

Empowerment of a community-based coffee shop to develop an entrepreneurial ecosystem through collaboration with stakeholders: An action research approach

Anjar Priyono ^{a,1,*}, Abdul Moin ^{a,2}, Ivan Piper ^{b,3}

^a Department of Management, Universitas Islam Indonesia, Jl. Prawiro Kuat, Condongcatur, Yogyakarta, 55283, Indonesia

^b Department of International Economics, University of Donja Gorica, Oktoih 1, Podgorica, Crna Gora, 81000, Montenegro

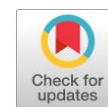
¹ anjar.priyono@uii.ac.id; ² abdul.moin@uii.ac.id; ³ ivan.piper@udg.edu.me

* Corresponding Author

Received 14 August 2024; accepted 10 November 2024; published 30 December 2024

ABSTRACT

This study examines the role of a community-based coffee shop as an entrepreneurial ecosystems that serve as the hub for economic activities among local citizens. Utilizing an action research approach, the community service team engaged directly in the field, facilitating the coffee shop's collaboration with various stakeholders to foster value creation. The action research methodology involves an iterative process of planning, implementation, evaluation, and reflection, rather than being a one-time intervention. The team worked closely with stakeholders to establish an entrepreneurial ecosystem within the coffee shop venue, aiming to actualize co-value creation. In this context, value creation is collaborative among ecosystem participants and is not merely linear; the coffee shop cannot simply offer products and expect customers to visit. Key stakeholders in this entrepreneurial ecosystem include farmers, government agencies, educational institutions, hobby clubs, training providers, and others. The coffee shop must orchestrate these stakeholders to ensure value creation that benefits the wider community. The enhancement of community economic well-being is evidenced by increased economic activity around the coffee shop area.



KEYWORDS

Coffee shop
Stakeholder collaboration
Co-value creation
Community empowerment
Resource orchestration



This is an open-access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license

1. Introduction

Kopi Gincu is a coffee shop rooted in rural community empowerment, located in Cirebon. Due to its extensive facilities, guest capacity, and comprehensive infrastructure, Kopi Gincu resembles a restaurant rather than merely a coffee shop. Beyond offering a unique experience for coffee enthusiasts, Kopi Gincu carries a social mission to enhance the economic well-being of the local community. The uniqueness of a coffee shop is essential for attracting customers who are willing to spend time enjoying the ambiance, not just the coffee itself [1], [2]. The Kopi Gincu business is situated amidst lush green landscapes, rich in local traditions and cultural heritage. Therefore, Kopi Gincu is not just a place to savor the finest coffee blends; it also serves as an anchor for preserving cultural heritage and enjoying the beauty of local culture.

In addition to its primary role, Kopi Gincu serves as an anchor, facilitating economic actors in creating collaborative economic efforts within an entrepreneurial ecosystem. Organizations functioning as anchors form networks among various stakeholders, fostering communities with complementary resources [3]. Moreover, Kopi Gincu is expected to encourage stakeholders to contribute to the entrepreneurial ecosystem by leveraging their resources [3]. Numerous researchers have analyzed the evolutionary process of developing entrepreneurial ecosystems from an evolutionary perspective [4], and this community service initiative adopts a similar approach by aiming to shift the mindset of stakeholders and the local community.

In addition to its standard coffee offerings, Kopi Gincu provides a unique mango coffee, made using mango extract sourced from plantations in the surrounding area. This mango coffee is one of the local

community's approaches to addressing the surplus of mangoes during harvest season. When the harvest yields an abundance of mangoes, prices tend to drop. To counteract this, farmers process a portion of the mangoes into coffee, thus stabilizing the mango supply and preventing oversaturation. Mango coffee is exclusively available at Kopi Gincu, making it a flagship product of the establishment. Furthermore, Kopi Gincu is the sole distributor of this mango-based coffee.

In its business operations, Kopi Gincu involves the local community, thus generating economic benefits for them. The establishment serves not only as a gathering place for residents but also provides infrastructure for economic activities. Despite the various synergies between Kopi Gincu and local farmers, musicians, artists, SMEs, and the community, the organization faces several challenges and issues. First, competition is becoming increasingly intense. Coffee shop businesses are highly popular, often facing competition from other coffee shops with various concepts, whether large franchises or independent businesses [5]. Kopi Gincu has successfully differentiated itself by establishing a clear, unique, and strong business identity, strategically located in a mountainous area, far from the city's hustle and bustle. However, this uniqueness also poses a challenge, as customers find it difficult to visit Kopi Gincu, requiring special effort just to reach the location.

Second, Kopi Gincu struggles to sustain itself solely through coffee and food sales. This traditional business model may no longer be effective in addressing the increasingly dynamic market challenges and rising competition. Kopi Gincu may not survive if it continues to rely solely on its core business of offering coffee and complementary food products [5]. For this reason, coffee shops must develop a robust business ecosystem with a solid business model [6].

Given the background and challenges faced by Kopi Gincu, the problem statement posed in this community service project is: How can Kopi Gincu position itself as an orchestrator of various stakeholders to form an entrepreneurial ecosystem that provides economic benefits to local communities?

Based on the background and problem statement, we conducted community service to facilitate the orchestration among Kopi Gincu's stakeholders, enabling the organization to enhance value creation. Various actors involved in the process of creating an entrepreneurial ecosystem include government entities, universities, community groups, startups, entrepreneurs, and other parties that promote the acceleration of entrepreneurial activities in the focus area [7]. The goal is for Kopi Gincu to establish an entrepreneurial ecosystem for local farmers and SMEs, thereby improving the well-being of the local community. In this context, an entrepreneurial ecosystem is defined as a network of organizations, including suppliers, distributors, customers, competitors, government institutions, and others, that are involved in providing a specific product or service through competition and cooperation [8]. The underlying idea is that every entity within the ecosystem influences and is influenced by others, creating an ever-evolving relationship where each entity must be flexible and adaptable to survive, much like in a biological ecosystem. Companies should not be viewed solely as independent entities within an industry but rather as members of a business ecosystem with participants spanning multiple industries. Similar to natural ecosystems, companies involved in business ecosystems compete for survival by adapting, and sometimes face extinction [9]. Analyzing how an organization can become the center of entrepreneurial activities that provide significant benefits to multiple stakeholders is crucial. The hope is that the documentation of this community service initiative can serve as a model that can be applied elsewhere [10].

2. Method

2.1. Method Action Research

Action research is a strategic approach aimed at finding realistic solutions to challenges and problems within organizations. This method is closely related to applied research and fundamentally emphasizes learning through action. In the context of business and management, action research operates within the domains of strategy, practical tasks, and structured hierarchical systems across various industries and spans multiple business functions and disciplines [11]. This study will provide action-based guidance to generate implementable knowledge within the specific domain of Kopi Gincu. Action research is a valuable method for facilitating organizational change by collaborating with and involving clients throughout the entire process of diagnosis, problem identification, experiential learning, and problem-solving. The entire

action research process is action-oriented, with the ultimate goal of successfully implementing change [12].

2.2. Data Collection and Consultation

This community engagement project employs action research and utilizes various techniques for data collection. The methods implemented include surveys, interviews, focus groups, observation, and archival research. By adhering to a systematic approach in data collection, the researchers ensure that the data gathered is relevant, accurate, and valuable for addressing their research questions.

The community engagement team comprises two faculty members from Universitas Islam Indonesia and one international researcher from the University of Donja Gorica, Montenegro, who serves as a consultant. The participation of this international researcher is part of the Erasmus project Overcoming Digital Divide in Europe and Southeast Asia (ODDEA), which aims to minimize the digital technology gap between the European Union and developing countries in Asia. The involvement of higher education institutions in the development of entrepreneurial ecosystems has been empirically shown to support collaboration among various stakeholders to establish such ecosystems. Universities play a crucial role in fostering an entrepreneurial mindset within local communities [13].

Supported by students, administrative staff, and other faculty members who act as a supporting team, the community engagement team held meetings with the management of Kopi Gincu. These meetings were also attended by stakeholders, including mango farmers, representatives of mango farmer groups, leaders of farmer associations, staff from the agricultural department, staff from the tourism department, and staff from the industry department.

2.3. Approach for Solving Issues and Challenges

In action research, researchers work collaboratively with subjects to identify problems and develop solutions. In the context of business and management, action research operates within the domains of strategy, practical tasks, and structured hierarchical systems across various industries, spanning multiple business functions and disciplines. To address the issues faced by subjects in action research within the business field, researchers may employ various methods [14], including:

- **Collaboration:** The community service team works with subjects to identify problems and develop solutions. This collaborative approach ensures that the solutions generated are relevant and effective for the subjects.
- **Systemic approach:** The community service team can use a systemic approach in designing and implementing organizational changes. This involves employing relevant system practices to achieve more successful change outcomes.
- **Reflection:** The community service team reflects on their experiences and the outcomes of their interventions to identify what worked and what could be improved. This reflection helps researchers refine their approach and develop more effective solutions

2.4. Phases of Consultation in Action Research

The following are the steps for community engagement with the subject of SME Kopi Gincu, focusing on business ecosystem management with digital technology support, using the action research method [11]. Each step should be conducted collaboratively with the coffee shop owners and employees to produce solutions tailored to their needs and circumstances [15]. This process involves a series of activities as presented in Table 1. The success of action research can be evaluated based on changes in attitudes, socio-cultural aspects, and the economic conditions of the target community [16].

Table 1. Series of Activities in Enhancing Business Ecosystem Management with Digital Technology Support

No.	Phases	Activities and Actions
1.	Initial Preparation	Identification of coffee shop SMEs: Identify the current state of the coffee shop subject to the engagement, namely Kopi Gincu, through coordination with the owner or manager. Conduct a preliminary analysis of the business conditions, operational processes, financials, marketing, and challenges faced by the coffee shop SME.

No.	Phases	Activities and Actions
2.	Introduction and Approach	Initiation and brief overview: The community service team holds meetings with the management of Kopi Gincu. The purpose of these meetings is to explain the action research method that will be employed.
3.	Initial Diagnosis	The community service team collaborates with Kopi Gincu's management and employees to identify emerging problems.
4.	Action Planning	Goal setting: The community service team collaborates with Kopi Gincu's management to establish specific goals, such as orchestrating stakeholders within the business ecosystem. Action plan: The community service team develops concrete actions to achieve these goals.
5.	Action Implementation	Implement the planned actions, such as modifying operational processes, adopting new marketing strategies, or enhancing employee training.
6.	Reflection and Evaluation	Data analysis: Analyze observations and collected data to evaluate the effectiveness of the actions taken. Reflection: Discuss with Kopi Gincu's management the outcomes achieved and whether they align with the goals or if further adjustments are needed.
7.	Knowledge Dissemination	Reporting results: Prepare a report summarizing the entire community engagement process, the results achieved, and recommendations for the coffee shop owner. Training and workshops: If necessary, conduct training or workshops for the coffee shop owner and employees to share the knowledge and skills acquired.
8.	Final Evaluation	Overall evaluation: Conduct a comprehensive evaluation of the effectiveness of this community engagement in addressing issues and improving business performance at Kopi Gincu.

3. Results and Discussion

3.1. Kopi Gincu: The Profile of Subject

Kopi Gincu is a coffee shop located in Sedong Lor village, Sedong district, Cirebon regency. Situated amidst mango orchards, the café offers an open concept with views of the Gedong Gincu mango trees. The coffee shop was established on August 26, 2020, with the aim of introducing agriculture to younger generations in an enjoyable and relaxed manner. Hendrik Nurwanto, the owner of Kopi Gincu, observed a declining interest in agriculture among the youth and sought to present it from a different perspective. In addition to serving coffee, Kopi Gincu offers educational tours of the orchard, where visitors can learn about the processes involved in farming. Kopi Gincu leases the land for IDR 200,000,000 (approximately USD 13,000) for a period of three years from the landowner. This arrangement not only provides income for the landowner but also creates a multiplier effect on the local economy.

3.2. Demographics of Surrounding Population as the Beneficiaries

The history of coffee's popularity in Cirebon dates back to the 18th century, specifically in 1711. During this period, coffee was highly sought after by the Dutch East India Company and was more popular than other commodities such as wax, cardamom, and bird's nests. In 1713, Cirebon produced 150,000 kg of coffee, which increased to 375,000 kg by 1730, and continued to rise, reaching 650 kg by 1823 [17]. This tradition of coffee cultivation has been passed down through generations and continues today. These farmers ensure the availability of high-quality raw materials, forming the foundation of the coffee products served in local coffee shops.

Demographically, the majority of the population in Sedong District are farmers, as shown in Table 2. In terms of vegetation, the area is predominantly covered by Gedong Gincu mango trees, totaling 43,254, while the remaining 86,060 are other mango varieties. The farmer groups in this district are organized under the Samimulya association, which consists of 21 fruit farming groups with a total of 1,295 farmers.

Table 2. Population Distribution by Occupation in Sedong Subdistrict, Cirebon Regency

No.	Village	Occupation			
		<i>Farmers</i>	<i>Traders</i>	<i>Laborers</i>	<i>Ranchers</i>
1.	Karangwuni	430	210	350	60
2.	Sedong Kidul	498	100	312	42
3.	Sedang Lor	286	171	542	5
4.	Windujaya	511	150	385	5
5.	Winduhaji	408	15	635	18
6.	Kertawangun	341	125	894	20
7.	Panambangan	249	32	339	37
8.	Putat	384	42	876	78
9.	Panongan	390	27	242	12
10.	Panongan Lor	557	14	485	45
		4054	886	5.060	329

Table 3 presents the aggregate number of mango farming collectives, the quantity of farming groups, and the total count of mango cultivators across various subdistricts within Cirebon Regency. The data indicates that the number of mango farmers in Sedong Subdistrict significantly exceeds that of other subdistricts in the region.

Table 3. Aggregate Farmer Population, Mango Farming Group Frequency, and Consolidated Farming Collective Enumeration

No.	Subdistrict	Aggregate farmer population	Frequency of mango cultivation groups	Enumeration of consolidated mango farming collectives
1.	Sedong	1.295	21	1
2.	Beber	652	18	1
3.	Astanajapura	777	12	2
4.	Lemah Abang	172	7	
5.	Sumber	64	2	
6.	Dukupuntang	22	1	
	Total	1.982	61	4

The substantial quantity of mango farmers and mango trees in agricultural areas indicates a significant potential for mango fruit production. This data suggests an equally substantial potential for mango coffee production. Currently, a synergistic relationship exists between Kopi Gincu and mango farmers, facilitating the processing of mango harvests into mango coffee. However, production remains at the SME scale, with products retaining a generic nature. Discussions have revealed that the mango coffee product possesses original characteristics, rendering it eligible for intellectual property rights (IPR) registration.

Another form of IPR that may be registered is geographical indication. Geographical indication is a designation used for products with a specific geographical origin, possessing qualities or reputations attributable to that origin. This indication is frequently applied to agricultural products, food, beverages, and handicrafts with unique characteristics determined by their geographical environment, including both natural and human factors. The registration of Cirebon Mango Coffee as a geographical indication would confer numerous benefits to the local community, as the IPR would be collectively owned by the Cirebon community rather than by specific individuals.

3.3. Orchestrating and Fostering Collaboration among Stakeholders

The community service team endeavors to encourage Kopi Gincu to synergize all participants within its ecosystem. In an increasingly interconnected and collaborative business era, forging close partnerships with various stakeholders becomes crucial in generating added value and ensuring sustainability. This finding aligns with empirical studies that have observed a shift in consumer roles within entrepreneurial ecosystems, transitioning from passive benefit recipients to active value co-creators [18]. Kopi Gincu's role is primarily to function as a support provider, motivating customers to engage in collaborative value creation.

In addressing the two challenges outlined in the introduction, digital technology emerges as a potential solution. By leveraging digital technology, Kopi Gincu can connect various stakeholders within its ecosystem, facilitate collaboration, and enhance coordination to achieve shared objectives [19]. As the focus of this community service activity, Kopi Gincu has already acquired sufficient knowledge regarding social media utilization. However, the knowledge of potential partners concerning social media varies significantly. Consequently, knowledge integration between Kopi Gincu and its partners proves challenging. To mitigate this issue, brief educational sessions for Kopi Gincu's stakeholders aid in accelerating their acquisition of social media knowledge. The utilization of social media by stakeholders and Kopi Gincu serves purposes such as reaching potential customers and cultivating relationships with them.

3.4. Benefits for SMEs and Local Communities

Kopi Gincu generates diverse economic and social benefits for the local community. For the surrounding SMEs, Kopi Gincu provides them a hub where businesses located in proximity can consign their merchandise in a showroom near the restaurant's entrance, labeled as the Gincu Store.

This description indicates that Kopi Gincu's role has evolved from merely selling products to the community to facilitating stakeholder interactions. The entrepreneurial ecosystem managed by Kopi Gincu enables a significant shift from being solely a producer to positioning itself as an intermediary among stakeholders. The challenge for business strategy lies in facilitating interaction and encouraging SMEs as stakeholders to participate in the entrepreneurial ecosystem managed by Kopi Gincu [20].

3.5. Benefits for Educational Institutions

In terms of physical facilities, Kopi Gincu offers meeting rooms, learning areas for children, and educational tours for primary and lower secondary school students. The surrounding area also provides outbound training infrastructure for government and private institutions. Additionally, Kopi Gincu collaborates with outbound training organizers. During training sessions, numerous participants visit Kopi Gincu, requiring various amenities such as catering, souvenirs, and local products. Kopi Gincu can offer educational tours for schools to conduct various activities at its venue. Other regularly organized events include celebrations of national and religious holidays, such as Heroes' Day, Independence Day, and Ramadan welcoming ceremonies. These events stimulate economic activities that benefit the community. Local residents are encouraged to become food suppliers, provide labor, or participate as actors in these events. Consequently, it is anticipated that Kopi Gincu's customers will feel satisfied through co-value creation [13], and the community can engage in value capture through their activities [21].

Educational organizations, from playgroups and kindergartens to primary and lower secondary schools, frequently organize edu-fun activities. These include poetry recitation competitions, book reviews, workshops, coloring contests, English for Kids programs, and cooking classes. Universities also participate in developing the entrepreneurial ecosystem at Kopi Gincu by acting as innovation intermediaries, offering benefits such as [13].

- Facilitating and maintaining collaboration among various actors
- Enabling value creation through knowledge capture and dissemination
- Connecting and supporting diverse actors in the innovation ecosystem

3.6. Contributions from Tourism, Agriculture, Trade, and Industry Departments

The Tourism Department can promote the coffee shop as a local tourist destination through brochures, websites, and social media. Furthermore, it can collaborate with the coffee shop to create tour

packages, potentially increasing visitor numbers and boosting the local economy. Meanwhile, the Cirebon Regency Agriculture Department provides various forms of support to mango farmers supplying Kopi Gincu. This support benefits Kopi Gincu by ensuring year-round availability of mangoes as raw material for mango coffee. The Industry and Trade Department contributes to value creation for the coffee shop by providing essential support for business development. Through regulatory assistance, this department ensures that the coffee shop operates in accordance with applicable legal and industry standards, avoiding legal issues and enhancing business reputation.

3.7. Contributions from Hobby Clubs, Family Events, Artists, and Performers

Various hobby clubs and communities use Kopi Gincu as a gathering place and venue for regular events. This not only increases visitor numbers but also creates a strong sense of community. Kopi Gincu often serves as a rest stop for cyclists and motorcycle clubs on tours. Jeep clubs frequently use Kopi Gincu for member gatherings. The presence of these clubs can stimulate word-of-mouth marketing, potentially increasing visitor numbers. Visitors and customers to Kopi Gincu's venue provide numerous economic benefits to the surrounding community. Therefore, not only Kopi Gincu's management but also the community should be encouraged to promote the use of Kopi Gincu as an event venue for various hobby clubs.

At Kopi Gincu, there is a resident band that regularly provides live music performances. This collaboration facilitates co-value creation between musicians and visitors, allowing customers to enjoy a special, memorable experience. Kopi Gincu also collaborates with local artists to design the café's interior or create artwork displayed in the coffee shop. This decoration enhances visual aesthetics and can serve as a photography spot for customers. These photos are often uploaded to Instagram, potentially creating a multiplier effect in marketing.

Several local artists, such as the X Noise band from Cirebon, can provide endorsements for Kopi Gincu. Other local bands often perform at events organized by Kopi Gincu's party department. Additional events that frequently utilize Kopi Gincu as a venue include circumcision ceremonies, birthday parties, pre-wedding parties, and celebrations of national and religious holidays.

With the involvement of parties outside Kopi Gincu's business ecosystem, value creation has shifted from a linear to a network-shaped process. The entrepreneurial ecosystem has formed a new logic in the value creation process. In traditional ecosystems, value creation occurs sequentially, with the company acting as the value creator and customers as value consumers. Meanwhile, in the network concept, each party creates and contributes to value creation, including hobby clubs, the community, and families [22].

4. Conclusion

The participants in Kopi Gincu's business ecosystem encompass travel agencies, government entities, local communities, industrial customers, and outbound training service providers. Each of these elements plays a distinct role and contributes differently to creating a unique and valuable experience for Kopi Gincu's customers. However, achieving this synergy necessitates a comprehensive approach and effective collaborative strategies.

Through community engagement focusing on Kopi Gincu, the potential to generate a more substantial positive impact on the local community and surrounding environment can be realized. This engagement not only provides direct benefits to the business and its owners but also fosters positive synergy with the surrounding community in building a sustainable ecosystem. In detail, these benefits are as follows:

Benefiting the local community: Kopi Gincu is not merely a coffee business but an integral part of the surrounding community's life. By providing quality coffee products and a welcoming environment, Kopi Gincu offers valuable experiences to local residents and visitors alike. This creates a space for interaction, story-sharing, and the creation of invaluable memories.

Generating employment opportunities: The development of businesses like Kopi Gincu not only creates economic impact for its owners but also provides employment opportunities for the local community. From baristas and servers to administrative and janitorial positions, Kopi Gincu creates jobs that contribute to local economic growth.

Preserving local culture: Kopi Gincu goes beyond serving coffee by embracing Indonesian local culture. By decorating its interior to reflect cultural heritage and promoting authentic Indonesian coffees, this business contributes to preserving cultural identity and traditional values amidst a dynamic modern era.

Stimulating growth in tourism-related businesses: Kopi Gincu's presence also encourages the growth of other businesses related to the tourism sector. For instance, local travel agencies can include Kopi Gincu in their tour packages, thereby helping to promote the destination and creating opportunities for mutually beneficial collaborations.

Acknowledgment

The authors express their gratitude to the Management Development Center, Faculty of Business and Economics, Universitas Islam Indonesia, in collaboration with Erasmus through the Overcoming Digital Divide in Europe and Southeast Asia (ODDEA) program, which has provided funding support for this community engagement initiative.

Declarations

Author contribution. All authors contributed equally to the main contributor to this paper. All authors read and approved the final paper.

Funding statement. This project has been supported with funding from the Department of Management, Universitas Islam Indonesia in collaboration with Erasmus through the Overcoming Digital Divide in Europe and Southeast Asia (ODDEA) program.

Conflict of interest. The authors declare no conflict of interest.

Additional information. No additional information is available for this paper.

References

- [1] L. Morland, "Rounton Coffee and Bedford Street Coffee Shop," *Int. J. Entrep. Innov.*, vol. 18, no. 4, pp. 256–263, Nov. 2017, doi: [10.1177/1465750317742325](https://doi.org/10.1177/1465750317742325).
- [2] P. P. Dhisasmito and S. Kumar, "Understanding customer loyalty in the coffee shop industry (A survey in Jakarta, Indonesia)," *Br. Food J.*, vol. 122, no. 7, pp. 2253–2271, Jun. 2020, doi: [10.1108/BFJ-10-2019-0763](https://doi.org/10.1108/BFJ-10-2019-0763).
- [3] A. Harima, J. Harima, and J. Freiling, "Ecosystem Orchestration: Unpacking the Leadership Capabilities of Anchor Organizations in Nascent Entrepreneurial Ecosystems," *Entrep. Theory Pract.*, vol. 48, no. 6, pp. 1404–1450, Nov. 2024, doi: [10.1177/10422587241241824](https://doi.org/10.1177/10422587241241824).
- [4] R. Brown and C. Mason, "Looking inside the spiky bits: a critical review and conceptualisation of entrepreneurial ecosystems," *Small Bus. Econ.*, vol. 49, no. 1, pp. 11–30, Jun. 2017, doi: [10.1007/s11187-017-9865-7](https://doi.org/10.1007/s11187-017-9865-7).
- [5] W. S. Lee, J. Moon, and M. Song, "Attributes of the coffee shop business related to customer satisfaction," *J. Foodserv. Bus. Res.*, vol. 21, no. 6, pp. 628–641, Nov. 2018, doi: [10.1080/15378020.2018.1524227](https://doi.org/10.1080/15378020.2018.1524227).
- [6] A. Cavallo, F. Cosenz, and G. Noto, "Business model scaling and growth hacking in digital entrepreneurship," *J. Small Bus. Manag.*, vol. 62, no. 4, pp. 2058–2085, Jul. 2024, doi: [10.1080/00472778.2023.2195463](https://doi.org/10.1080/00472778.2023.2195463).
- [7] N. J. Foss, J. Schmidt, and D. J. Teece, "Ecosystem leadership as a dynamic capability," *Long Range Plann.*, vol. 56, no. 1, p. 102270, Feb. 2023, doi: [10.1016/j.lrp.2022.102270](https://doi.org/10.1016/j.lrp.2022.102270).
- [8] P. K. Senyo, K. Liu, and J. Effah, "Digital business ecosystem: Literature review and a framework for future research," *Int. J. Inf. Manage.*, vol. 47, pp. 52–64, Aug. 2019, doi: [10.1016/j.ijinfomgt.2019.01.002](https://doi.org/10.1016/j.ijinfomgt.2019.01.002).
- [9] L. D. W. Thomas and E. Autio, "Innovation Ecosystems in Management: An Organizing Typology," in *Oxford Research Encyclopedia of Business and Management*, Oxford University Press, 2020, doi: [10.1093/acrefore/9780190224851.013.203](https://doi.org/10.1093/acrefore/9780190224851.013.203).
- [10] G. Sarafin, "What business ecosystem means and why it matters," *EY - Sweden*, 2021. [Online]. Available at: https://www.ey.com/en_se/alliances/what-business-ecosystem-means-and-why-it-matters.
- [11] P. Coughlan and D. Coughlan, "Action research for operations management," *Int. J. Oper. Prod. Manag.*, vol. 22, no. 2, pp. 220–240, Feb. 2002, doi: [10.1108/01443570210417515](https://doi.org/10.1108/01443570210417515).

- [12] G. I. Susman and R. D. Evered, "An Assessment of the Scientific Merits of Action Research," *Adm. Sci. Q.*, vol. 23, no. 4, p. 582, Dec. 1978, doi: [10.2307/2392581](https://doi.org/10.2307/2392581).
- [13] R. Osorno-Hinojosa, M. Koria, and D. D. C. Ramírez-Vázquez, "Open Innovation with Value Co-Creation from University–Industry Collaboration," *J. Open Innov. Technol. Mark. Complex.*, vol. 8, no. 1, p. 32, Mar. 2022, doi: [10.3390/joitmc8010032](https://doi.org/10.3390/joitmc8010032).
- [14] B. De Oliveira, "Participatory action research as a research approach: advantages, limitations and criticisms," *Qual. Res. J.*, vol. 23, no. 3, pp. 287–297, Apr. 2023, doi: [10.1108/QRJ-08-2022-0101](https://doi.org/10.1108/QRJ-08-2022-0101).
- [15] F. Cornish *et al.*, "Participatory action research," *Nat. Rev. Methods Prim. 2023 31*, vol. 3, no. 1, pp. 1–14, Apr. 2023, doi: [10.1038/s43586-023-00214-1](https://doi.org/10.1038/s43586-023-00214-1).
- [16] A. Pettican *et al.*, "Doing together: reflections on facilitating the co-production of participatory action research with marginalised populations," *Qual. Res. Sport. Exerc. Heal.*, vol. 15, no. 2, pp. 202–219, Mar. 2023, doi: [10.1080/2159676X.2022.2146164](https://doi.org/10.1080/2159676X.2022.2146164).
- [17] F. Labibinajib, "When Coffee Triggered the Eruption of War in Cirebon," *detik.com*, 2024. [Online]. Available at: <https://www.detik.com/jabar/cirebon-roya/d-7284734/kala-kopi-picu-meletusnya-perang-di-cirebon>.
- [18] J. Füller, "Refining Virtual Co-Creation from a Consumer Perspective," *Calif. Manage. Rev.*, vol. 52, no. 2, pp. 98–122, Feb. 2010, doi: [10.1525/cmr.2010.52.2.98](https://doi.org/10.1525/cmr.2010.52.2.98).
- [19] M. Mount and M. G. Martinez, "Social Media: A Tool for Open Innovation," *Calif. Manage. Rev.*, vol. 56, no. 4, pp. 124–143, Aug. 2014, doi: [10.1525/cmr.2014.56.4.124](https://doi.org/10.1525/cmr.2014.56.4.124).
- [20] T. Kohler, "Crowdsourcing-Based Business Models: How to Create and Capture Value," *Calif. Manage. Rev.*, vol. 57, no. 4, pp. 63–84, Aug. 2015, doi: [10.1525/cmr.2015.57.4.63](https://doi.org/10.1525/cmr.2015.57.4.63).
- [21] N. Sukma and A. Leelasantham, "A community sustainability ecosystem modeling for water supply business in thailand," *Front. Environ. Sci.*, vol. 10, p. 940955, Aug. 2022, doi: [10.3389/fenvs.2022.940955](https://doi.org/10.3389/fenvs.2022.940955).
- [22] S. Nenonen and K. Storbacka, "Business model design: conceptualizing networked value co-creation," *Int. J. Qual. Serv. Sci.*, vol. 2, no. 1, pp. 43–59, Mar. 2010, doi: [10.1108/17566691011026595](https://doi.org/10.1108/17566691011026595).