Investigating the Use of Crowdfunding and Alternative Financing Methods in Supporting Early-Stage Entrepreneurial Ventures Under Resource Constraints

Dr.R. Velanganni[1*]

[1*]Assistant Professor, Department of Management Studies, Crescent School of Law, BS Abdur Rahman Crescent Institute of Science and Technology, Chennai, Tamil Nadu, India. velangannijose78516@gmail.com, https://orcid.org/0000-0003-4412-3689

Received: 18 September, 2025; Revised: 29 October 2025; Accepted: 24 November 2025; Published: 30 December 2025

Abstract

Capital constraint is one of the major problems faced by early-stage ventures on account of institutional market failures. Conventional modes of financing, like commercial bank lending and venture capital, consistently reject seed-stage ventures owing to high information asymmetries, lack of past performance record, and lack of a tangible asset base. Despite alternative financing proposals to fill this gap, the literature lacks an integrative model for understanding how resource-constrained entrepreneurs align their unique gaps with different forms of digital financing. Drawing from entrepreneurial bricolage and signaling theory, the study utilized a qualitative multi-case study research design. The study analyzed four early-stage ventures operating across different industry segments (consumer hardware, B2B SaaS, e-commerce, and social impact technology) that managed to evade conventional finance by relying on alternative sources of finance. Data triangulation was accomplished using semi-structured interviews, financial records, and platform-level campaign analysis. Empirical results showed that alternative financing worked as a proactive approach to structural asset substitution rather than a reactive measure. Founders were able to align specific constraints with relevant digital platforms: companies lacking any collateral relied on reward-based crowdfunding to produce by making pre-sales; network-poor founders could rely on equity crowdfunding to build their organic army of retail fans; and companies suffering from cash volatility would use revenue-based financing to coordinate payment schedules with sales seasons. In the article, it is suggested the development of the strategic alignment matrix to demonstrate that the use of alternative finance allows entrepreneurs to translate community support into runway, which acts as an important sign of market validation for further rounds of venture investments. Further research may investigate the long-term effects of financing with digital seed capital.

Keywords

Alternative Finance, Crowdfunding, Entrepreneurial Bricolage, Signaling Theory, Resource Constraints, Early-Stage Startups, Venture Capital.

1. Introduction

Financing problems that are faced by seed entrepreneurs are one of the major bottlenecks when it comes to innovation and growth. Traditional methods of capital generation, such as lending through commercial banks or venture capital through institutions, fail to suit the requirements of seed companies. Lenders demand collateral, while venture capitalists demand a proven presence in the market and scalability of the product. This leads to severe information asymmetry on the part of young entrepreneurs, resulting in a lack of financing for potentially good innovations.

In order to address this divide among institutions, a paradigm shift in the form of digital alternative financing is developing in the context of reward-based crowdfunding, equity crowdfunding, and revenue-based

financing. The advantage of using alternative finance is that it democratizes funding through the avoidance of conventional middlemen and enables entrepreneurs to get money from retail investors or consumers directly. But there is one major research void that needs to be filled because even though there have been many studies about the processes of alternative financing platforms.

This research paper bridges the gap by looking at the strategic fit between the resource limitations of entrepreneurship and the various forms of alternative financing. There are two ways through which the research makes its contributions unique. First, the research bridges the gaps within the literature on entrepreneurial finance by bringing out the link between bricolage and signaling theories. In this case, it shows how resource-constrained firms leverage community involvement to raise money. Secondly, there is a matching matrix that helps map different operational difficulties to the best form of alternative financing. Through this, it helps look at alternative financing not only as a stop-gap measure but as a way of validating one's venture in the marketplace.

The paper is organized into seven sections. Section II reviews literature crowdfunding, entrepreneurial finance, and alternative funding mechanisms. Section III develops the theoretical framework using bricolage and signalling theory. Section IV explains the qualitative multiple case study methodology. Section V presents empirical results and a strategic financing-matching matrix. Section VI discusses the findings and presents the strategic financing-matching matrix. Section VII concludes with implications, limitations, and directions for future research.

2. Literature Review

Nevertheless, the structure of financing has shifted in respect of early-stage ventures, where the traditional and institutional financiers have distanced themselves from the ventures due to information asymmetry, principal-agent problem, and intangible assets (Cumming et al., 2021; Hussain, 2024; Bellavitis et al., 2017). Traditionally, such financial constraints would lead to a very large gap between the finance required by the venture and the finance available, which results in failure of the micro-venture (Bonini & Capizzi, 2019; Siddiqui, 2025). But with the fast growth in fintech and alternative investments, seed finance has become democratized (Zabolotnikova et al., 2020; Bruton et al., 2015). It has come through digital crowdfunding, which transforms the process of financing by taking fundraising from institutional elites to retail investors (Raimi, 2020; Camilleri & Bresciani, 2024).

Indeed, academic studies have demonstrated that crowdfunding is an effective replacement for traditional finance, especially among young entrepreneurs who operate in strict domestic credit markets (Alshebami, 2022; Islam & Khan, 2020). Apart from its mere functionality of raising money, crowdfunding offers certain operational benefits. In particular, it facilitates innovation at the initial stage due to the involvement of community-based knowledge, thus overcoming the usual obstacles in technology adoption faced by customers (Hoque, 2024; Lehner et al., 2015; Bernardino & Santos, 2020). Moreover, platforms allow for raising funds for projects sustainably and locally due to the construction of asset structures according to community requirements (Al-Mulla et al., 2022; Lam & Law, 2016).

Importantly, however, recent studies emphasize that engaging in these alternative markets involves an intricate strategic fit between the constraints of the ventures and the characteristics of the platforms, which represents a new paradigm of financial fit (Stevenson et al., 2022). Entrepreneurs can no longer consider online fundraising as a mere tool; on the contrary, it requires a high level of improvisational entrepreneurship and constant business networking (Fortezza et al., 2021; Brown et al., 2018). Efficient alternative financing requires entrepreneurs to coordinate multiple layers of innovation drivers based on the different motivations of their backers (Amoozad Mahdiraji et al., 2024). As a result, alternative financing has become more than a backup option for credit-constrained businesses and has turned into a powerful strategic tool employed by ingenious entrepreneurs to address the liabilities of newness.

3. Theoretical Framework

In order to anchor the study of alternative finance within the context of traditional entrepreneurship literature, this paper presents a combination of two complementary perspectives: Entrepreneurial Bricolage Theory and Signaling Theory. The combination provides the rationale for how resource-constrained firms create capital and use crowd validation to survive.

Entrepreneurial Bricolage and Digital Platforms

Entrepreneurial bricolage is a process of making do through the use of combinations of the resources that are readily at hand to address new problems and opportunities. If startups operating at an early stage suffer from capital scarcity, there is no possibility for them to access institutional resources. Alternative funding mechanisms function as institutional toolkits that give rise to the opportunity for the founders to make a digital bricolage.

While not interpreting capital scarcity as an ultimate point, which stops everything from moving forward, founders employ whatever they have at the moment: their story, intellectual property, social networks. Using these resources on crowdfunding platforms, the founders manage to transform intangible resources into tangible money. Here comes the role of the crowd as a latent resource that is activated and combined with technology in order to create a financial runway.

Signaling Theory and Crowd Validation

Whereas the theory of bricolage tells how capital is built in the first place, Signaling Theory helps explain how this alternative capital changes the credibility of the venture in the future. The early stage of financing is characterized by the high level of information asymmetry existing between entrepreneurs and their traditional counterparts – VCs and angel investors.

Alternative financing through rewards and equity crowdfunding helps resolve this issue because it provides a strong signal of market validation. By investing money into an unreleased product or an early-stage company, thousands of micro-backer investors form a signal of market demand.

This public demonstration of the concept helps decrease the risk for other traditional investors. A successful crowdfunding campaign helps prove to the market that the venture's value proposition was successfully validated by its customers.

4. Methodology

The research design that was adopted in this study was that of a qualitative multiple case study analysis in order to thoroughly understand how entrepreneurs adapted their unique constraints to alternative financing frameworks. This design was the most appropriate for such a study since it was possible to investigate the "how" and the "why" behind the decision-making processes of entrepreneurs within a context of severe resource constraints.

Case Selection and Sampling Strategy

Purposive and theoretical sampling methods were employed in the selection of four entrepreneurial startups that operated in various industry sectors.

Sample Size Rationale: The sample size of four cases was purposely selected to strike a balance between rich context and adequate cross-case comparisons, as advocated by previous qualitative approaches. This particular size enabled the study to include maximum diversity in four unique combinations of operational challenges and alternative finance types, while maintaining an adequate level of analysis needed for rich within-case stories. Moreover, data collection continued until theoretical saturation was reached, where further case analysis offered limited returns in new themes on the strategic match process.

The research process itself maintained an extreme level of consistency in three baseline case criteria, present at the launch of each alternative funding campaign:

1. They were in the seed or pre-revenue stage (less than 18 months old).
2. They faced severe traditional resource constraints, characterized by explicit rejections from commercial banks or a total lack of institutional venture capital networks.
3. They successfully raised capital utilizing at least one distinct alternative financing typology.

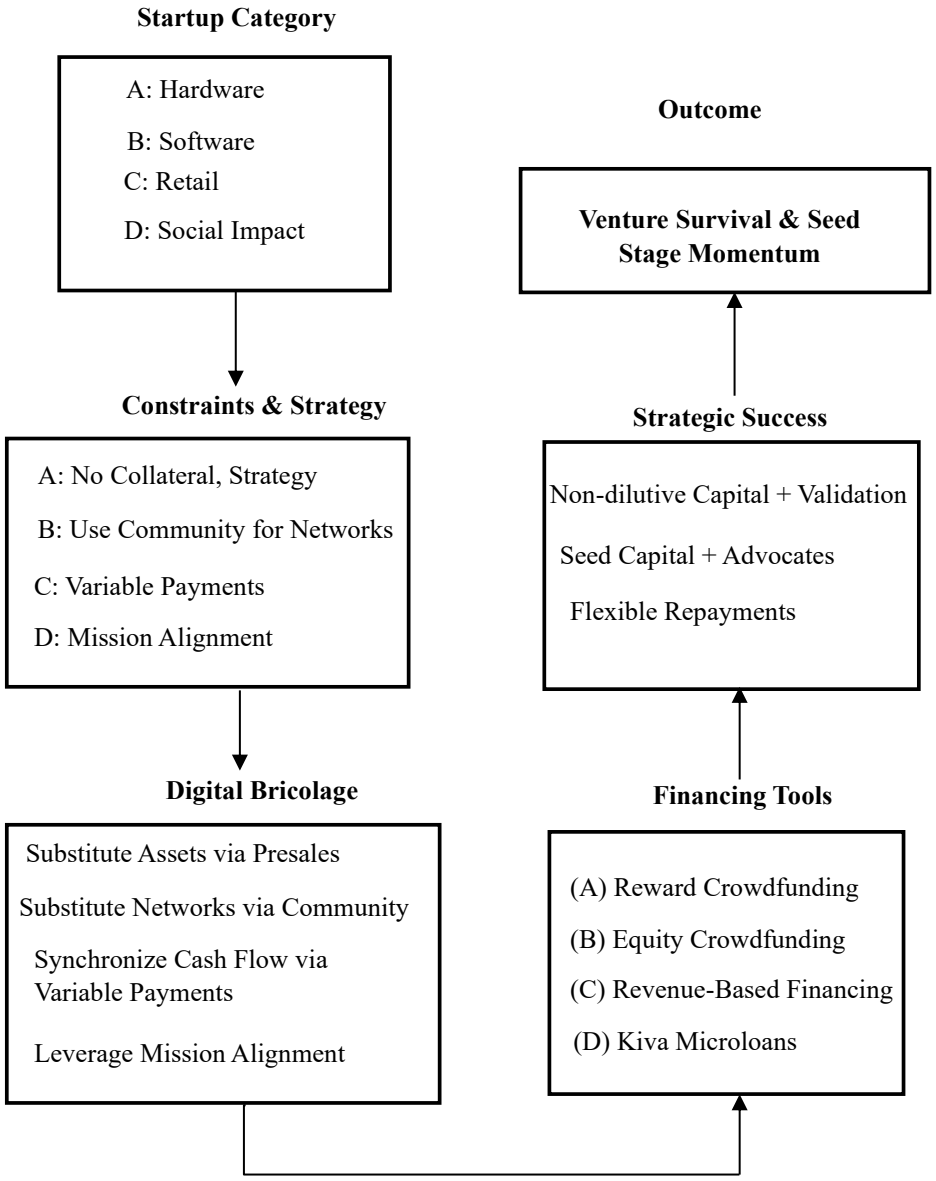

Fig. 1: Digital bricolage–based alternative financing alignment framework for resource-constrained startups

Fig. 1 shows how diverse entrepreneurial ventures belonging to hardware startups, software ventures, retailers, and ventures with social impact are subjected to diverse resource constraints that dictate strategic response through digital bricolage. This is done by matching the resource constraints with the appropriate alternatives for raising funds such as reward crowdfunding, equity crowdfunding, revenue-based funding, and microloans. The final strategic outcomes are success, survival, momentum, and market validation.

Empirical Setting and Case Profiles

Empirical basis for this study was provided by the comparative analysis of four distinct venture firms that were specifically selected on account of their peculiar features of resource insufficiency and digital alternative capitalization, which is illustrated in the following conceptual framework.

The Case A firm was one that worked in the field of consumer hardware products, where the initial prototypes were quite expensive, and there was no collateral to speak of for any loan in the commercial market. To overcome this, the company utilized reward-based crowdfunding on Kickstarter using pre-orders for its production run.

Case B was a startup offering SaaS software in the business-to-business space that was struggling with an extremely low financial runway and had no access to venture capital institutions. Instead of going through conventional equity methods, they conducted an equity crowdfunding on Wefunder.

Case C entailed a business in the e-commerce and retail industry whose biggest challenge in operations was high inventory demand along with fluctuating cash flow. Since it was impossible for the business to service a fixed amount of money repayment on the loan offered by commercial banks in times of low sales, it got funding based on revenue from Wayflyer.

Case D involved a business in the social impact technology industry that faced high institutional friction due to its double bottom line, resulting in an outright refusal by commercial banks to provide any kind of funding. The company managed to overcome the institutional bias and raised funds through social peer-to-peer funding on Kiva.

Data Collection and Triangulation

To ensure internal validity and robustness, data were collected from multiple sources to achieve thorough triangulation:

- Semi-Structured Interviews: Interviews of 60 to 90 minutes were held with the founders, CEOs, and CFOs of each business. The questions revolved around the resources lacking in their opinion, why they avoided conventional finance, and the problems they encountered in their campaigns.
- Archival and Platform Data: Data was extracted from publicly available campaign statistics, total amount raised, comments from investors, equity decks, and repayment structure from the respective alternative finance platform.
- Internal Documents: Where allowed, internal financial reports and marketing budget before the campaign were analyzed.

Data Analysis Techniques

Analysis of the data that had been collected was done through the process of thematic analysis, which involved two levels of analysis. The first level of the analysis was an independent narrative construction where analysis was done on each firm separately in order to show how their resource constraints affected their financing decisions. The second stage was a cross-case analysis, which was carried out by means of open and axial coding. Themes that were generated at this point were used to formulate the matching matrix.

5. Results

Empirical evidence suggests that successful, resource-scarce entrepreneurs do not pick their financing alternatives on a whim. Rather, they go through an extremely strategic process of mapping and selecting particular financial tools whose mechanics neutralize their major disadvantages.

Alternative Financing Strategic Matching Matrix

Table 1 presents the strategic alignment matrix for alternative financing strategies derived from cross-case thematic analysis. It is clear that successful ventures were able to match their key resource limitations with alternative finance mechanisms whose structural properties addressed those limitations. Instead of using alternative finance mechanisms simply because they had money to invest, entrepreneurs chose to use finance mechanisms that fit well within the reality of their business. Ventures that did not have consumer hardware and thus lacked collateral used reward-based crowdfunding to create working capital from the demand for future products through pre-sales. Ventures that had software but faced a challenge of accessing capital due to a lack of networks used equity crowdfunding to raise money without having to rely on networks, while at the same time creating advocates for their brand.

All things considered, the matrix analysis shows that alternative financing acts as a strategic matching tool of resources rather than a mere alternative to conventional finance. It is evident from the results that favorable outcomes for funding happen in cases where entrepreneurs match venture-specific issues with a corresponding form of financing that is aimed at solving these problems. Additionally, this process brings about some other valuable outcomes besides financing itself.

Table 1: Strategic matching of alternative financing mechanisms for resource-constrained startup ventures

Case / Venture Typology	**Primary Resource Constraint**	**Operational Bottleneck**	**Selected Alternative Finance Tool**	**Structural Matching Rationale**	**Empirical Outcome & Strategic Benefit**
Case A *(Consumer Hardware)*	Zero Physical Assets & High Prototyping Costs	Institutional banks require tangible collateral to secure manufacturing loans.	Reward-Based Crowdfunding *(Kickstarter)*	Capital is raised via non-equity product presales, completely bypassing the need for asset collateral.	Raised $150,000 in non-dilutive capital; validated consumer market demand prior to tooling injection molds.
Case B *(B2B SaaS)*	No Institutional VC Network & Short Financial Runway	High barriers to entry in elite venture capital networks; impending cash stockout.	Equity Crowdfunding *(Wefunder)*	Regulated internet platforms democratize equity allocation, allowing retail micro-investors to fund the seed round.	Secured $450,000 from 800+ micro-investors; turned early users into a highly vocal brand advocacy network.
Case C *(E-Commerce / Retail)*	Volatile Cash Flow & High Seasonal Inventory Costs	Rigid monthly fixed loan repayments pose a structural default risk during low-sales cycles.	Revenue-Based Financing *(Wayflyer)*	Repayment structures are variable, scaling dynamically up or down as a fixed percentage of daily gross revenue.	Secured $80,000 for holiday inventory; repayments naturally decreased during low-sales months, protecting operational cash flow.
Case D *(Social Impact Tech)*	Double-Bottom-Line Friction	Conventional lenders reject hybrid missions that do not prioritize pure, short-term profit maximization.	Social P2P Lending / Crowdfunded Microloans *(Kiva)*	Crowdsourced, zero-interest micro-loans are driven by social affinity and community alignment rather than strict risk-adjusted pricing.	Crowdsourced a $25,000 interest-free working capital loan; avoided mission drift and preserved founder control.

Key Empirical Insights

Collateral Deconstruction through Presales

In Case A, digital platforms enable the entrepreneur to replace tangible collateral assets with intangible assets such as intellectual and narrative capital. The venture created liquid capital from future deliverables through the use of digital prototypes and realistic timelines of production. This validates the digital bricolage theory since it transforms the excitement of a community into a manufacturing runway.

Network Substitution Via Democratic Equity

However, the absence of an elite socioeconomic network for Case B was nullified through equity crowdfunding via the platform. Instead of taking several months to obtain a good connection with institutional angels and venture capitalists, the startup presented its software business case directly to the public. As it can be observed from the results, not only did this solve the current problem, but it also helped create a marketing army of over 800 retail investors who promoted the software themselves in their professional environment.

Cash Flow Synchronization

The use of revenue-based funding in Case C is one of the most important evolutionary steps compared to debt funding. If the company has seasonality or any other kind of volatility of its revenue stream at the early stages, then the amortization schedule prepared by the bank will hinder the growth of the company or even lead to a technical default. It is quite clear from the fact that the method of funding was consistent with the macroeconomic situation of the company.

6. Discussion

These results imply that the alternative financing sources have to be regarded as strategic capabilities of the entrepreneurial venture rather than as an emergency source of funds. Empirical results showed that those founders that managed to align the financing methods with the resource issues of their ventures obtained not only better funding opportunities but also additional stakeholder validation and market engagement. Such results are consistent with the Entrepreneurial Bricolage Theory, since the entrepreneurs were able to utilize tangible and intangible resources for solving the institutional financing issues. On the other hand, the results prove the relevance of the Signaling Theory, since the successful crowdfunding campaign lowered information asymmetry due to market acceptance and provided greater credibility for the venture among institutional investors.

Results show that the utilization of digital financing platforms can bring additional strategic benefits to the venture, apart from fundraising. Increased resilience of the venture due to community engagement, customer validation, flexible financing terms, and stakeholder engagement were observed on the early stages of business development. These results contribute to previous research on entrepreneurial finance by emphasizing the strategic alignment of venture characteristics and financing techniques.

From a practical standpoint, the entrepreneur must first consider the constraints that exist for their basic resources before deciding on any form of alternative finance. Governments can also assist in the development of more entrepreneurs by providing regulations that allow for easier entry into equity crowdfunding and other online finance sources.

7. Conclusion

The empirical analysis conducted through this study provides a significant understanding of the way in which resource-limited ventures at the initial stage of development make use of the contemporary financial environment. As is evidenced by the main results of the study, types of financing available to such ventures are not just a solution of last resort in cases where traditional organizations refuse their funding. These types of financing operate as instruments of resource alignment and capitalization. Through examination of different cases, the study identifies a systematic process of mapping of certain operational deficiencies of an enterprise with mechanisms of crowdfunding and revenue-based financing. The findings, informed by the entrepreneurial bricolage and signaling theories, demonstrate that successful digital campaign platforms leverage community capital in lieu of physical assets and create market validation signals that reduce information asymmetries to compensate for potential information asymmetry between institutional investors in the future. While this research has provided a base-level matching matrix for financing via constraints, it has identified a number of opportunities for further academic investigation. First of all, follow-up research needs to conduct longitudinal

studies to determine whether the use of alternative funding in the initial stages affects capital structures, valuations, or entrepreneur retention in the venture capital rounds. Secondly, because these platforms have an international reach, there is a need to conduct cross-cultural or cross-regulatory research in order to understand how different international regulations, including different restrictions on microequities in different jurisdictions, affect the effectiveness of these platforms for minority entrepreneurs. Thirdly, in light of rapid changes in fintech, future research needs to look at how decentralized finance and crowdsourcing via blockchain can be used to reduce constraints for ventures under extreme resource constraints.

References

[1] Al-Mulla, A., Ari, I., & Koç, M. (2022). Sustainable financing for entrepreneurs: Case study in designing a crowdfunding platform tailored for Qatar. *Digital Business*, *2*(2), 100032. https://doi.org/10.1016/j.digbus.2022.100032

[2] Alshebami, A. S. (2022). Crowdfunding platforms as a substitute financing source for young Saudi entrepreneurs: empirical evidence. *Sage Open*, *12*(3), 21582440221126511. https://doi.org/10.1177/21582440221126511

[3] Amoozad Mahdiraji, H., Razavi Hajiagha, S. H., Jafari-Sadeghi, V., Busso, D., & Devalle, A. (2024). Towards financing the entrepreneurial SMEs: exploring the innovation drivers of successful crowdfunding via a multi-layer decision-making approach. *European Journal of Innovation Management*, *27*(7), 2275-2301. https://doi.org/10.1108/EJIM-12-2021-0618

[4] Bellavitis, C., Filatotchev, I., Kamuriwo, D. S., & Vanacker, T. (2017). Entrepreneurial finance: new frontiers of research and practice: Editorial for the special issue Embracing entrepreneurial funding innovations. *Venture Capital*, *19*(1-2), 1-16. https://doi.org/10.1080/13691066.2016.1259733

[5] Bernardino, S., & Santos, J. F. (2020). Crowdfunding: an exploratory study on knowledge, benefits and barriers perceived by young potential entrepreneurs. *Journal of Risk and Financial Management*, *13*(4), 81. https://doi.org/10.3390/jrfm13040081

[6] Bonini, S., & Capizzi, V. (2019). The role of venture capital in the emerging entrepreneurial finance ecosystem: future threats and opportunities. *Venture capital*, *21*(2-3), 137-175. https://doi.org/10.1080/13691066.2019.1608697

[7] Brown, R., Mawson, S., Rowe, A., & Mason, C. (2018). Working the crowd: Improvisational entrepreneurship and equity crowdfunding in nascent entrepreneurial ventures. *International Small Business Journal*, *36*(2), 169-193. https://doi.org/10.1177/0266242617729743

[8] Bruton, G., Khavul, S., Siegel, D., & Wright, M. (2015). New financial alternatives in seeding entrepreneurship: Microfinance, crowdfunding, and peer–to–peer innovations. *Entrepreneurship theory and practice*, *39*(1), 9-26. https://doi.org/10.1111/etap.12143

[9] Camilleri, M. A., & Bresciani, S. (2024). Crowdfunding small businesses and startups: a systematic review, an appraisal of theoretical insights and future research directions. *European Journal of Innovation Management*, *27*(7), 2183-2209. https://doi.org/10.1108/EJIM-02-2022-0060

[10] Cumming, D. J., Vanacker, T., & Zahra, S. A. (2021). Equity crowdfunding and governance: Toward an integrative model and research agenda. *Academy of Management Perspectives*, *35*(1), 69-95. https://doi.org/10.5465/amp.2017.0208

[11] Fortezza, F., Pagano, A., & Bocconcelli, R. (2021). Serial crowdfunding in start-up development: a business network view. *Journal of Business & Industrial Marketing*, *36*(13), 250-262. https://doi.org/10.1108/JBIM-05-2020-0243

[12] Hoque, M. M. (2024). Crowdfunding for innovation: a comprehensive empirical review. *Future Business Journal*, *10*(1), 102. https://doi.org/10.1186/s43093-024-00387-5

[13] Hussain, M. A. (2024). A critical study of startup financing dynamics and emerging approach to attracting capital resources. *Journal of Corporate Finance Management and Banking System*, *44*, 1-14. https://doi.org/10.55529/jcfmbs.44.1.14

[14] Islam, M. T., & Khan, M. T. A. (2020). Inertia to the adoption of crowdfunding in Bangladesh: A study on start-up entrepreneurs. *Cogent business & management*, *7*(1), 1811597. https://doi.org/10.1080/23311975.2020.1811597

[15] L Lehner, O. M., Grabmann, E., & Ennsgraber, C. (2015). Entrepreneurial implications of crowdfunding as alternative funding source for innovations. *Venture Capital*, *17*(1-2), 171-189. https://doi.org/10.1080/13691066.2015.1037132

[16] Lam, P. T., & Law, A. O. (2016). Crowdfunding for renewable and sustainable energy projects: An exploratory case study approach. *Renewable and sustainable energy reviews*, *60*, 11-20. https://doi.org/10.1016/j.rser.2016.01.046

[17] Raimi, L. (2020). Breaking the formal financing barriers facing entrepreneurs: Crowdfunding as an alternative financing for enterprise development in Nigeria in the Digital Era. In *Handbook of Research on Social and Organizational Dynamics in the Digital Era* (pp. 218-234). IGI Global. https://doi.org/10.4018/978-1-5225-8933-4.ch010

[18] Siddiqui, F. (2025). Impedivit of Crowdfunding in Start-Up Financing in the Technology Sector of an Emerging Asian Economy. *The Asian Bulletin of Green Management and Circular Economy*, *5*(1), 83-98. https://doi.org/10.62019/abgmce.v5i1.128

[19] Stevenson, R., McMahon, S. R., Letwin, C., & Ciuchta, M. P. (2022). Entrepreneur fund-seeking: toward a theory of funding fit in the era of equity crowdfunding. *Small Business Economics*, *58*(4), 2061-2086. https://doi.org/10.1007/s11187-021-00499-0

[20] Zabolotnikova, V., Selezneva, I., Nizamdinova, A., Mukhamedyarova-Levina, T., & Praliyeva, S. (2020). Entrepreneurial projects' development: alternative sources of investments. *Entrepreneurship and Sustainability Issues*, *8*(2), 253-268. http://doi.org/10.9770/jesi.2020.8.2(15)