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The Role of Ecosystems in Improving Cooperative Performance in the Education Sector Through Collaboration Strategies and Agile Leadership

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ABSTRACT

Objective: This study aims to identify the influence of ecosystems on improving cooperatives' performance within the education sector. It examines the impact of collaboration strategies on enhancing the competitiveness of education-based cooperatives. It explains the contribution of agile leadership in fostering innovation and organizational resilience amid rapid changes in the educational environment and digital transformation. **Method**: Systematic Literature Review (SLR) method was employed by analyzing peer reviewed scientific articles published between 2018 and 2025, with data obtained from reputable academic databases including Scopus, Crossref, and ScienceDirect. **Result:** The findings confirm that an ecosystem based approach, supported by effective collaboration strategies and agile leadership, plays a significant role in enhancing the performance and competitiveness of cooperatives in the education sector. These factors contribute to the cooperatives' ability to innovate, adapt to digital challenges, and deliver sustainable value in educational environments. **Novelty:** The main novelty of this study lies in its conceptualization of cooperative ecosystems in the education sector as strategic platforms. This perspective underscores that collaboration and agile leadership generate competitive advantage and institutional resilience and, more importantly, advance the scientific discourse in education research by strengthening governance, promoting equity, and ensuring sustainability in the digital age.

INTRODUCTION

Cooperatives as economic entities have a strategic role in improving the welfare of members and surrounding communities, including within the education sector. In educational institutions such as schools, universities, and training centers, cooperatives serve as economic vehicles and platforms for fostering entrepreneurship, financial literacy, and social inclusion among students, educators, and staff. However, in recent years, educational cooperatives have faced various challenges, such as shifts in educational funding, digital disruption, and the need for rapid adaptation to changes in teaching and learning systems.

According to the Ministry of Cooperatives and SMEs, the number of cooperatives in Indonesia reached 127,124 units in 2020, up from 123,048 in 2019 (Srikalimah & Kurniawati, 2021). Indicating positive growth despite systemic challenges. In the education sector, many of these cooperatives are school based cooperatives (Koperasi Siswa), teacher cooperatives, or university cooperatives that help support student welfare and academic infrastructure (Harisandi et al., 2025). However, data also show a national decline in active cooperatives from 209,448 in 2014 to 130,120 in 2023 (Mediana, 2024), signaling that sustainability and performance remain key concerns. In some regions, like Surabaya, efforts to improve quality continue. The Surabaya City Cooperative Office

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reported that 115 units of savings and loan cooperatives achieved a healthy status in 2023, reflecting the success of localized development efforts.

Despite their strategic potential, educational cooperatives continue to face significant challenges in adapting to digital transformation, particularly due to limited infrastructure and digital literacy among managers and members (Alhamidi, 2022; Setyaningrum, 2022). This situation often leads to resistance to change and slow adoption of technology, weakening the cooperative's ability to remain competitive. In educational institutions, these challenges are both organizational and pedagogical, as cooperatives are expected to support institutional learning goals such as entrepreneurship education, financial literacy, and collaborative learning (UNESCO, 2021). A cooperative ecosystem integrating students, educators, administrators, alums, and external stakeholders can act as an experiential learning platform, aligning economic activities with educational objectives. Thus, the research problem lies in the limited capacity of educational cooperatives to transform into adaptive ecosystems that foster collaboration, agile leadership, and digital innovation, while simultaneously advancing their dual mission: ensuring institutional sustainability and enhancing student learning outcomes.

Strategic collaboration can help educational cooperatives gain access to broader markets, external funding, and knowledge networks. Collaborations with local businesses, tech firms, and government programs can provide the support and innovation required to stay competitive (Harisandi, Yahya, et al., 2024). (Sari & Asra, 2022) noted that cooperatives engaging in multi stakeholder partnerships exhibit more robust performance than those operating in isolation. Equally important is the role of agile leadership, a leadership style centered on adaptability, innovation, and responsiveness. In educational cooperatives, leaders must be able to navigate regulatory changes quickly, curriculum shifts, and students' evolving needs. Agile leaders encourage a culture of continuous learning, data driven decision making, and proactive engagement (Harisandi, Muhammad Mardiputra, et al., 2024). Research by (Pratama et al., 2019) supports this view, highlighting that cooperatives led by agile leaders are more capable of seizing market opportunities, adopting digital tools, and engaging members in participatory decision making. Agile leadership, therefore, becomes a cornerstone of digital transformation in educational cooperative models. The cooperative ecosystem in education encompasses internal stakeholders such as students, teachers, administrators, and external partners, including local industries, educational authorities, and digital service providers. As (Srikalimah & Kurniawati, 2021) defined, this ecosystem supports cooperatives' economic and social operations by aligning educational goals with entrepreneurial outcomes.

Interaction between these actors fosters a dynamic, responsive, inclusive cooperative model that strengthens learning experiences and financial sustainability. (Kusa et al., 2024) assert that cooperatives embedded in adaptive ecosystems are more resilient. Cooperatives must embrace technology, policy reform, and academic innovation in the education sector to remain relevant.

A collaboration strategy involves structured partnerships among education stakeholders to share resources, knowledge, and capabilities. This can include student enterprise programs, curriculum linked ventures, and cooperative managed student services. According to (Andika & Darmanto, 2020) collaboration enables cooperatives to expand access to capital, technology, and markets. Education based cooperatives benefit greatly from co branding with educational platforms, joint ventures with edtech

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companies, and digital alliances that enable scalable growth and social impact (Fitriani & Muafi, 2023; Hartini et al., 2025). (Febryansyah, 2021) adds that such partnerships enhance institutional visibility and innovation capacity.

Agile leadership in education focused cooperatives emphasizes responsiveness, team empowerment, and learner centered innovation. Leaders with agile mindsets create environments that value experimentation, adaptive thinking, and real time feedback (Farhati et al., 2024). In the education sector, this leadership style helps cooperatives respond to evolving accreditation standards, digitized learning environments, and changing member expectations. Agile leadership promotes open communication, flexible strategy execution, and sustained relevance amid educational shifts (Bauwens & Cortellazzo, 2024; Firdaus et al., 2024)

Given the adaptation challenges faced and the strategic potential of the cooperative ecosystem, collaboration, and agile leadership concepts outlined above, it is clear that there is a research gap in understanding how these three elements can be effectively integrated in the context of educational cooperatives. The limited literature that comprehensively addresses the interrelationships between digital transformation, multi stakeholder collaboration strategies, and agile leadership's role in supporting educational cooperatives' dual mission indicates the need for more in depth study. Therefore, this study aims to address the following key research question: how educational cooperative ecosystems can transform into adaptive platforms that foster strategic collaboration, agile leadership, and digital innovation to ensure institutional sustainability while improving student learning outcomes..

Given this background, this study addresses the following key research problem: To what extent do ecosystem based approaches, collaboration strategies, and agile leadership influence cooperatives' performance in Indonesia's education sector?

Research Objectives:

1. To analyze the cooperative ecosystem as a multi actor environment that supports resilience and sustainability in the education sector.
2. To evaluate the influence of strategic collaboration on improving the competitiveness of educational cooperatives.
3. To assess the role of agile leadership in fostering innovation, digital transformation, and adaptability within education focused cooperatives.

RESEARCH METHOD

This study applies the Systematic Literature Review (SLR) method to identify the role of the ecosystem in improving cooperative performance through collaboration strategies and agile leadership. The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta Analyses) model is used as a guideline in screening, selecting, and analyzing relevant literature. PRISMA is a set of evidence based guidelines designed to assist authors in transparently reporting the reasons for the systematic review, the methods used, and the findings obtained (Winarti et al., 2023). The studies used in this literature review were obtained from three primary databases, namely Scopus, ScienceDirect, and CrossRef, with Google Scholar used only as an initial complement to the search. The inclusion and exclusion criteria applied in the selection of literature are as follows:

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1. Inclusion Criteria:
   a. Scientific journal articles published in the range of 2018–2024.
   b. Articles explicitly addressing at least two concepts: cooperative ecosystems, collaboration strategies, and agile leadership.
   c. Articles available in English or Indonesian.
   d. Articles with full text access.
2. Exclusion Criteria:
   a. Articles that only discuss cooperatives without connection to ecosystems, collaborations, or leadership.
   b. Articles that come from unaccredited sources or are not from reputable scientific journals/conferences.
   c. Articles that are only available in abstract or summary form.

This research follows four stages in the PRISMA model, namely identification, screening, feasibility, and inclusion, with the following flow:

Table 1. Stages of the PRISMA Model

No.	Plot	Stages
1.	Identification	1. Article searches are conducted on Scopus, Google Scholar, CrossRef, and ResearchGate using the following keywords: • "cooperative ecosystem" • "collaboration strategy in cooperatives" • "agile leadership in cooperatives" • "cooperative competitiveness and innovation" 2. Initial search results returned 143 articles.
2.	Filtering	a. Duplicates of various databases removed. b. Articles are filtered by title and abstract to check for compliance with inclusion criteria.
3.	Feasibility	a. Articles that pass the screening are read thoroughly. b. Articles that are not relevant are substantially eliminated (e.g., only discussing the general management of cooperatives without ecosystem or leadership dimensions).
4.	Inclusion	Articles that met all final criteria (30 articles) were systematically analyzed based on their themes, methodologies, findings, and contributions to the synthesis of cooperative leadership ecosystem concepts.

Source: Processed Researcher, (2025)

The following is a flowchart in this study using the PRISMA model based on literature from Scopus, Google Scholar, CrossRef, and ResearchGate:

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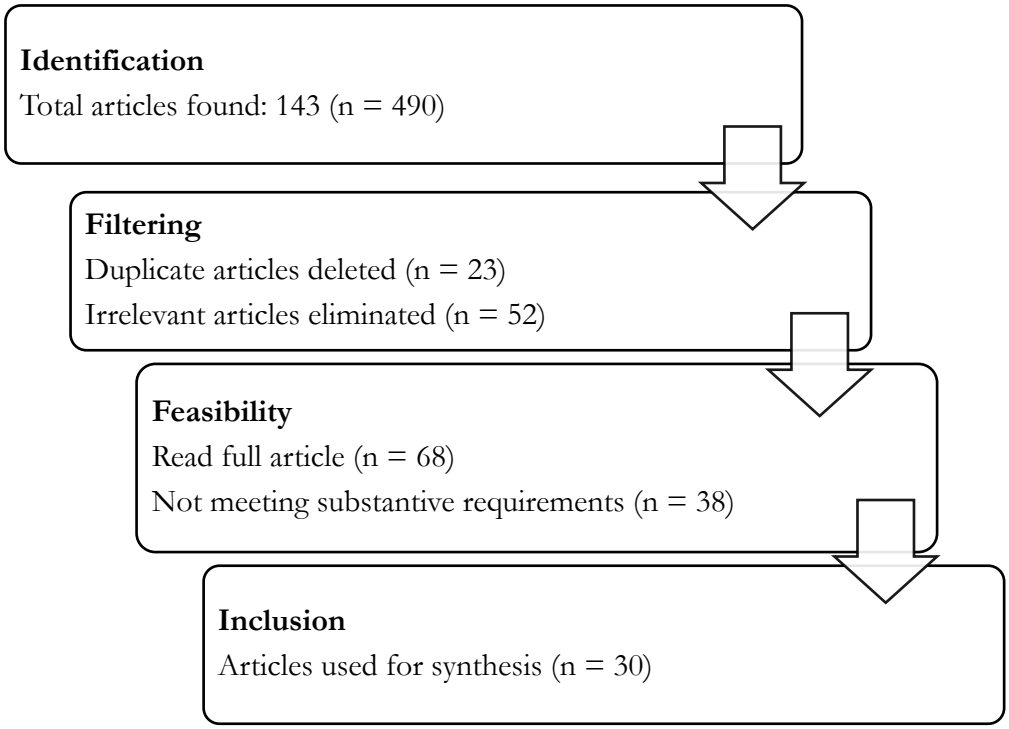

Figure 1. Processed Researcher

Thematic Synthesis and Coding

After identifying the final 30 articles, a thematic synthesis was applied. The articles were imported into NVivo 12 for systematic coding across three thematic dimensions: (1) cooperative ecosystem, (2) collaboration strategies, and (3) agile leadership. Inductive sub themes included entrepreneurship literacy, stakeholder engagement, digital adaptation, and institutional learning support. Coding proceeded iteratively until theoretical saturation was reached.

Quality Appraisal

To ensure the robustness of the synthesis, each included article was critically appraised using a modified CASP (Critical Appraisal Skills Programme) checklist. The assessment evaluated research clarity, methodological rigor, data validity, and relevance to the cooperative education context. Articles falling below the minimum quality threshold were excluded from the synthesis.

Inter-Rater Reliability

To enhance reliability, two independent reviewers conducted the coding process. Inter rater reliability was assessed using Cohen's Kappa, yielding a coefficient of 0.81, which indicates substantial agreement. Any discrepancies were addressed and resolved through consensus.

RESULTS AND DISCUSSION

Results

This study employs the Systematic Literature Review (SLR) method by identifying relevant journal sources. The collected data were categorized by year of publication, journal source, and journal type. The search results indicate a significant year on year

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increase in publications addressing the cooperative ecosystem, collaboration strategies, and agile leadership. The distribution of the analyzed publications is presented as follows:

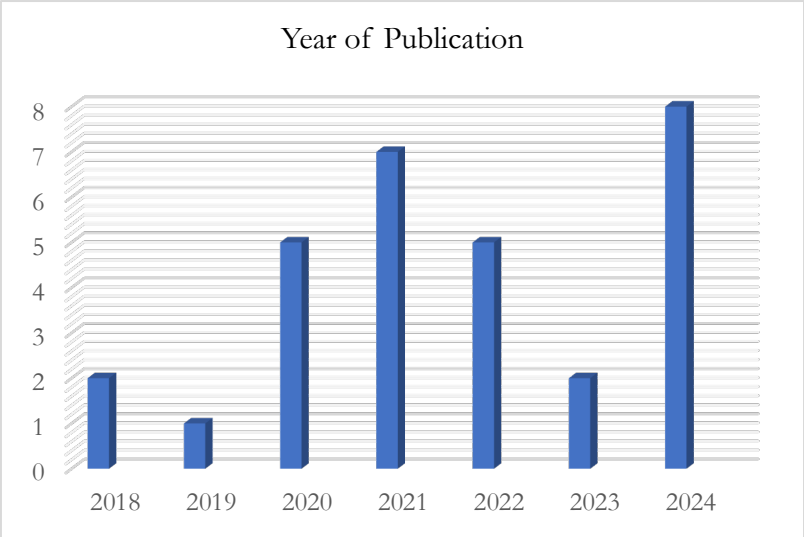

Figure 2. Year of Publication
Source: processed by the researcher

This study employs the Systematic Literature Review (SLR) method to identify relevant journal sources. The collected data were categorized by year of publication, journal source, and journal type. The results indicate a significant year on year increase in publications focusing on the cooperative ecosystem, collaboration strategies, and agile leadership. The distribution of the analyzed publications is presented below:

Table 2. Journal Source

No	Journal Source	Sum
1.	Google Scholar	5
2.	Scopus	8
3.	CrossRef	10
4.	ResearchGate	7

Source: processed by the researcher

CrossRef served as the primary source in this study, contributing 10 articles, which indicates that research on the cooperative ecosystem, strategic collaboration, and agile leadership is widely disseminated in internationally indexed journals.

Discussion

Publication Trends on Cooperative Performance in the Education Sector

Research on cooperative performance, particularly studies focusing on ecosystem models, collaboration strategies, and agile leadership, has shown a steady upward trend over the past seven years. From only two publications in 2018 and a slight decline in 2019, the number of studies increased notably in 2020 (five articles) and peaked in 2024 with eight relevant publications. This surge reflects growing academic attention on how cooperatives, especially in the education sector, adapt and transform their operational models to remain resilient amid digital disruption and institutional change.

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Most of the identified articles were sourced from highly reputable databases, including CrossRef (10 articles) and Scopus (8 articles), indicating a strong presence in peer reviewed international journals. Additional contributions were drawn from ResearchGate (7 articles) and Google Scholar (5 articles), providing supplemental insights, particularly in the form of regional case studies and gray literature. Collectively, these diverse sources offer a balanced perspective that bridges theoretical discourse and practical implementation, especially regarding how educational cooperatives navigate organizational agility and stakeholder collaboration.

This evolving publication landscape aligns with (Athia, 2018) who emphasizes the need for internal adaptability and strategic external partnerships to enhance cooperative competitiveness. The increasing focus on ecosystem based governance and agile leadership models signals a paradigm shift away from traditional, siloed cooperative practices. Cooperatives are progressively adopting interconnected, network driven frameworks to sustain performance and relevance in the digital era, marking a significant reorientation in the academic and institutional understanding of cooperative development.

The Influence of Collaboration Strategy on Cooperative Competitiveness in the Education Sector

The role of collaboration strategy in enhancing cooperative performance has emerged as a dominant theme in recent publications, particularly within the education sector. Studies by (Hulu et al., 2024) indicate that cooperatives engaging in structured partnerships with governmental bodies, financial institutions, and the private sector achieve significantly stronger performance outcomes than those operating independently. This trend highlights the growing importance of cross sector synergy in educational cooperatives, where access to capital, training, and wider networks enhances institutional sustainability. (Aras et al., 2022) further emphasize that policy driven collaborations not only improve cooperative effectiveness but also align educational cooperatives with regional development goals, fostering mutual value creation and community empowerment.

Collaboration also plays a critical role in strengthening internal dynamics and fostering innovation within cooperatives. (Hartawan & Dewi, 2024) found that promoting employee participation and satisfaction through collaborative management correlates with higher productivity and member loyalty two key success factors in education based cooperatives. This is supported by (Junaidi Efendi et al., 2024) who underscore the value of external training programs in enhancing managerial capabilities, a crucial component of effective educational service delivery. Additionally, (Hikmah et al., 2024) note that conflict resolution is more effectively managed in cooperatives that prioritize collaborative decision making. Collectively, these findings suggest that a culture of teamwork and shared leadership contributes to an agile and responsive cooperative structure, particularly in institutions focused on educational outcomes.

In the era of digital transformation, collaboration has further facilitated technological advancement within cooperatives. (Febryansyah, 2021; Harisandi et al., 2025) report that cooperatives with strong external partnerships are more likely to implement digital systems and e-learning platforms, modernizing service provision. In the education sector, such innovations are essential for maintaining competitiveness and engaging younger, tech savvy members. The recent surge in related publications,

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particularly in 2024, underscores the growing academic consensus that collaboration is not merely an auxiliary strategy but a central pillar in improving cooperative performance. These insights reinforce the importance of institutional support, adaptive leadership, and integrated ecosystems in enabling educational cooperatives to thrive in a digitally connected world.

The Role of the Cooperative Ecosystem in Improving Organizational Performance in the Education Sector

The concept of a cooperative ecosystem has gained increasing prominence in recent scholarly discussions, particularly regarding its role in enhancing performance within education focused cooperatives. According to (Ambarriani, 2022), a cooperative ecosystem facilitates collaboration among members, management, external partners, and government institutions to achieve shared objectives. In the education sector, such ecosystems support innovation in service delivery, regulatory compliance, and technological adaptation. (Asidah, 2022) further notes that cooperatives operating within well structured ecosystems demonstrate stronger competitiveness than those functioning in isolation. These ecosystems foster a trust based environment that encourages knowledge sharing and mutual support, key factors for successfully adapting to dynamic educational needs and policy shifts.

Evidence from (Bahri et al., 2018) indicates that partnerships with financial institutions and government bodies enhance cooperatives' capacity to scale distribution and strengthen managerial functions critical for managing educational services across diverse demographics. Integrating digital technologies within the ecosystem not only improves operational efficiency but also promotes data informed decision making. However, (Setyawasih, 2011) cautions that digital literacy gaps remain a significant barrier to transformation in cooperative settings. Educational cooperatives that address this challenge through continuous digital training and leadership development experience notable gains in productivity and service quality, highlighting the need to nurture internal capabilities within an enabling ecosystem.

Finally, (Srikalimah & Kurniawati, 2021) argue that an effective cooperative ecosystem is characterized by transparent governance, performance accountability, and open communication, all of which are essential for building credibility in the educational landscape. As cooperatives gain legitimacy, they attract broader partnerships and funding opportunities, ensuring long term sustainability. The surge in research publications in 2024 exploring these themes underscores the growing academic interest in cooperative ecosystems as a core strategy for performance improvement. Collectively, these findings highlight the critical role of ecosystem based models in fostering innovation, resilience, and competitiveness in educational cooperatives amid digital transformation and global integration.

Ecosystem Contribution to Cooperative Performance in the Education Sector

The cooperative ecosystem functions as a strategic enabler for sustained growth, innovation, and institutional resilience, particularly within education sector cooperatives. It facilitates meaningful interaction among internal stakeholders (members, leaders, and educators) and external actors (government agencies, financial institutions, and private partners), fostering multi directional performance improvements. According to (Ambarriani, 2022; Tarigan & Ambarita, 2021) he success of educational cooperatives

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depends heavily on leadership quality, active member participation, and an innovation oriented mindset. These elements are reinforced by an enabling external ecosystem that promotes adaptive governance, resource availability, and a culture of collaboration—critical factors in effective educational service delivery.

From a managerial perspective, (Asidah & Vinuzia, 2021) found that participatory leadership combined with an entrepreneurial orientation significantly enhances efficiency and responsiveness in cooperatives engaged in education and training. Such leadership models enable cooperatives to better align with community needs and evolving educational demands, particularly in decentralized or rural learning environments. Human resource development also emerges as a pivotal factor. (Avissa et al., 2022), show that adopting Islamic human resource management practices in sharia based educational cooperatives fosters ethical discipline, motivation, commitment, and workplace harmony, all of which improve performance outcomes while integrating spiritual and educational objectives.

Ecosystem dynamics, including strategic networking and community empowerment, are essential in reinforcing cooperative performance. (Bahri et al., 2018) highlight that cooperatives with robust public–private partnerships are more effective in mobilizing resources, accessing pedagogical innovations, and expanding institutional influence, helping overcome structural limitations in regions with limited educational infrastructure. This aligns with the broader increase in academic publications from 2020 to 2024, reflecting renewed scholarly interest in cooperative ecosystems as foundational to enhancing educational service quality and governance. As cooperatives face pressures to modernize and diversify, ecosystem based strategies provide a comprehensive framework for resilience, legitimacy, and sustainable performance.

Research on cooperative performance in the education sector shows a clear upward trend, as depicted in Figure 2 (Publication Trends on Cooperative Performance in the Education Sector). The growth in studies between 2020 and 2024 illustrates increasing scholarly concern regarding how cooperatives adapt to digital disruption and educational transformation. This trend indicates a paradigm shift: cooperatives are no longer viewed merely as economic entities but as integral institutional partners supporting educational outcomes.

Within this trajectory, collaboration strategies emerge as a key determinant of competitiveness. Partnerships with government, financial institutions, and private sector actors enable educational cooperatives to provide broader student services, including affordable learning materials, scholarship programs, and digital access
(Aras et al., 2022; Hulu et al., 2024). nternal collaboration also enhances teacher capacity building and promotes curriculum innovation through knowledge sharing platforms (Hartawan & Dewi, 2024; Junaidi Efendi et al., 2024). Thus, collaboration strengthens cooperative sustainability while directly improving the quality of teaching and learning processes.

Equally important is the cooperative ecosystem as a driver of inclusive and adaptive governance. Ecosystem based practices foster transparent decision making, participatory leadership, and engagement of diverse stakeholders including students, teachers, administrators, and local communities in shaping cooperative services (Ambarriani, 2022; Srikalimah & Kurniawati, 2021). These dynamics support inclusive school governance, ensuring that cooperative decisions align with educational equity and student welfare priorities. Ecosystem synergies also enable curriculum linked

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innovations, such as cooperative managed entrepreneurship labs or student enterprises, providing experiential learning opportunities that reinforce the institutional mission of education.

Furthermore, agile leadership within educational cooperatives enhances adaptability to curriculum reforms and accreditation standards while promoting a This leadership orientation ensures that cooperatives remain financially viable, pedagogically relevant, and capable of driving student centered innovation.

Taken together, the thematic synthesis (see Figure 1, PRISMA Stage Diagram) confirms that collaboration, cooperative ecosystems, and agile leadership form an interdependent framework supporting both organizational resilience and educational outcomes. By aligning cooperative performance with educational goals such as student services, curriculum innovation, and inclusive governance these dynamics demonstrate that cooperatives can serve as strategic enablers of institutional learning and community empowerment.

CONCLUSION

Fundamental Finding: This research demonstrates that innovation in educational cooperatives depends on the integration of three key pillars: adaptive leadership, an organizational culture that fosters creativity, and a collaborative strategy across stakeholders supported by digital technology. The interplay of these elements forms a cooperative ecosystem capable of driving transformation and sustaining competitiveness in the rapidly evolving landscape of digital learning. Significance for Cooperative Innovation in Education.The findings highlight the importance of balancing innovation with collective values such as shared benefits, member participation, and inclusive governance. Accordingly, innovation efforts remain aligned with the cooperative's social mission of expanding access to equitable and sustainable education.

Implication: Theoretically, this study advances the body of knowledge by integrating innovation ecosystem theory, agile leadership, and collaborative governance, providing a holistic framework for understanding cooperative performance in education. It offers a novel conceptual lens to analyze cooperative transformation within the education sector. Practically, the findings indicate that educational cooperatives should actively pursue strategic partnerships with government bodies, edtech providers, and community institutions, while investing in digital infrastructure and leadership development. From a policy perspective, the research underscores the need for flexible regulatory frameworks that accommodate the dynamic requirements of educational cooperatives, performance based support mechanisms, and an enhanced facilitative role for government in strengthening cooperative ecosystems. These implications are especially relevant in the context of Indonesia's efforts to foster inclusive, community driven educational innovation.

Limitation: Theoretically, this study contributes to the body of knowledge by demonstrating that integrating innovation ecosystem theory, agile leadership, and collaborative governance creates a synergistic framework enabling educational cooperatives to enhance institutional resilience, increase member engagement, and accelerate digital adoption. This framework provides a novel lens for analyzing cooperative transformation in the education sector, highlighting that performance improvement is most effective when technological innovation, participatory governance, and adaptive leadership are mobilized together. Practically, the findings indicate that

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cooperatives engaging in strategic partnerships with government bodies, edtech providers, and community institutions, while investing in digital infrastructure and leadership development, are better positioned to sustain growth, expand resource access, and deliver broader educational impact. From a policy perspective, the study underscores the need for flexible regulatory frameworks, performance based support mechanisms, and a more facilitative governmental role in fostering cooperative ecosystems. These insights are particularly critical to Indonesia's ongoing efforts to institutionalize inclusive, community driven educational innovation.

Future Research: Future studies should consider quantitative or mixed methods approaches to statistically examine the causal relationships among agile leadership, innovation culture, strategic partnerships, and digitalization within educational cooperatives. Expanding research across diverse cooperative types and regional contexts would provide a more representative and holistic understanding of cooperative performance nationwide. Further investigation is warranted into the role of local government policies and regulatory environments in either facilitating or constraining innovation in education focused cooperatives. Additionally, longitudinal studies could yield valuable insights into the sustainability of innovation initiatives and the adaptive mechanisms cooperatives employ over time in response to technological disruption and evolving educational demands. Such research would contribute to refining strategic frameworks for long term cooperative development in the education sector.

REFERENCES

Alhamidi, E. M. A. (2022). Peran Kepemimpinan Transformasional Dalam Meningkatkan Kinerja Karyawan. *Jurnal Integrasi Sumber Daya Manusia*, *1*(1), 52–62. https://doi.org/10.56721/jisdm.v1i1.69

Ambarriani, A. S. (2022). The influence of leadership, risk-taking, innovation, intensive participation and contribu-tory participation on cooperative performance in Purbalingga, Central Java. *Fair Value: Scientific Journal of Accounting and Finance*, *4*(12), 5811–5818. https://doi.org/10.32670/fairvalue.v4i12.2045

Andika, R., & Darmanto, S. (2020). The Effect Of Employee Empowerment and Intristic Motivation On Organizational Commitment And Employee Performance. *Jurnal Aplikasi Manajemen*, *18*(2), 241–251. https://doi.org/10.21776/ub.jam.2020.018.02.04

Aras, A., Ibrahim, A., Ahmad, B., & Iskandar, D. (2022). Implementation of Regional Superior Commodity Development Policy: A Cross-Sector Collaboration Perspective in Central Mamuju Regency. *Al Qisthi Journal of Social and Political Affairs*, 67–82. https://doi.org/10.47030/aq.v12i2.125

Asidah, E. (2022). Analysis of the entrepreneurial spirit of leaders, the participation style of members, and the cooperative management model in improving cooperative performance. *Journal of Community Service*, *2*(2), 229–232. https://doi.org/10.55681/swarna.v2i2.356

Asidah, E., & Vinuzia, M. (2021). Analisa Model Manajeman Koperasi Dalam Meningkatkan Kinerja. In *Jurnal of Applied Business and Banking (JABB)* (Vol. 2, Issue 2).

Athia, I. (2018). The Role of Internal and External Factors in Moderating the Influence of Customer Fo-cus Strategies to Increase Cooperative Competitiveness (Study on

p-ISSN : 2721-852X ; e-ISSN : 2721-7965
IJORER, Vol. 6, No. 5, September 2025
Page 1498-1511

Cooperatives in Batu City). *Journal of Management Science (JIMMU), 3*, 86. https://doi.org/10.33474/manajemen.v3i2.1575

Avissa, C. N., Hamdani, H. I., & Suyud Arif, H. (2022). Strategi Manajemen Sumber Daya Manusia Islami Dalam Meningkatkan Produktivitas Kinerja Karyawan di Koperasi Syariah 212 Sentul. *El-Mal: Journal of Economic & Economic Studies Islamic Business, 5*(1), 115–128. https://doi.org/10.47467/elmal.v5i1.650

Bahri, S. Y., Hari, N., Stia, S., & Selong, M. (2018). Faktor-Faktor yang Mempengaruhi Kinerja Koperasi Syariah di Kabupaten Lombok Timur. *Jurnal Humanitas*, *5*(1), 15–30. https://doi.org/10.29408/jhm.v5i1.3264

Bauwens, R., & Cortellazzo, L. (2024). The different faces of e-leadership: Six perspectives on leading in the era of digital technologies. *Human Resource Management Review*. https://doi.org/10.1016/j.hrmr.2024.101058

Farhati, Z. M., Aproliyanti, N. V., Muhtar, S., & Rahmawati, R. (2024). Strategi Kepemimpinan Dalam Meningkatkan Kinerja Pegawai. *Karimah Tauhid*, *3*(8), 8659–8670. https://doi.org/10.30997/karimahtauhid.v3i8.14340

Febryansyah, Y. (2021). Digital Communication Transformation: Efforts to Improve Cooperative Performance: A Case Study on the Ghani Mandiri Indonesia Cooperative, Cimahi, West Java. *Coalition: Cooperative Journal*, *1*(1), 17–34. https://doi.org/10.32670/koaliansi.v1i1.949

Firdaus, R., Sartika, D., & Nurhasanah. (2024). Pengaruh Kualitas Sistem Informasi Kualitas Informasi dan Kualitas Layanan terhadap Kepuasan Pengguna Sistem Kepabean. *Syntax Literate: Jurnal Ilmiah Indonesia*, *9*(10), 5681–5692. https://doi.org/10.36418/syntax-literate.v9i10

Fitriani, A., & Muafi. (2023). Peran Kepemimpinan Transformasional dalam Meningkatkan Motivasi Kerja dan Kinerja Pegawai. *Jurnal Informatika Ekonomi Bisnis*, *5*, 1409–1414. https://doi.org/10.37034/infeb.v5i4.743

Harisandi, P., Hurriyati, R., Gaffar, V., Adi Wibowo, L., Yanti, P., & Yusriani, S. (2025). Personal Branding of Lecturers and Word of Mouth: Effective Education Strategy in Increasing the Attractiveness of Entrepreneurship Study Program and Reputation of Pelita Bangsa University. *IJORER : International Journal of Recent Educational Research IJORER*, *6*(3). https://doi.org/10.46245/ijorer.v6i3.813

Harisandi, P., Muhammad Mardiputra, I., Zakiyatul Hidayah, Z., & Jordan Alvaro Ramba, S. (2024). Creation of Micro Market Structure in MSMEs in Review of Social Entrepreneurship Involvement, Government Policy and Empowerment. *Jurnal Ilmiah Manajemen*, *12*(1), 231–246. https://doi.org/10.56457/jimk.v12i1.534s

Harisandi, P., Yahya, A., & Istiqomah, A. (2024). Building Independence through an Entrepreneur Education, Marketing Channel Strategy and E-Commerce Mediated by Student's Entrepreneur Motivation in Increasing MSMEs in Bekasi District. *MUKADIMAH: Jurnal Pendidikan, Sejarah, Dan Ilmu-Ilmu Sosial*, *8*(2), 330–337. https://doi.org/10.30743/mkd.v8i2.9310

Hartawan, G. M. D., & Dewi, P. E. P. (2024). Pengaruh Gaya Kepemimpinan Otoriter, Kepuasan Karyawan, dan Partisipasi Kerja Terhadap Kinerja Karyawan pada Perusahaan Koperasi Simpan Pinjam Karya Abadi Desa Pemaron. *Jurnal Artha Satya Dharma*, *17*(2), 1–13. https://doi.org/10.55822/asd.v17i2.549

Hartini, Y., Noorhafizah, N., & Novitawati, N. (2025). Studi Literature Review Peran Kepemimpinan Dan Strategi Manajeman Mutu Untuk Kinerja Dan Kualitas

p-ISSN : 2721-852X ; e-ISSN : 2721-7965
IJORER, Vol. 6, No. 5, September 2025
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Pendidikan Yang Lebih Baik. *LEARNING : Jurnal Inovasi Penelitian Pendidikan Dan Pembelajaran*, *5*(1), 303–311. https://doi.org/10.51878/learning.v5i1.4339

Hikmah, A. R., Khoiroh, F., & Manan, Y. M. (2024). Optimalisasi Sumberdaya Manusia Terhadap Kinerja Karyawan Pada KSPPS Artha Mitra Sejati Kepanjen. *215 | Jurnal At-Tamwil: Kajian Ekonomi Syariah*, *6*(2), 215–218. https://doi.org/10.33367//at.v6i2.1499

Hulu, N., Harefa, P., Ndraha, A. B., & Zega, Y. (2024). Peran Kepemimpinan dalam Membangun Kinerja yang Berkualitas di Koperasi Konsumen Masyarakat Sejahtera Bersama Desa Orahili Sibohou Kecamatan Gomo Kabupaten Nias Selatan. *INNOVATIVE: Journal Of Social Science Research*, *4*(2), 2299–2319. https://doi.org/10.31004/innovative.v4i2.9713

Junaidi Efendi, Achmarul Fajar, & Syaiful Syaiful. (2024). Strategi Peningkatan Kapasitas Manajerial dan Kepemimpinan: Mendukung Daya Saing Koperasi Bina Warga Sejahtera. *Pemberdayaan Masyarakat : Jurnal Aksi Sosial*, *1*(4), 239–248. https://doi.org/10.62383/aksisosial.v1i4.971

Kusa, R., Suder, M., & Duda, J. (2024). Role of entrepreneurial orientation, information management, and knowledge management in improving firm performance. *International Journal of Information Management*, *78*. https://doi.org/10.1016/j.ijinfomgt.2024.102802

Pratama, M. A., Siregar, R. P. S., & Sihombing, S. O. (2019). The Effect of Consumer-Based Brand Equity and Satisfaction on Loyalty: An Empirical Study. *Jurnal Economia*, *15*(2), 275–291. https://doi.org/10.21831/economia.v15i2.27314

Sari, D. N., & Asra, Y. (2022). The Influence of Product Quality and Price on Purchase Intention Alfamart Private Label Products. *Inovbiz: Jurnal Inovasi Bisnis*, *2*, 177–180.

Setyaningrum, R. P. (2022). Achieving employee environmental performance through perceived organizational support towards the environment: a mediated-moderation analysis. *Jurnal Siasat Bisnis*, 17–30. https://doi.org/10.20885/jsb.vol27.iss1.art2

Setyawasih, R. (2011). *Dampak Penurunan Tick Size terhadap Kualitas Pasar dan Determinan Likuiditas Pasar di Bursa Efek Indonesia* (Vol. 5, Issue 1).

Srikalimah, S., & Kurniawati, E. (2021). Analisis Kinerja Koperasi Melalui Pemeringkatan Koperasi Berdasarkan Permenkop No. 21/Per/M.KUKM/IX/2015. *Owner*, *5*(2), 664–673. https://doi.org/10.33395/owner.v5i2.516

Tarigan, W. J., & Ambarita, I. M. (2021). Penerapan Manajemen Strategi dalam Menghadapi Persaingan Pasar (Studi Kasus pada Telkomsel Cabang Pematangsiantar). *Jurnal Ilmiah AccUsi*, *3*(1), 28–39. https://doi.org/10.36985/accusi.v3i1.491

Winarti, G., Komunitas, K., & Keperawatan, M. (2023). Literature Review: Faktor Keberhasilan Implementasi Sistem Informasi Manajemen Rumah Sakit (SIMRS). *Communnity Development Journal*, *4*(1), 486–497. https://doi.org/10.31004/cdj.v4i1.12291

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