financing that does not meet needs, and limited participation by small-capacity investors.

In the midst of the phenomenon of funding gaps, mismatches, limited information in business funding, and the low participation of small-capacity individual investors, a new alternative to informal funding

has emerged, crowdfunding. Crowdfunding is an innovation in the field of financial services which is called the National Digital Research Center (NDRC) as a form of financial technology (abbreviated as fintech). There are four types of crowdfunding, namely based on equity, donations, prizes and loans (GRIFFIN, 2012). Not all projects have been successfully funded through crowdfunding. The average project was successfully funded at 43.53% and the remaining 56.47% experienced a failure due to the inability of creators to convince investors or crowd funders (KICKSTARTER, 2013). The inability to convince investors is caused by the lack of knowledge about investor behavior.

One branch of financial behavior that has developed at this time lies in the field of cultural and cultural research is one of the fundamental factors that influence one's financial behavior (MAHESWARAN and SHAVITT, 2000). Hofstede groups cultural differences into four dimensions, namely Power Distance, Individualism-Collectivism, Masculinity, and Uncertainty Avoidance. Among the four dimensions, Individualism-Collectivism (IC) is the most prominent indicator that defines cultural differences in various countries (HOFSTEDE, 2011).

CHONG (2003) found that culture is one of the many forces that influence consumer decision making in e-commerce transactions. ZHENG et al. (2014) used Hofstede's individualist-collectivist cultural dimension to measure culture and find that individualist-collectivist culture influences crowdfunding performance. GANTENBEIN et al. (2019) found that individualism was positively and significantly related to several measures of venture capital investment. In contrast to previous researchers, AMIRHOSSEINI and OKERE (2012) actually found no

significant relationship between individualism-collectivism with investment decisions. The conflicting results of research related to the cultural influence of the IC dimension on investment suggest that other variables affect the relationship between culture and investment.

Investment decisions relate to encouragement, motives and responses. OSOWSKA et al (2016) found that culture has a strong relationship with motivation. In line with the general purpose of investing, which is to make a certain amount of money with minimal risk (TANDELILIN, 2001: 5), Taiwanese investors who are in social networks are financially motivated (DRISSCOLL, 2013), but SCHWIENBACHER and LARRALDE (2010) find that financial motivation in the model crowdfunding isn't that important. Investor participation is apparently not driven by financial return or reward, but rather by a desire to play a role and help realize the project (WECHSLER, 2013). MORITZ and BLOCK (2014) found that crowd funders are not only financially motivated, but social reputation also plays an important role.

The Social Exchange Theory by Peter Michael Blau emphasizes the consequences of a social exchange, not merely in the form of intrinsic rewards or rewards such as money or certain items, but can also be extrinsic in the form of praise, affection, honor and so forth. This condition is in line with Frederick Herzberg's Two Factor Motivation Theory which states that the best way to motivate individuals is to meet the needs of a high level of motivation, namely motivational factors and hygiene or maintenance factors.

High collective culture societies tend to interact in various social networks. Zachkowsky, the originator of the theory of engagement with social networking sites, states that through social networking sites, a person can develop broader relationships and connect with people he has known or with people who have similar interests.

Concepts and theories as well as empirical evidence as described, show that: 1) people in a high collective cultural environment tend to be motivated to take collective action (in this case fundraising on crowd funding sites); 2) even though they are in the same collective culture, investors still consider certain motives in making investment decisions that are not necessarily the same among investors; 3) even though they are in the same high level of collective culture, but without being involved in social networks, it is difficult for investors to be motivated to invest; and 4) being in a social network helps investors to obtain information about investment opportunities, but in investment decision making it still considers certain motives that are not necessarily the same among investors.

These conditions indicate a strong relationship between collective culture, social networking, motivation, and investment. Motivation has characteristics as variables that can mediate the relationship of collective culture and social networking with investment and social networking also has characteristics as variables that can mediate the relationship of collective culture with motivation and investment. These phenomena encourage authors to examine and discover the role of motivation and social networking mediating collective cultural relationships with investment in crowdfunding sites in Indonesia.

The funding decision involves two important matters, namely: First, the decision regarding the determination of the source of funds needed to finance investment. KEOWN et al., (2011: 39) states that the source of funds in terms of origin are basically divided into internal sources in the form of retained earnings and depreciation and external sources, namely funds originating from creditors or financial institutions, owners, participants or shareholders in the company. Second, the determination of the best spending balance or often called the optimum capital structure. The optimum capital structure is a balance of long-term debt and equity capital with a minimum average capital cost.

2. METHODOLOGY

Respondents of this study are funders or investors who have carried out funding activities during 2017 to 2018 on investment crowdfunding sites in Indonesia that are registered and supervised by the Financial Services Authority, namely Akseleran, Modalku, and Investree. According to Roscoe (in KALNADI 2013) for analysis using PLS SEM it takes a maximum sample of 100. This study uses perceptual data measured by a 1-5 Likert scale for motivation, social network, and investment. The questionnaire was distributed to investors through the admin on all three sites using the Google Docs online application. Testing the validity of the instrument with Pearson product moment correlation method which states the instrument is valid if the value of r is greater than or equal to 0.30 and the significance value of the correlation is less or equal to 95% or alpha = 0.05 (Sugyono, 2009). According to Ghozali

(2011: 48) reliability testing uses Cronbach Alpha with a cut-off point that is acceptable or feasible at least 0.70.

Variable measurements according to the research model are based on indicators of research variables / constructs arranged in accordance with the research objectives. List of variablesand indicator variables as follows:

Table 1: List of variables and variable indicators

No	Variable name		Variable Indicator
1	Collective Culture (X) (Cozma, 2011)	1	Pride when a friend gets a prize
		2	The importance of friend welfare
		3	Willing to spend time with friends
		4	Feelings when cooperating with other people
		5	Togetherness of children with parents
		6	Responsibility to the family
		7	Sacrifice to the family
		8	Respect for the decisions of others
2	Motivation (Y1) (Holbrook 1986 in Wingerden & Ryan 2013)	1	Non-monetary incentives
		2	Get a refund in the form of money
		3	Get the biggest refund
		4	Become an idol
		5	Personal relationship
		6	Trust in creators
		7	Project innovation
		8	Desire to contribute
		9	Involvement in the process of creation
		10	The desire for fun
		11	Helping achieve goals
3	Social Networking (Y2) (Carlson and Grossbart 1988 in Driscoll 2013)	1	Participation in projects that have been funded by friends or family members
		2	Participate in projects introduced by online friends
		3	Local community
		4	Hailing from the same country
		5	Participation in projects whose achievements are close to the budget
		6	Promotion through websites or social media
		7	Participation before the campaign ends
4	Investment (Y3)	1	Frequency of investing
		2	Amount of funds invested

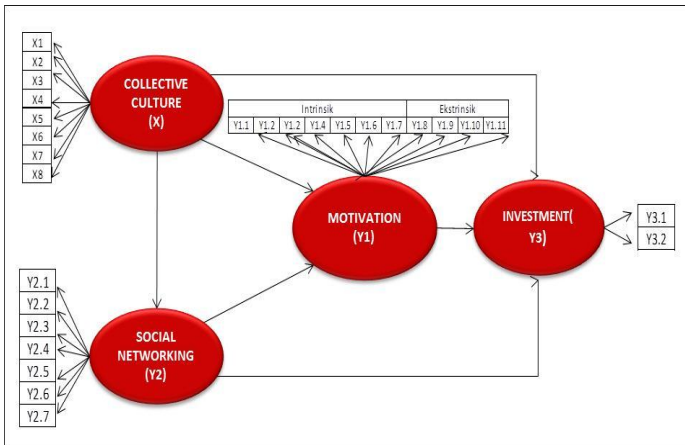The conceptual framework in this study can be seen in Figure 1 below.

Figure 1: Research Concept

This study uses variance or Component based SEM analysis techniques, known as Partial Least Square (PLS). Structural model testing is carried out after the relationship model is built according to the observational data and the suitability of the overall model (goodness of-fit overall model). Testing of the structural relations model aims to determine the relationship between latent variables that have been designed in this study. Based on the conceptual framework, testing the relationship between latent variables and hypotheses can be done in two stages, namely (1) testing the hypothesis and the direct effect coefficient; and (2) testing of hypotheses and path coefficients of mediation influences.

3. RESULTS AND DISCUSSION

3.1 Characteristics of respondents

The respondents of this study consisted of 78.00 percent of men and 22 percent of women. Age <31 years 16.00 percent and most (38.00 percent) aged 41-50 years. 6.00 percent are over 60 years old. The majority of respondents (80 percent) are entrepreneurs, the remaining 20 percent are private employees and civil servants / military / police. As many as 51.00 percent of respondents registered or registered on two sites, 28.00 percent on three sites, and 19.00 percent on only one site. This research is related to Indonesian national culture. Indonesian society consists of various ethnic groups. The respondents of this study consisted of several ethnic groups in Indonesia, including Chinese. The top five respondents based on ethnic groups in a row from the highest number were investors from the Javanese tribe (48.00 percent), followed by the Balinese Tribe 10.00 percent, the Betawi Tribe 9.00 percent, the Sundanese Tribe 8.00 percent, and the Chinese descent 6.00 percent.

3.2 Description of Research Variables

Descriptive analysis in this study is presented based on minimum, maximum, standard deviation, and average values. In Table 2 can be seen descriptive statistics and Table 3 presented a detailed frequency distribution of each variable indicator.

Table 2: Descriptive Statistics

Variabel	N	Minimum	Maximum	Mean	Std. Deviation
Collective Culture	100	2,25	5,00	4,34	0,58
Motivation	100	1,43	5,00	3,46	0,57
- Intrinsic	100	1,33	5,00	3,42	0,58
- Extrinsic	100	1,00	5,00	3,53	0,68
Social network	100	1,29	4,86	3,82	0,83
Investment	100	1,00	4,50	2,42	1,18

Table 3: Frequency Distribution

Variable	Variable Indicator	SD =1		DA=2		EA=3		A=4		SA=5		Mean	
		f	%	f	%	f	%	f	%	f	%	Indicator	Variable
Colletcive Culture(X)	X1.1	0	0.00	2	2.00	15	15.00	41	41.00	42	42.00	4.23	4.34
	X1.2	0	0.00	3	3.00	8	8.00	27	27.00	62	62.00	4.48	
	X1.3	0	0.00	4	4.00	8	8.00	36	36.00	52	52.00	4.36	
	X1.4	0	0.00	3	3.00	5	5.00	25	25.00	67	67.00	4.56*	
	X1.5	0	0.00	1	1.00	7	7.00	34	34.00	58	58.00	4.49	
	X1.6	0	0.00	1	1.00	14	14.00	46	46.00	39	39.00	4.23	
	X1.7	0	0.00	1	1.00	28	28.00	36	36.00	35	35.00	4.05	
	X1.8	0	0.00	2	2.00	13	13.00	33	33.00	52	52.00	4.35	
Motivation(Y1)	Y1.1	6	6.00	14	14.00	35	35.00	37	37.00	8	8.00	3.27	3.46
	Y1.2	3	3.00	8	8.00	44	44.00	36	36.00	9	9.00	3.40	
	Y1.3	2	2.00	8	8.00	15	15.00	68	68.00	7	7.00	3.70*	
	Y1.4	3	3.00	17	17.00	38	38.00	36	36.00	6	6.00	3.25	
	Y1.5	0	0.00	10	10.00	49	49.00	35	35.00	6	6.00	3.37	
	Y1.6	0	0.00	9	9.00	21	21.00	68	68.00	2	2.00	3.63	
	Y1.7	3	3.00	8	8.00	48	48.00	36	36.00	5	5.00	3.32	
	Mean Dimensions of Intrinsic Motivation												3.42
	Y1.8	8	8.00	17	17.00	34	34.00	30	30.00	11	11.00	3.19	
	Y1.9	5	5.00	13	13.00	35	35.00	39	39.00	8	8.00	3.32	
	Y1.10	5	5.00	9	9.00	34	34.00	34	34.00	18	18.00	3.51	
	Y1.11	3	3.00	2	2.00	5	5.00	61	61.00	29	29.00	4.11*	
	Mean Dimensions of Extrinsic Motivation												3.53
Social Networking (Y2)	Y2.1	4	4.00	7	7.00	11	11.00	33	33.00	45	45.00	4.08*	3.82
	Y2.2	4	4.00	8	8.00	18	18.00	31	31.00	39	39.00	3.93	
	Y2.3	2	2.00	3	3.00	20	20.00	44	44.00	31	31.00	3.99	
	Y2.4	7	7.00	1	1.00	16	16.00	34	34.00	42	42.00	4.03	
	Y2.5	6	6.00	11	11.00	8	8.00	39	39.00	36	36.00	3.88	
	Y2.6	6	6.00	16	16.00	9	9.00	36	36.00	33	33.00	3.74	
	Y2.7	4	4.00	24	24.00	40	40.00	22	22.00	10	10.00	3.10	

Variable	Variable Indicator	< 5 times=1		5-10 times=2		>10-15 times=3		>15-20 times=4		>20 times=5		Mean	
		f	%	f	%	f	%	f	%	f	%	Indicator	Variable
Investment (Y3)	Y3.1	18	18.00	22	22.00	33	33.00	6	6.00	21	21.00	2.90	2.42

Variable	Variable Indicator	< 10 Jt =1		10-25 Jt=2		>25-50 Jt=3		>50-75 Jt=4		> 75 Jt=5			
		f	%	f	%	f	%	f	%	f	%		
	Y3.2	61	61.00	10	10.00	4	4.00	25	25.00	0	0.00	1.93	

Keterangan:
*) highest mean
SD= Strongly Disagree   DA = Disagree   EA = Enough Agree   A = Agree   SA= Strongly Agree
Interval Class: 1 - 2.33 = Low   > 2.33 - 3.66 = Medium   > 3.66 - 5 = High

Source: Primary data, processed

4.3 Test results of direct influence

Testing the research hypothesis and the direct influence coefficient aims to answer whether the research hypothesis can be accepted or rejected. The results of testing the direct effect on the analysis of structural equations are presented in Table 4 and Figure 2.

Table 4: Direct Effect

Variable	Correlation	Direct Effect Coefficient	Sig	Note
Collective Culture → Motivation	0,420	0,263	0,007	Significant
Collective Culture → Social Networking	0,392	0,392	0,000	Significant
Collective Culture → Investment	0,550	0,311	0,000	Significant
Social Networking → Motivation	0,502	0,398	0,000	Significant
Social Networking → Investment	0,516	0,203	0,100	Not Significant
Motivation→ Investment	0,613	0,381	0,001	Significant

5. RESEARCH FINDINGS

Based on the results of data analysis and discussion, theoretical and empirical studies, the findings of this study are as follows:

1) Provide a basis for understanding the new configuration of the development of models of collective cultural relations and social networks for direct and indirect investment through motivational variables; and direct and indirect collective cultural relations and motivations through social networks.

2) Provide empirical evidence that in investing, investors in Indonesia are not only driven by intrinsic motivation, but also extrinsic motivation. Indonesian investors are not only driven by financial returns, but also non-financial returns.

3) Provide empirical evidence that motivation has a role in mediating the relationship of collective culture and social networking with investment;

4) Provide empirical evidence that social networking has a role in mediating the relationship of collective culture with motivation, but does not have a role in mediating the relationship of collective culture with investment.

6. CONCLUSION

1) Collective culture influences motivation, social networking, and investment in a significant positive way.

2) Motivation, both intrinsic and extrinsic significantly influences investment.

3) Social networking significantly influences motivation and investment.

4) Motivation has an important and real role in mediating the relationship of collective culture with investment with the mediating nature of being part of the mediation.

5) Motivation has an important and real role in mediating the relationship of social networks with investments with the nature of mediation classified as full mediation.

6) Social networks have an important and tangible role in mediating the relationship of collective culture with motivation with the nature of mediation classified as part mediation.

7) Social networks have no role in mediating the relationship of collective culture with investment.

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