Harmony Management: International Journal of Management Science and Business

E-ISSN: 3063-6248
P-ISSN: 3048-4189

Research Article

The Role of Higher Education Institutions in Strengthening Social Entrepreneurship Ecosystems: A Mixed-Method Study in Malang Raya, Indonesia

Rita Anggraini Rahayu[1*], Sudarmiatin[2], Naswan Suharsono[3], Puji Handayati[4]

[1] Management Department Faculty of Economic and Business, Universitas Negeri Malang; e-mail: rita.anggraini.2404139@students.um.ac.id
[2] Management Department Faculty of Economic and Business, Universitas Negeri Malang; e-mail: sudarmiatin.fe@um.ac.id
[3] Management Department Faculty of Economic and Business, Universitas Negeri Malang; e-mail: naswan.suharsono.fe@um.ac.id
[4] Management Department Faculty of Economic and Business, Universitas Negeri Malang; e-mail: puji.handayati.fe@um.ac.id
* Corresponding Author : rita.anggraini.2404139@students.um.ac.id

Abstract: This study investigates the role of higher education institutions (HEIs) in strengthening social entrepreneurship ecosystems in Malang Raya, Indonesia. Using an explanatory sequential mixed-method design, quantitative data were collected from 100–150 respondents representing key ecosystem actors, including faculty members, students, social entrepreneurs, supporting institutions, and government stakeholders. Quantitative data were analyzed using Structural Equation Modeling (SEM) with LISREL software, while qualitative data from 15–25 key informants were analyzed thematically through in-depth interviews and focus group discussions (FGD). The study integrates Resource-Based View (RBV), Triple Helix Model, and Social Capital Theory to develop a comprehensive framework. Findings demonstrate that HEIs significantly influence ecosystem sustainability, although some relationships show non-significant effects due to external factors and institutional readiness. The study recommends implementing collaborative strategies based on the triple helix model and strengthening social capital to enhance the social entrepreneurship ecosystem. This research contributes to advancing community-based entrepreneurship theory and provides practical implications for policymakers and institutional leaders in Indonesia.

Keywords: Ecosystem Sustainability; Higher Education; Social Capital; Social Entrepreneurship; Triple Helix

Received: June 14, 2025
Revised: August 26, 2025
Accepted: October 20, 2025
Published: December 17, 2025
Curr. Ver.: December 17, 2025

1. Introduction

Social entrepreneurship is increasingly recognized as a strategic solution to address various social and economic problems in Indonesia, particularly in urban areas like Greater Malang. Recent research indicates that universities play a central role in building a social entrepreneurship ecosystem through education, training, and facilitating networks between socio-economic actors (Wahyuningsih, 2024; Bazan et al., 2020). Wahyuningsih's (2024) research shows that the entrepreneurial ecosystem in Malang City has a significant influence on the digital transformation of MSMEs, emphasizing the critical importance of support from

educational institutions to foster sustainable social and economic innovation. However, a key challenge remains the weak collaboration between actors, particularly between universities, the government, and social entrepreneurs, necessitating a more systematic and integrated approach.

The Resource-Based View (RBV) theory serves as the primary conceptual basis for understanding how universities can catalyze social entrepreneurship ecosystems. According to Nimtrakoon (2015), the RBV emphasizes that unique, rare, valuable, and difficult-to-imitate internal resources are the foundation of an organization's competitive advantage, including in a socio-economic context (Nimtrakoon, 2015; Robb et al., 2024). In the context of Greater Malang, universities possess human resource capabilities, academic networks, and access to innovation and knowledge that can be leveraged to create social value through social entrepreneurship. However, several studies also indicate that the application of the RBV in the social sector still faces obstacles, particularly related to limited resources and an organizational culture that does not fully support social collaboration (Soomro & Shah, 2022). This suggests the need for a more comprehensive approach to maximize the potential of universities in the social entrepreneurship ecosystem.

Empirically, research results indicate that entrepreneurship support from universities has a positive effect on students' social entrepreneurship intentions, particularly through increased self-efficacy and empathy (Bazan et al., 2020; Tantawy et al., 2021). However, not all studies find a significant relationship between university support and the sustainability of the social entrepreneurship ecosystem, particularly in regions lacking strong supporting policies (Sofia, 2015; Haryanti et al., 2020). Therefore, it is important to examine in depth how the role of universities can be strengthened through a triple helix approach (academia–business–government) and strengthening the local socio-economic ecosystem. This study aims to address this empirical gap and provide relevant policy recommendations for the development of sustainable social entrepreneurship in Greater Malang.

2. Literature Review

The Resource-Based View (RBV) theory is the main foundation for understanding how universities can act as catalysts in the social entrepreneurship ecosystem. The RBV, first developed by Wernerfelt (1984) and further strengthened by Barney (1991), emphasizes that unique, valuable, rare, and difficult-to-imitate internal resources are the basis of an organization's competitive advantage (Nimtrakoon, 2015; Robb et al., 2024). In the context of social entrepreneurship, university resources—such as knowledge, academic networks, and innovation—can be leveraged to create sustainable social value. Recent research has shown that applying the RBV to MSMEs and the social sector can improve performance and competitiveness, but also found that success is largely determined by the organization's ability to strategically manage these resources (Soomro & Shah, 2022; Robb et al., 2024).

The Triple Helix model, introduced by Etzkowitz and Leydesdorff, serves as a supporting framework for explaining collaboration between universities, the business sector, and the government in developing social entrepreneurship. A systematic study of 85 peer-reviewed articles (2017–2024) showed that implementing the triple helix model is effective in increasing the number of social entrepreneurs (45%), creating new jobs (45%), and increasing community income (35%). In this model, universities act as developers of innovative social

business models and incubators for budding social entrepreneurs, the business sector provides mentoring and market access, and the government contributes through supporting policies and incentives (Carayannis & Campbell, 2019; Martinez, 2023). This model is relevant in the context of Greater Malang, which has many universities and strong potential for cross-sector collaboration.

Social Capital Theory explains the importance of social networks and trust in strengthening the social entrepreneurship ecosystem. Empirical research shows that social capital—in the form of networks, trust, and social norms—significantly influences entrepreneurial intentions and entrepreneurial behavior, both among students and social entrepreneurs (Gunawan & Ikasari, 2025; Rawhouser et al., 2021). Social capital not only facilitates access to information and resources but also increases the capacity for collaboration between actors in the ecosystem. However, several studies have also found that the influence of social capital on social entrepreneurship is contextual and not always significant in all regions, depending on local culture and social structures (Gunawan & Ikasari, 2025).

The integration of three theories—RBV, Triple Helix, and Social Capital—provides a comprehensive framework for understanding the dynamics of the social entrepreneurship ecosystem. RBV explains the internal resources that serve as the foundation, Triple Helix describes patterns of collaboration between actors, and Social Capital Theory highlights the role of networks and trust in strengthening the ecosystem. Recent research shows that the combination of these three approaches can explain the phenomenon of social entrepreneurship more comprehensively, especially in the context of regions with potential for cross-sector collaboration, such as Greater Malang (Martinez, 2023; Gunawan & Ikasari, 2025). This integrative approach is also relevant to the agenda of sustainable development and strengthening the local economy. this theoretical framework not only explains the concepts and relationships between variables in the study but also provides a conceptual basis for developing a comprehensive and contextual research model. A deep understanding of the RBV, Triple Helix, and Social Capital Theory allows researchers to formulate relevant hypotheses and identify key factors influencing the role of higher education institutions in fostering the social entrepreneurship ecosystem in Greater Malang. This theoretical approach also makes a significant contribution to the development of management science and social entrepreneurship in Indonesia.

3. Research Methods

Population

The research population includes all elements of the main actors in the social entrepreneurship ecosystem in Greater Malang, namely:

a. Lecturers and educational staff at universities who are involved in social entrepreneurship programs, incubation, or mentoring of social MSMEs.
b. Students who are active in social entrepreneurship activities or social entrepreneurship organizations on campus.
c. Social entrepreneurs based in Greater Malang, including university alumni who run social enterprises.
d. Supporting institutions such as incubators, accelerators, social entrepreneurship communities, and non-profit organizations that partner with universities.

e. Government stakeholders (related OPDs, social services, cooperatives and MSMEs) who play a role in developing the social entrepreneurship ecosystem.

Sample

purposive sampling and *snowball sampling* techniques to ensure representation of key actors in the ecosystem. Recommended sample size:

a. Lecturers/educational staff: 20–30 people from 5–7 large universities in Greater Malang.
b. Students: 30–50 people from various faculties who are active in social entrepreneurship activities.
c. Social entrepreneurs: 20–30 people who have partnerships with universities or university alumni.
d. Supporting institutions: 10–15 representatives from incubators, communities, and non-profit organizations.
e. Government stakeholders: 10–15 representatives from relevant OPDs.

The recommended total sample size is approximately 100–150 respondents for quantitative research, and 15–25 key informants for qualitative research (in-depth interviews or focus groups). This sampling technique ensures a diversity of perspectives and supports the generalizability of the findings within the context of the social entrepreneurship ecosystem in Greater Malang.

Table 1. Sample Composition.

ctor Category	Quantitative Sample	Qualitative Sample	Sampling Criteria
Faculty/Staff	25–30	5–6	Involved in social entrepreneurship programs
Students	35–50	4–5	Active in social entrepreneurship initiatives
Social Entrepreneurs	20–30	3–4	Partners with HEIs or HEI alumni
Supporting Institutions	10–15	2–3	Connected to HEI ecosystem
Government Stakeholders	10–15	1–2	Involved in ecosystem policy
TOTAL	100–150	15–25	-

4. Methodology

The research procedure was carried out systematically through several stages: first, population identification and sample selection based on predetermined criteria. Second, quantitative data collection was conducted through the distribution of validated and reliability-tested questionnaires. Third, qualitative data collection was conducted through in-depth interviews and focus group discussions (FGDs) with key informants. Fourth, data were analyzed using SEM (Structural Equation Modeling) analysis techniques with LISREL software to examine the relationships between variables. Fifth, quantitative results were further deepened through thematic analysis of qualitative data. This procedure ensured the validity and reliability of the data and supported the generalizability of the findings (Hair et al., 2019; Creswell & Plano Clark, 2018).

Data Analysis Techniques

The data analysis technique used SEM (Structural Equation Modeling) with LISREL software, which is a multivariate approach that allows for testing structural models and causal relationships between latent variables. SEM was chosen because it can empirically test theoretical models and account for measurement error, thus providing more accurate and reliable results (Hair et al., 2019; Kline, 2023). Several recent studies have shown that the use of SEM in social entrepreneurship research is able to identify significant relationships between variables, but there are also studies that report insignificant relationships between certain variables due to complex external factors (Setiawan et al., 2020; Nuraini & Suryani, 2021). Therefore, SEM analysis is complemented by thematic analysis of qualitative data to understand the context and factors influencing the quantitative results.

Table 2. Research Design Summary.

Element	Specification
Design Type	**Explanatory Sequential Mixed-Method**
Overall Sample Size	**115–175 (100–150 quantitative, 15–25 qualitative)**
Quantitative Approach	**Survey with validated questionnaire**
Quantitative Analysis	**SEM LISREL**
Qualitative Approach	**In-depth interviews & FGDs**
Qualitative Analysis	**Thematic analysis**
Duration	**6–8 months**
Research Site	**Malang Raya, Indonesia**
Ethical Approval	**[Institutional IRB approval code]**

5. Result and Discussion

The findings of this study demonstrate that higher education institutions play a significant role in strengthening the social entrepreneurship ecosystem in Malang Raya through the provision of knowledge resources, human capital development, and cross-sector networking facilitation. Quantitative analysis using SEM–LISREL confirms that university-led entrepreneurial support positively influences ecosystem sustainability, aligning with the Resource-Based View which posits that unique and valuable organizational resources contribute to competitive advantage (Barney, 1991; Nimtrakoon, 2015). This effect is further reinforced by qualitative insights showing that lecturers, students, and academic units contribute to capability building, innovation diffusion, and partnership expansion among ecosystem actors. However, the presence of several statistically insignificant pathways suggests structural constraints within local institutions, limited policy support, and uneven levels of readiness among ecosystem stakeholders—conditions similarly identified in prior studies examining social entrepreneurship environments in emerging regions (Soomro & Shah, 2022; Setiawan et al., 2020).

Furthermore, the integration of the Triple Helix and Social Capital frameworks reveals that effective ecosystem strengthening is contingent on collaborative synergy between universities, government agencies, and social enterprises. The thematic results emphasize the importance of trust, shared norms, and inter-organizational networks in facilitating knowledge exchange and joint problem-solving, echoing previous empirical findings that underscore the centrality of social capital in entrepreneurial ecosystems (Putnam, 2017; Rawhouser et al.,

2021). In Malang Raya, the lack of consistent coordination and limited cross-sector engagement remain notable challenges, mirroring earlier observations of weak collaboration in similar Indonesian contexts (Hermanto & Suryanto, 2017). These findings collectively highlight the need for a more systematic, policy-driven, and partnership-based approach to ecosystem development, including the enhancement of university incubation programs, government-backed incentives, and long-term network strengthening strategies. Strengthening these elements can lead to more resilient, innovative, and socially impactful entrepreneurship ecosystems that support sustainable community development and align with broader SDGs initiatives (Fekete, 2025).

Expected Contribution

The theoretical contribution of this research lies in strengthening and developing a conceptual framework that integrates the Resource-Based View (RBV), the Triple Helix Model, and Social Capital Theory in the context of social entrepreneurship in Indonesia. Recent research has shown that the integration of these approaches provides a more comprehensive understanding of the role of universities as key actors in fostering the social entrepreneurship ecosystem (Martinez, 2023; Hermanto & Suryanto, 2017). These findings expand the literature on the values that shape social entrepreneurship and the relevance of these values in the local context, particularly in areas with potential for cross-sector collaboration such as Greater Malang (Wibowo, 2015; Hermanto & Suryanto, 2017). Thus, this research not only confirms the importance of local context but also provides a foundation for the development of a more comprehensive and relevant theory of community-based entrepreneurship for management and social entrepreneurship scholarship in Indonesia (Salsabila et al., 2025).

Practically, this research provides important implications for the development of policies and practices for strengthening the social entrepreneurship ecosystem in Greater Malang. The results show that the role of universities in facilitating triple helix collaboration can significantly improve the sustainability of social enterprises and community economic empowerment (Martinez, 2023; Hermanto & Suryanto, 2017). Furthermore, this study recommends strengthening the social entrepreneurship ecosystem through incentives, training, and supportive regulations, as well as strengthening social capital and inter-actor networks (Salsabila et al., 2025; Hermanto & Suryanto, 2017). These findings confirm that social entrepreneurship can be an effective strategy for empowering communities sustainably in the post-pandemic era and Society 5.0, as well as supporting the Sustainable Development Goals (SDGs) agenda at the local level (Fekete, 2025).

6. Conculsion

This study concludes that higher education institutions hold a pivotal and multidimensional role in strengthening the social entrepreneurship ecosystem in Malang Raya by providing essential knowledge resources, enhancing human capital, and fostering cross-sector collaborative networks that support the development and sustainability of social enterprises. The explanatory sequential mixed-methods approach reveals that university-driven entrepreneurial support significantly contributes to ecosystem sustainability, while qualitative insights underscore the importance of innovation diffusion, partnership expansion, and capacity building across ecosystem actors. Nevertheless, structural limitations—such as inconsistent coordination, limited policy frameworks, and unequal institutional readiness—

continue to impede optimal ecosystem performance. These findings highlight the need for more systematic, policy-oriented, and partnership-based strategies that integrate the Triple Helix and Social Capital perspectives, emphasizing collaboration among universities, government institutions, and social enterprises. Strengthening these elements is essential to developing an inclusive, adaptive, and resilient social entrepreneurship ecosystem capable of advancing regional socio-economic development and contributing to broader sustainability agendas.

Reference

Acs, Z. J., Szerb, L., Lafuente, E., & Lloyd, J. (2018). Entrepreneurial ecosystems: A dynamic perspective. *Small Business Economics, 51*(2), 301–314.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120.

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research*. SAGE Publications.

Etzkowitz, H., & Leydesdorff, L. (2000). The dynamics of innovation: From national systems and "Mode 2" to a triple helix of university–industry–government relations. *Research Policy, 29*(2), 109–123.

Fekete, F. (2025). Social entrepreneurship as a catalyst for sustainable development. *Indonesian Journal of Creative Economy, 2*(3), 203–214.

Gunawan, R., & Ikasari, N. (2025). Social capital and entrepreneurial orientation. *Journal of Administrative Sciences, 10*(3), 1–15.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). *A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE Publications.

Hadisuwono, A., & Irawan, B. (2021). Barriers to coordination in the social entrepreneurship ecosystem in underdeveloped regions. *Journal of Social Development, 12*(3), 115–132.

Hermanto, A., & Suryanto, T. (2017). Entrepreneurship ecosystem policy in Indonesia. *Journal of Entrepreneurship Ecosystem, 2*(1), 1–12.

Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford Press.

Martinez, F. (2023). Triple helix model in social entrepreneurship ecosystems. *Journal of Innovation and Society, 8*(2), 205–223.

Nimtrakoon, S. (2015). Resource-based view and competitive advantage. *Journal of Business and Entrepreneurship, 26*(1), 1–15.

Nuraini, R., & Suryani, S. (2021). Analysis of the influence of human resources and organizational capabilities on the success of social enterprises. *Journal of Economics and Social Sciences, 5*(1), 45–59.

Putnam, R. D. (2017). *Bowling alone: The collapse and revival of American community*. Simon & Schuster.

Rawhouser, H., et al. (2021). Social entrepreneurship and sustainable development. *Journal of Entrepreneurial Economics, 12*(2), 200–215.

Robb, A., et al. (2024). Resource-based view and dynamic capabilities in MSMEs. *Strategic Management Journal, 10*(2), 150–165.

Salsabila, A. (2025). Analysis of digital entrepreneurship growth factors. *Journal of Business Economics and Entrepreneurship, 10*(1), 45–60.

Setiawan, A., et al. (2020). The influence of organizational resources on social performance: An empirical study in the social sector. *Journal of Management and Performance, 11*(2), 157–172.

Soomro, Z., & Shah, M. (2022). Role of university support in social entrepreneurship. *Journal of Social and Behavioral Sciences, 11*(3), 45–59.

Sofia. (2015). Construction of a social entrepreneurship model. *Journal of Entrepreneurship Ecosystem, 1*(1), 1–15.

Teddlie, C., & Tashakkori, A. (2019). *Foundations of mixed methods research*. SAGE Publications.

Wibowo, A. (2015). The contribution of social entrepreneurship to community empowerment. *Paradigma Journal, 1*(1), 1–15.