

CROWDFUNDING OPPORTUNITIES AS AN ALTERNATIVE FUNDING SOURCE IN THE MUHAMMADIYAH INDONESIA MERCHANT NETWORK

Sentot Imam WAHJONO^{1*}, Anna MARINA², Tri KURNIAWATI³, Soo-Fen FAM⁴

¹ Universitas Muhammadiyah Surabaya, Indonesia; sentot.imamw@fe.um-surabaya.ac.id,
ORCID: 0000-0001-7464-6283

² Universitas Muhammadiyah Surabaya, Indonesia; annamarina@um-surabaya.ac.id,
ORCID: 0000-0002-3640-5179

³ Universitas Muhammadiyah Surabaya, Indonesia; trikurniawati@um-surabaya.ac.id,
ORCID: 0000-0001-6648-5790

⁴ Universiti Teknikal Malaysia Melaka, Malaysia; famsoofen@utem.edu.my, ORCID: 0000-0001-9439-6074

* Correspondence author

Purpose: This study aims to investigated the potential of crowdfunding as an alternative funding mechanism for businesses within the Muhammadiyah Merchant Network (JSM) in Indonesia.

Design/methodology/approach: This study uses a quantitative approach with a survey method and data collection through questionnaires distributed to 325 business operators acquainted with crowdfunding platforms in Indonesia.

The data analysis technique uses multiple regression to test the influence and significance between variables.

Findings: The results show that fundraising, product testing, and established relationship are a positive and significant influence on the success of the crowdfunding platform.

Research limitations/implications: This research needs to be followed up with a qualitative approach to see in more detail how the variables studied or perhaps other variables can influence the success of crowdfunding as a source of business funding.

Social implications: This research has an impact on the financial economic literacy of the community, especially for business people, regarding broader funding sources, not just banking. Therefore, regulations are needed to protect the community and investors or fund providers in a balanced manner.

Originality/value: This article offers an original contribution that combines theory and practical insights emphasizing crowdfunding's relevance as a financial tool in the fast-developing economies of Southeast Asia.

Keywords: crowdfunding, fundraising, product testing, established relationship, Muhammadiyah merchant network.

Category of the paper: Research paper.

1. Introduction

Access to finance is a pivotal determinant of entrepreneurial success (Liu et al., 2015). However, traditional financial institutions have become increasingly hesitant to fund entrepreneurial ventures, particularly after the global economic crisis (Tanrisever, Wismans, 2016). This reluctance, primarily driven by the high risks associated with market volatility and technological innovations, has left technology-based projects and startups with limited funding options. Crowdfunding has consequently emerged as a transformative funding approach, offering an inclusive platform for financial support.

The purpose of this article is to assess the suitability of crowdfunding as an alternative source of business financing, specifically for the specific needs of businesses within a faith-based organization, specifically Muhammadiyah in Indonesia. This analysis focuses on key barriers to financing innovation and explores how crowdfunding mechanisms can help address them. The article also discusses the nature of crowdfunding, its main models, and the procedures involved in fundraising.

As defined by Liu et al. (2015), crowdfunding is an alternative financing strategy that substitutes conventional financial mechanisms. Fundamentally, it involves an open call to individuals and organizations to support projects or ventures financially, often through small contributions. The ownership of these projects remains with the initiators, while the financial backing stems from a collective of supporters (Wahjono et al., 2021). Notably, advancements in digital technologies have enhanced the prominence of crowdfunding, particularly Web 5.0 innovations (Wahjono et al., 2020). Beyond fundraising, crowdfunding serves as a means of garnering additional insights and testing market viability for new ideas (Wahjono et al., 2018).

2. Literature Review

In developing nations, economic activities are predominantly driven by Micro, Small, and Medium Enterprises (MSMEs), most of which operate within the trade sector (Wahjono et al., 2015). These enterprises heavily rely on financial support from banks. However, almost half of MSME loan applications are denied, in contrast to multinational corporations' mere 7% rejection rate. Similarly, nearly all loan requests from startups are rejected (Bouncken et al., 2019). This disparity compels financial experts to explore alternative, equitable funding sources outside the banking system, enabling entrepreneurs to access capital from diverse community resources (Wahjono et al., 2015).

One such alternative is crowdfunding, which provides a platform for individuals or groups to obtain financial backing for projects or businesses from a collective audience (Tanrisever, Wismans, 2016). Crowdfunding is typically categorized into three types: donations, loans, and investments (Fam et al., 2022). In donation-based crowdfunding, contributors do not expect any financial returns as their contributions are made with prior knowledge of the cause and without the anticipation of repayment (Care et al., 2018). Conversely, loan-based crowdfunding involves funders expecting profit and repayment within the project's lifespan. In the investment-based model, contributors provide funds with the expectation of acquiring ownership stakes, evidenced by shares in the venture (Walthoff et al., 2018).

Crowdfunding serves as a mediator, bridging individuals or entities with surplus financial resources to those requiring funding (Borello, Pichler, 2021). The process operates under the framework of registered institutions, which oversee the funding mechanisms (Kshetri, 2018). This platform is open to anyone, including donors or investors with excess funds, and the contributions made are directed through the registered institutions managing the crowdfunding process before being allocated to the intended businesses or projects (Jenkins et al., 2014). Importantly, crowdfunding platforms must be internet-based, ensuring accessibility to users regardless of location or time (Mahamud et al., 2021).

Crowdfunding platform organizers must operate as registered institutions and comply with the financial regulations of their respective countries (Moritz, Block, 2016). The process involves aggregating public funds, which necessitates safeguards to protect the contributors and ensure that crowdfunding platforms adhere to financial security regulations and risk management (Sleuwaegen, Jonas, 2022). While some nations have established legal frameworks to regulate crowdfunding activities, others lack such regulatory measures (Zvilichovsky et al., 2015). In developing countries, crowdfunding platforms are increasingly utilized to support projects and initiatives led by MSMEs and startups (Neville et al., 2020). This paper analyzed the potential of crowdfunding as an alternative financing mechanism for MSMEs and startups.

The global adoption of crowdfunding continues to expand rapidly. In 2018, the total funds raised from investors amounted to \$16.2 billion. In the United Kingdom (UK), the crowdfunding market, as highlighted by Nesta (Pakkana et al., 2020), was projected to reach £1.74 billion. Between 2012 and 2020, the sector experienced an average annual growth rate of 150% and is anticipated to grow by 161% between 2016 and 2022. By the end of 2020, the alternative financial market in the UK was expected to contribute over £1 billion in growth and working capital to approximately 7180 MSMEs, representing 2.4% of total business bank loans. Notably, 70% of MSMEs and startups utilizing peer-to-peer (P2P) business loans reported an impressive 63% increase in revenue (Lagazio & Francesca, 2018). As an alternative funding mechanism, crowdfunding has proven instrumental in providing substantial financial support to MSMEs, startups, and socially impactful projects.

According to Ahmad, et al. (2023), crowdfunding can be classified into three primary types: donation-based, loan-based, and equity-based. Donation-based crowdfunding focuses on raising funds for humanitarian or altruistic projects, often without offering financial returns or rewards. These platforms frequently host campaigns aimed at charitable giving, including zakat and waqf contributions.

The crowdfunding process begins with project initiators submitting detailed proposals that outline their objectives, motivations, timelines, and required budgets. These proposals are made available on online crowdfunding platforms, allowing potential funders to review and assess their alignment with the projects' objectives. If funders decide to participate, they complete a form expressing their interest and transfer their contributions to accounts managed by the platform (Massolution, 2019). Once the fundraising goal is achieved, the platform facilitates an agreement between the project initiator and the platform operator, which includes transaction fees, before transferring the funds to execute the project (Walthoff et al., 2018).

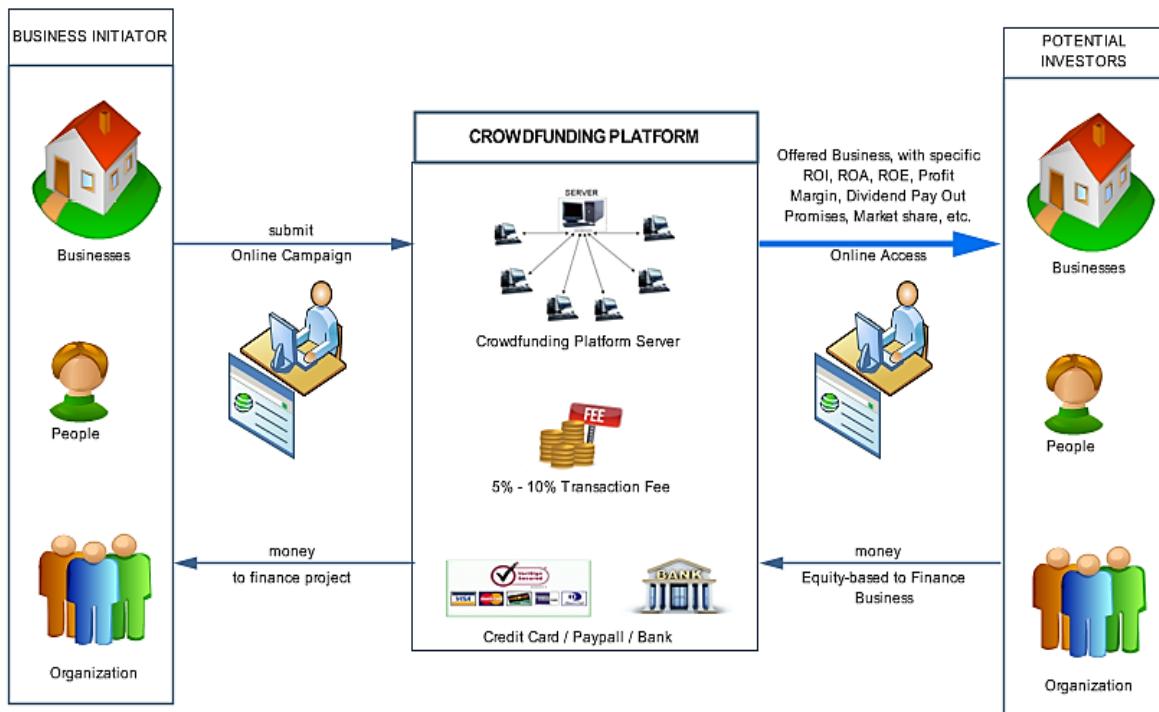


Figure 1. Equity-based crowdfunding mechanism.

Source: Wahjono et al., 2021.

The third crowdfunding category is equity-based crowdfunding, which involves individuals investing in exchange for ownership stakes in MSMEs or startup businesses. In this model, financial contributions are converted into shares of the company. Similar to other equity instruments, the value of these shares fluctuates based on the company's performance—rising as the company's value increases and declining when it decreases (Liu, Liu, 2020). This form of crowdfunding caters to investors seeking tangible ownership as evidence of their investment, represented by company shares (Marina et al., 2019). As shareholders, investors anticipate gaining some control over the business while also benefiting from annual dividends derived

from the company's profits (Dresner, 2020). Figure 1 illustrates the equity-based crowdfunding process.

Based on the research context, this study tested the following hypotheses:

H1: Fundraising positively and significantly impacts the performance of crowdfunding as an alternative funding source.

H2: Product testing positively and significantly impacts the performance of crowdfunding as an alternative funding source.

H3: Relationship building positively and significantly impacts the performance of crowdfunding as an alternative funding source.

As a conclusion to this literature review, the performance of crowdfunding as an alternative source of business funding depends on the ability to carry out fundraising, product testing, and relationship building.

3. Methods

This research uses a descriptive quantitative research design with a survey approach (Yakin et al., 2023). This design was chosen because this research aims to explore the influence of existing variables, namely fundraising, product testing, and relationship building with impact the performance of crowdfunding as an alternative funding source.

This study adopted a quantitative research design. An online survey was conducted using Google Forms to collect data, which served as the primary tool for gathering insights from initiators of equity-based and loan-based crowdfunding campaigns. The use of Google Forms was deemed suitable due to the online nature of crowdfunding platforms, which involve participants from diverse locations. Additionally, this method streamlined the process of validating questionnaire responses. The survey was distributed via the Crowdfunding Indonesia group over four months, from June to September 2024. A non-probabilistic sampling method was employed, where respondents were intentionally selected, and a snowball sampling technique was applied. This approach was used because project initiators often connect with others who have prior crowdfunding experience. The respondents comprised business operators affiliated with JSM in various major cities across Indonesia. Information about eligible participants was obtained through the Secretariat of the Muhammadiyah Central Leadership for the Business, Economic, and Tourism Council (MEBP) in Jakarta.

Population and Sample

Determining the exact population size was challenging due to the broad scope of individuals involved. Consequently, the study focused on project initiators who are members of a Facebook group associated with JSM. Using Krejcie's table, a sample size of 325 was determined. Of the 805 questionnaires distributed to business operators and crowdfunding initiators, 405 were returned. After verifying the responses, only 325 complete and valid questionnaires were included in the analysis. The researchers encountered several obstacles during data collection, including the lack of direct interaction with respondents. However, assistance from MEBP administrators in various cities and provinces helped mitigate some of these challenges (YingYing et al., 2019).

Data Collection Technique

Data were collected through a survey using a questionnaire distributed online. The research instrument used was a questionnaire consisting of statements related to each variable studied. This questionnaire was sent via the WhatsApp platform with a Google Form link that could be accessed by respondents.

The questionnaire instruments used to measure the variables in this study are as follows:

1. Fundraising: These dimensions are measured using statements developed by (Salwa, 2021).
2. Product Testing: This variable was measured using three statements developed by (Prayogo, 2018).
3. Establish Relationship: This variable is measured using ten statements developed by (Azmi, 2020).
4. Crowdfunding Performance: This variable is measured by four statement items developed by (Wahjono, 2021).

Each statement on the questionnaire was measured using a 4-point Likert scale, consisting of:

- 1 = Strongly Disagree.
- 2 = Disagree.
- 3 = Agree.
- 4 = Strongly Agree.

Respondents were asked to rate the statements based on their experiences and views on social media use and workplace performance.

Research Instruments

This research instrument is a questionnaire containing statements to measure the variables under study. Each item in the questionnaire relates to a specific dimension of the variable being measured, namely fundraising, product testing, and relationship building, and crowdfunding performance. The Likert scale is used to measure the respondent's level of agreement or disagreement with each statement in the questionnaire. This instrument has been tested for validity and reliability to ensure that the data collected can be trusted and provide valid results. Instrument validity was tested using factor analysis, while reliability was tested using Cronbach's alpha (Sekaran, Bougie, 2016).

Data Analysis Technique

The collected data will be analyzed using descriptive and inferential statistical analysis techniques. For descriptive analysis, data will be presented in the form of frequencies and percentages to describe the characteristics of respondents and the distribution of answers to each statement item. Furthermore, inferential analysis will be used to test the hypotheses that have been formulated. Linear regression test and moderation analysis will be used to examine the effect of fundraising, product testing, and relationship building on crowdfunding performance (Tojiri et al., 2023). In addition, reliability and validity tests will be conducted to ensure the consistency and accuracy of the measurement tools used in this study. Data analysis is conducted using statistical software SPSS to ensure the accuracy of the analysis results.

4. Results and Discussion

Respondent Characteristics

Table 1 shows the distribution of respondents based on the demographic characteristics relevant in this study, including gender, age, citizenship, and Length of membership in JSM (years).

Table 1.
Characteristics of Respondents

Characteristics	Frequency (n = 325)	Percentage (%)
Gender		
Male	254	78.2
Female	71	21.8
Age		
15-20 years old	17	5.2
21-30 years old	83	25.5

Cont. table 1.

31-40 years old	92	28.3
41-50 years old	88	27.1
51-60 years old	45	13.8
Citizenship		
Jakarta	114	35.1
Bandung	42	12.9
Yogyakarta	46	14.2
Surakarta	34	10.5
Semarang	22	6.8
Malang	15	4.6
Surabaya	52	16.0
Length of membership in JSM (years)		
1	155	47.7
2	82	25.2
3	63	19.4
4	23	7.1
5	2	0.6

Table 1 illustrates the distribution of respondents' characteristics, which mostly consisted of males (72.2%) reflecting the dominance of men in the business sphere within the Muhammadiyah organization. This suggests that business activities in Muhammadiyah are primarily conducted by men, likely due to their greater flexibility, capacity to engage in external activities, and ability to interact with others more freely. most respondents (69.2%) belonged to the productive age group, with 28.3% aged 31-40 years old, 27.1% aged 41-50 years old, and 13.8% aged 51-60 years old. This underscores the predominance of individuals within the productive age range in the Muhammadiyah business environment. The remaining respondents (30.7%) were aged 21-30 years old (25.5%) and 15-20 years old (5.2%).

These findings suggest that the respondents represent an economically active demographic capable of driving community economic development. They form the core participants in JSM, engaging in business and other economic activities, including crowdfunding. and the age group of 36-45 years (39%). Significant proportion of respondents (35.1%) were based in Jakarta, while others operated their businesses in other major cities on Java, Indonesia's most economically active island. Other key locations include Surabaya (16.0%), Yogyakarta (14.2%), and Bandung (12.9%), which are recognized for their medium to high economic activity. As provincial capitals, Surabaya and Bandung are industrial hubs with vibrant populations and significant financial activity. most respondents (92.3%) have been members of JSM for up to three years, with 47.7% joining within the past year.

Many resident in Jakarta, while others operate in prominent cities on Java with high economic activity, such as Surabaya (16.0%), Yogyakarta (14.2%), and Bandung (12.9%). Surabaya and Bandung are industrial cities with dynamic populations and substantial financial turnover in addition to being provincial capitals. Nearly half of the respondents (48.6%) were self-employed, followed by those employed in the private sector (27.1%). This indicates that most Muhammadiyah business members (75.7%) are engaged in entrepreneurial activities, mainly within the informal sector and outside government employment. Notably, some

respondents were students, suggesting that some had initiated business ventures early, even before completing their higher education.

Hypothesis Test Result

After the data is processed, it produces respondent characteristics as in table 1 and is then entered into a quantitative data processing application (SPSS) to determine the regression between the independent and dependent variables until the coefficient and significance figures are obtained as shown in table 2, then the coefficient figures can be used to answer the hypothesis.

Table 2.
Coefficients & Significance

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.180	.170		12.852	.000
	Fundraising	.130	.041	.178	3.137	.002
	Product Test	.177	.045	.226	3.943	.000
	Est Relationship	.128	.032	.196	4.029	.000

^aDependent variable: Success of crowdfunding

Crowdfunding can be one of the funding source options for business people and is especially beneficial for beginners or start-up business people. Although crowdfunding is not yet widespread in Indonesia, crowdfunding platform owners are trying to use various methods to increase public awareness, including through lectures, socialization, business training, and the use of social media to transfer crowdfunding knowledge to the public. To protect the rights of the community and project initiators, the Indonesian government needs to formulate regulations or rules to minimize the risk of fraud and project failure. The implications of this study indicate that crowdfunding not only provides financial benefits but also non-financial benefits. This is especially useful for startup entrepreneurs who want to effectively overcome their financial issues and expand their distribution networks. The level of trust in individuals intending to start their businesses will also increase. This is important because as more startups emerge, job vacancies will increase, leading to better economic scales in the country.

Crowdfunding is highly recommended to be practiced within JSM, considering Muhammadiyah as a community organization aims to develop its contributions to the nation and Indonesia not only in the education, health, and religious social sectors but also in the economic sector. It is an appropriate choice given its inclusive nature.

In addition, there are several recommendations to provide solutions to the limitations of this study and to increase the benefits of similar research in the future. First, extending the timeframe for conducting future research is recommended. More survey forms can be distributed with more time, and more data from a larger target respondent pool can be obtained. Researchers also have time to investigate and contact more Asian crowdfunding platform

owners, allowing more countries' respondents to participate in the survey to ensure the accuracy of the results. The second recommendation, future research should use different and larger population and sample sizes to improve the accuracy of the results and the efficiency of the independent and dependent variables. In addition, a more in-depth analysis can be explored in future research. Also, future research can focus on the size of the creator's social network, by examining how the creator's expertise, the types of projects they launch, and the level of funding can affect the motivation to participate in other business communities in both religious and non-religious business communities.

There are several limitations in this study. The first limitation is time constraints, as there were only about six months to conduct this research project, with the most time-consuming parts being the questionnaire distribution period and data collection. Therefore, this study could not cover all parts of Indonesia. The second limitation is the sample size of respondents. Because the researchers posted the questionnaires directly to the crowdfunding group, it can be assumed that 805 questionnaires were distributed. However, only 505 sets were returned. After filtering eligible respondents, only 325 participated in this study. Due to time constraints, conducting a larger sample size was impossible.

Conflict of Interest

The authors declared there is no conflict of interest.

Fundings

This research was funded by the National Research and Innovation Agency (BRIN) of the Republic of Indonesia under Contract No. 109/IV/KS/11/2023 and No. 019/SP/II.3.AU/LPPM/A/2023.

Acknowledgments

The authors acknowledge the use of artificial intelligence tools for translation and paraphrasing support in preparing this manuscript. These tools were utilized to ensure clarity and accuracy in the text while adhering to the authors' intended meaning.

References

1. Ayyagari, R., Grover, V., Purvis, R. (2011). Technostress: Technological antecedents and implications. *MIS Quarterly*, 35(4), 831-858. <https://doi.org/10.2307/41409963>
2. Borello, G., De Crescenzo, V., Pichler, F. (2015). The funding gap and the role of financial return crowdfunding: Some evidence from European platforms. *Journal of Internet Banking and Commerce*, 20(1), 1-20.
3. Bouncken, R.B., Komorek, M., Kraus, S. (2015). Crowdfunding: The current state of research. *The International Business & Economics Research Journal*, 14(3), 407.
4. Creswell, J.W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.
5. Fam, S.-F., Chuan, Z.-L., Wahjono, S.I., Zaini, N.D. (2022). Fuzzy Analytical Hierarchy Process (F-AHP) Method in Evaluating E-Wallet Payment System in Malaysia. *Mathematical Statistician and Engineering Applications*, Vol. 71 No. 3, pp. 742-749, <http://philstat.org.ph>
6. Firstzt, Ds. (2025). Crowdfunding as an Alternative Source of Startup Financing. *Scientific Papers of Silesian University of Technology Organization and Management*, No. 226.
7. Mollick, E.R., Kuppuswamy, V. (2014). After the campaign: Outcomes of crowdfunding. *UNC Kenan-Flagler Research Paper*, No. 2376997. <https://doi.org/10.2139/ssrn.2376997>
8. Moritz, A., Block, J.H. (2016). Crowdfunding: A literature review and research directions. In: D. Bruntje, O. Gajda (Ed.), *Crowdfunding in Europe: State of the Art in Theory and Practice* (pp. 25-53). Springer International Publishing.
9. Pakkana, M., Rasulong, I.A., Wahjono, S.I. (2020). Microfinance Institution And Women Empowermwnt: Evidence In The Rural Areas of Tangerang, Indonesia. *International Journal of Scientific & Technology Research*, Vol. 9, Iss. 2. www.ijstr.org
10. Tarafdar, M., Tu, Q., Ragu-Nathan, B.S., Ragu-Nathan, T.S. (2007). The impact of technostress on role stress and productivity. *Journal of Management Information Systems*, 24(1), 301-328. <https://doi.org/10.2753/MIS0742-1222240109>
11. Tufail, M., Akhtar, M.N., Rashid, M. (2022). Employee performance and motivation: A study of the impact of organizational support and leadership. *Journal of Human Resource Management*, 60(3), 125-137. <https://doi.org/10.1080/00043700122829711>
12. Wahjono, S.I., Marina, A., Fam, S.F., Hasan, A. (2020). Equity-Based Crowdfunding Project: Affect on Social Capital. *Advances in Business Research International Journal*, 6(1), 50- 58.
13. Wahjono, S.I., Marina, A., Oceano, P.M.N.R., Fam, S.F. (2018). Readiness of Crowdfunding to Finance Small and Medium-Sized Enterprises in ASEAN. *The Social Sciences*, 13(3), 657-663. <https://doi.org/10.36478/sscience.2018.657.663>

14. Wahjono, S.I., Marina, A., Sezeli, S.S., Mahardhika, B. W. (2019). The Role of social awareness over the Success of Crowdfunding Platform. *Humanities and Social Sciences Reviews*, 7(3), 534-540. <https://doi.org/10.18510/hssr.2019.7379>
15. Wahjono, S.I., Marina, A., Fikry, M. (2015). Innovative funding solution for special projects: Crowdfunding. *Journal of Economics, Business & Accountancy Ventura*, 18(1), 65-74.
16. Wahjono, S.I., Fam, S.-F., Pakkana, M.R., Marina, A. (2021). Promoting Creators Intentions: Measurement of Crowdfunding Performance. *International Journal of Business and Society*. Vol. 22, No. 3, 1084-1101.
17. Walthoff-Borm, X., Schwienbacher, A., Vanacker, T. (2018). Equity crowdfunding: First resort or last resort? *Journal of Business Venturing*, 33(4), 513-533.
18. Yakin, I.H., Supriatna, U., Rusdian, S., Global Akademia, M. (2023). *Research Methodology (Quantitative & Qualitative). Paper Knowledge. Toward a Media History of Documents*.
19. YingYing, T., Fam, S.-F., Kamarudin, M.F., Wahjono, S.I., Zian, O.B. (2019). Measuring Urban Tourist Spillover Effect Toward Rural Area. *International Journal of Recent Technology and Engineering (IJRTE)*, Vol. 8, Iss. 2S11. DOI: 10.35940/ijrte.B1112.0982S1119
20. Yu, L., Han, J., Wang, Z. (2018). The relationship between social media use, work-life balance, and employee performance. *Journal of Applied Psychology*, 103(4), 440-457. <https://doi.org/10.1037/apl0000304>
21. Yusuf Tojiri, M.M., Putra, H.S., Nur Faliza, S.E. (2023). *Basic Research Methodology: Theory, Design, and Data Analysis*. Takaza Innovatix Labs.
22. Zvilichovsky, D., Inbar, Y., Barzilay, O. (2015). Playing both sides of the market: Success and reciprocity on crowdfunding platforms. *SSRN Electronic Journal*, <https://doi.org/10.2139/ssrn.230410>