

How a coffee shop increases the welfare of societies through ecosystem orchestration: a dynamic capabilities perspective



 Anjar Priyono ^{(a)*}  Syadiyah Abdul Shukor ^(b)  Abdul Moin ^(c)  Norasikin Salikin ^(d)

^(a, c) Department of Management, Universitas Islam Indonesia, Jl. Prawiro Kuat, Yogyakarta, 55283 Indonesia

^(b, d) Faculty of Economics and Muamalat, Universitas Sains Islam Malaysia, Bandar Baru Nilai, 71800 Nilai, Negeri Sembilan, Malaysia

ARTICLE INFO

Article history:

Received 12 December 2024

Received in rev. form 20 Jan 2025

Accepted 16 February 2025

Keywords:

Dynamic capabilities, ecosystem orchestration, collaborative innovation, value co-creation, business ecosystem

JEL Classification:

L14, L22, L26, M10

ABSTRACT

This research analyses how a service firm develops an ecosystem and serves as the orchestrator. A unique coffee shop in a mountainous area was used as the subject because it has abundant resources to become an orchestrator and various distinctive traits. A single case study design was selected to enable researchers to analyse depth and rich data, covering all participants within the ecosystem. Using a holistic case study design enables investigators to explore complex interplays of ecosystem participants. This study demonstrates that a firm uses elements of dynamic capabilities to manage the evolving process of ecosystem dynamics, starting from the initial formation of the ecosystem to the maturity stage. Our analysis identifies what derivative capabilities can be created from each element of dynamic capabilities and how these derivative capabilities are employed for developing and managing partners involved in the ecosystem. This study establishes a contribution by examining a coffee shop, representing a small service firm, and its evolution into an ecosystem orchestrator role - an under-explored setting in prevailing orchestration literature concentrated on large platform corporations. Single case studies are often criticized because their generalizability is thin and their findings are narrow. However, this weakness has led to the advantage of presenting insights in detail and depth. Because this study is exploratory, future research can analyze the extent to which these findings can be generalized in different contexts, ensuring the continuous cycle of theory development.

© 2025 by the authors. Licensee Bussecon International, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International license (CC BY) (<http://creativecommons.org/licenses/by/4.0/>).

Introduction

Fostering a collaborative ecosystem is critical for companies to continuously spark innovation in today's complex business landscape (Priyono & Hidayat, 2024). Ecosystems enable diverse partners to combine their unique strengths and capabilities in order to create novel solutions and technologies (Clarysse et al., 2014). With closer integration between firms, startups, research institutions, suppliers, and customers, ideas and knowledge can be exchanged more freely across organizational boundaries to reveal fresh opportunities (Zamiri et al., 2021). Ecosystem actors can also jointly validate concepts, prototype offerings, and accelerate time-to-market. Recent research finds that when organizations actively participate in technology-sharing partnerships and innovation-focused alliances within their ecosystem, they produce more impactful and disruptive innovations (Prabowo et al., 2025).

Although ecosystems promise many benefits, interactions between actors in this ecosystem are complex because each actor has different interests, resources, and capabilities. For this reason, "further research into the multifaceted orchestration process in innovation networks of SMEs remains essential if we want to fully understand how innovation networks function and why innovation networks succeed or fail" (Batterink et al., 2010, p. 71). The need for more research analyzing entire innovation networks is exacerbated when examining the service industry. To date, little or no research has analyzed how service firms serve as orchestrators and innovation hubs within an ecosystem. Previous research has focused solely on how firms orchestrate ecosystems, while the combined role of orchestrator and innovation hub has yet to receive much attention. This study focuses on how a service firm develops an ecosystem and acts as an orchestrator and an innovation hub. Due to contextual differences, the distinguished characteristics of service firms from the manufacturing firms caused the facets generated in prior research to become less relevant.

* Corresponding author. ORCID ID: 0000-0003-4607-1595

For SMEs, the role of orchestrator is more challenging to achieve given resource constraints in resources, technology, and knowledge, which are usually required to gain legitimacy from potential partners (Nilsen & Gausdal, 2017). The role of innovation hub is more accessible for SMEs to undertake than an ecosystem leader role for firms facing such limitations, as this role is akin to a catalyst or facilitator connecting diverse companies. The power and ties held by an innovation hub are looser than those of an orchestrator (Zamiri et al., 2021), so an innovation hub's bargaining power is lower than that of an orchestrator.

This study utilizes a coffee shop as a subject, acting as an orchestrator and innovation hub. Orchestrator and innovation hubs in the coffee shop ecosystem have a different nature compared to business ecosystems in general due to their unique characteristics. First, the coffee shop ecosystem seeks not only mutual benefits through collaborative innovation but also a shared atmosphere. The commonality of atmosphere among ecosystem members is necessary to ensure collaboration and cohesiveness. Second, coffee shops are more dominated by services than manufacturing. Manufacturing in coffee shops is very much attached to the barista and tends to be seen as an individual skill. These characteristics differ from previous studies where the orchestrator is usually a large company (Radziwon & Bogers, 2019) or one possessing manufacturing technology advantages, and ecosystem participants depend on the advantage (Lingens et al., 2021). In contrast, the coffee shop ecosystem requires soft entertainment, art, and event-organizing knowledge.

The service nature of coffee shops, requiring direct customer contact, necessitates that orchestrators facilitate co-location to enable interactions. For a nascent ecosystem, like the subject in this study, potential partners hesitate to be on co-location with the orchestrator due to some uncertainties regarding the business sustainability. Knowledge gaps, false starts, and difficulties attracting partners are common issues ecosystem leaders face during the initial ecosystem formation stage (Jacobides et al., 2018). From this knowledge gap, a relevant research question is proposed: How does a coffee shop pioneer an ecosystem development and manage cohesive orchestration among ecosystem participants?

Our findings demonstrate that the coffee shop, as both an orchestrator and innovation hub, develops governance for the ecosystem with the support of complementors with a well-aligned vision and atmosphere. Our findings demonstrate how combinations of resources and knowledge among ecosystem participants can be formed, interorganizational values are established, and relationships among ecosystem members are managed to convert opportunities into economic success. Interorganizational and customer relationships help the company maintain its desired atmosphere and create new opportunities for value creation within the ecosystem.

Literature Review

Orchestrator, innovation hub, and business ecosystem

The orchestrator and innovation hub are two overlapping concepts, sharing some similarities in certain aspects, yet remain fundamentally distinct concepts. Ecosystem orchestrator can be defined as an entity that intentionally brings together and cultivates a network of partners, customers and suppliers. The members of this network each have unique but complementary expertise and assets (Dhanaraj & Parkhe, 2006). They purposely build networks of participants including partners, customers and suppliers, leveraging complementary knowledge and resources to solve problems. Orchestrators establish a platform or architecture that facilitates activities and collaboration within the ecosystem. Orchestrator has some degree of control to manage the innovation networks for creating shared value among participants (Nilsen & Gausdal, 2017).

Meanwhile, innovation hub refers to "an ecosystem and cooperation which comprises heterogeneous groups of engaged stakeholders" (Zamiri et al., 2021). An innovation hub include "a physical space that brings together researchers, creators and innovators to nurture ideas into industry-changing products and services" (Quarter, 2023). Although the innovation hub's intervention is not as extensive as the ecosystem orchestrator's, the innovation hub plays a role in several area such as "encourages collaboration, serves as a springboard for new ideas and helps innovators pursue creative solutions" (Quarter, 2023). An innovation hub catalyzes the cross-pollination of knowledge across organizations and disciplines to stimulate emerging innovations.

The value creation process in ecosystems is complex; the process is not linear because many parties are involved in the partnership network and ecosystem (Randhawa et al., 2021). A company involved in an ecosystem is expected to provide complementary resources to be respected by other participants (Randhawa et al., 2021). Still, in the same ecosystem but with a different pattern of relationships, a company can act as an orchestrator that organizes other actors in the ecosystem (Lingens et al., 2021). In addition, using the same networks, participants can offer different value propositions to the market, depending on how the resources obtained from different ecosystem participants are configured (Randhawa et al., 2021).

For ecosystems operating in the service sector, maintaining a conducive atmosphere is critical for sustained collaboration. In a general business context, the atmosphere is defined as "a gathering of mood, human practice, material and environmental conditions, and values that have sufficient coherence and distinction to constitute a distinct interior" (Jørgensen & Holt, 2019). Meanwhile, in this study, we define business ecosystem atmosphere as the overall social and cultural environment among the network of stakeholders in a business ecosystem. Some critical aspects of a supportive business ecosystem atmosphere include trust and reciprocity among the whole partners (Gomes et al., 2018), collaboration and co-competition (Gomes et al., 2018), and diversity and inclusion, in which different voices are valued and heard (Iansiti & Levien, 2004). The atmosphere is volatile in nature, subject to shifts and changes. Various elements determine an organization's atmosphere, including interactions between humans, human moods, human

activities/practices, materials, the environment, and values. In addition to being shaped by parties involved in the ecosystem, architecture also plays a role. Lighting, color, music, building materials, layouts, and designs determine the scenographic composition (Jørgensen & Holt, 2019).

Ecosystem collaboration and coordination

An ecosystem can grow when participants are willing to commit to abiding by the orchestrator's rules and invest in the ecosystem. The orchestrator has been viewed as the solution for resolving coordination and collaboration challenges within the ecosystem (Dhanaraj & Parkhe, 2006; Hurmelinna-Laukkanen et al., 2022). Coordination and cooperation within ecosystems are unique since "the coordination and cooperation problems arise from multilateral interdependences in the presence of co-specialization" (Foss et al., 2023). For SMEs, decisions regarding coordination and collaboration are primarily determined by owner-managers (Priyono et al., 2020).

Similarly, innovation hubs do not possess coercive power to regulate, as described in the literature: "In nature, such ecosystems evolve through a process of natural selection and depends on a high degree of interdependence and collaboration between species. Within the ecosystem, there is no single population that dominates – and stability emerges from the interactions between its myriad cohabitants." (p.70) (Iansiti & Levien, 2004).

The emergence of this multilateral interdependence is due to the products or services offered by partners within the ecosystem being complementary to one another; the composition of products or services offered in the ecosystem must be well aligned (Adner, 2017; Kapoor, 2018). Coordination and collaboration issues often arise when one partner becomes dissatisfied with existing interdependencies and subsequently requests renegotiation, which, if agreed to, could disrupt the overall ecosystem structure (Kapoor, 2018). Coordination and collaboration within ecosystems are multilateral in nature; solutions offered to a participant can negatively implicate other ecosystem partners (Kapoor & Agarwal, 2017).

Dynamic capabilities and ecosystem orchestration

Dynamic capabilities encompass the ability to steer a firm towards strategic change at both the organizational and individual levels. Dynamic capabilities serve as an internal adaptation mechanism to the externally changing environment, with orchestrating the ecosystem representing an externally oriented dynamic capability (Foss et al., 2023). For this reason, dynamic capabilities enable a firm to create, extend, and modify internal organizational resources – to some extent its operating environment – to ensure well fit between firms resource and capabilities with environmental changes (Teece, 2007). The elements of dynamic capabilities – sensing, seizing, and configuring – for ecosystem orchestration are discussed in the following paragraphs.

Sensing for ecosystem orchestration. Sensing is about identifying opportunities through scanning, creation, learning, and interpreting alert of changes. In other words, it deals with how firms gather relevant market intelligence (Helfat & Raubitschek, 2018). To achieve this aim, firms must constantly search, scan, and explore environment to identify opportunities and threat (Teece, 2007). The orchestrator can apply sensing within the ecosystem to formulate a shared vision and build a collective effort to envision the "big picture" (Foss et al. 2023) and how to design a governance structure (Schmidt & Foss, 2023). section may be divided by subheadings. Footnotes should not be used and must be transferred to the main text.

Seizing for ecosystem orchestration. In the ecosystem context, seizing can be defined as "make ecosystem-specific investments and accept common rules and agreements" and "mobilization of resources as shaped by its strategy and organizational infrastructure to address an opportunity" (Foss et al., 2023). Seizing relates to capturing opportunities identified through sensing; that is, capitalizing on business opportunities by designing new value propositions (Teece, 2007). Within ecosystems, actors not only leverage their own resources to seize identified opportunities, but also combine them with other actors' capabilities to deliver new propositions (Teece, 2020). Co-specialized partners strive to form the most beneficial unique configuration, with the orchestrator responsible for enabling this (Dedehayir et al., 2018).

Configuring for ecosystem orchestration. Sensing and seizing capabilities assist the ecosystem in creating business opportunities, but the potential will only materialize with the orchestrator mobilizing ecosystem participants toward capturing opportunities (Foss et al., 2023). Configuring capabilities relates to maintaining the ecosystem's competitive position through the continual adaptation of resources to external changes (Warner & Wäger, 2019). This is achieved through coordination and collaboration among participants. Previous work identified that dynamic capabilities exist within a business ecosystem, enabling evolutionary adaptation to remain relevant within a changing environment (Cristofaro & Lovallo, 2022).

Research and Methodology

Method: single case study design with a holistic approach

The case study method is selected due to the exploratory nature of this research (Voss et al., 2002). Case studies also enable the analysis of real-life phenomena (Yin, 2018), provide rich empirical descriptions (Eisenhardt, 1989), and permit rich contextual analysis and logical replication supporting theory development (Siggelkow, 2007).

Although the literature suggests the use of multiple case studies (Eisenhardt, 1989), a single case study design has the advantage of enabling a deeper analysis of phenomena within their contexts. Additionally, single case studies still allow researchers to conduct logical replication, which can be equated to statistical generalization in quantitative methods (Siggelkow 2007). An excessive number of cases can overwhelm researchers cognitively, making it difficult to discern causal patterns as the basis for theory building (Volmar & Eisenhardt 2020).

Kopi Gincu is selected as the subject due to various unique attributes, making it suitable as a case study. The coffee shop is situated in the mountains area, harmonized with nature, representing an extreme or one-of-a-kind situation (Siggelkow, 2007). A single-unit analysis or holistic approach is employed to view the subject as an integrative entity without separating components. The holistic design also encompasses all ecosystem participants, programs, and activities, allowing a more integrative understanding (Yin, 2018).

Data collection

The researchers conducted desk research prior to field visits, observations, and interviews. The desk research gathered secondary data about the subject to provide initial understanding. During the fieldworks, the researchers interviewed individuals representing ecosystem actors. Fourteen informants participated in data collection to understand Kopi Gincu's interactions across different actors. Interview durations varied per informant, concluding upon reaching data saturation. Informants played diverse roles, spanning from core ecosystem players to complementors.

The interviews with informants were conducted in interactive ways. Despite using an interview protocol guide, informants are given opportunities to express their thoughts based on experiences and competencies. Questions to the manager of Kopi Gincu as orchestrator included: How do you maintain cohesiveness among partners in the ecosystem? How do you ensure fitness between the ecosystem's value proposition and market changes? How do you manage partner plug-and-play within your ecosystem?

Meanwhile, the partners were asked: How do you maintain alignment of your business resources with the ecosystem's? How do you configure your resources appropriately with the ecosystem? The researchers adapted questions from the prepared interview protocol to cover emerging concepts. In addition to verbatim interview transcriptions, field notes enabled memory recall during the analysis. Data from various informants, site visits, and document reviews underwent triangulation to assure validity (Jick, 1979). A case study database was developed to ensure reliability and replicability. In the data base we developed structured summaries of our collected data so that allow us to identify pattern across cases, which result in comprehensiveness and strengthens credibility (Eisenhardt, 1989).

Data Analysis

A thematic analysis was conducted to understand how Kopi Gincu organizes the orchestration of participants within the ecosystem. The thematic analysis identifies patterns emerging from large data sets, including interconnections between concepts (Braun & Clarke, 2006). A grounded theory approach was applied comprising three stages: open coding, axial coding, and selective coding (Bamford, 2008). Initially, we conducted open coding to develop detailed codes to cover all possible emerging concepts. Next, in axial coding, we attempt to refine the concept developed in open coding. In addition, we also identify the links between the themes and the context. Finally, in selective coding, we analyzed the interrelations of the critical themes and identified the relationship with other concepts.

Findings and Discussion

Findings

The case companies

The Kopi Gincu coffee shop was established in 2020 on 13 hectares of open land in the mountainous area, approximately a 1-hour drive from Cirebon, the nearest city located in West Java, Indonesia. With a building area of 2,000 square meters accommodating up to 400 people distributed across a rooftop, tents, and gazebos, Kopi Gincu resembles a large restaurant situated in a mountainous region. Kopi Gincu embraces the motto "Good Place for a Better Mood," envisioning providing experiences that uplift customers' moods. Supported by 25 staff serving varied food and beverages, Kopi Gincu's signature menu is coffee supplemented with Gincu mango fruit juice. As the main ingredient and a staple for locals, Gincu mangoes are available year-round, securing supply. Developed from local community research to utilize surplus harvest mangoes, Kopi Gincu operates a multifaceted value proposition as an innovation hub hosting diverse events, such as weddings, live music shows, agriculture trainings, etc. As an innovation hub, the venue is a popular and comfortable space providing a creative outlet for self-expression or work. Digital technologies are utilized for marketing, promotion, and various business operations.

Early stages of ecosystem development

As an entrepreneur, the owner of Kopi Gincu played a major role in establishing the nascent ecosystem by attracting partners for co-location to achieve agglomeration economies. Ownership of 13 hectares of land and 2,000 square meters of building infrastructure has made Kopi Gincu an indisputable orchestrator. Also, the owner holds dual roles in the ecosystem: managing internal parties – e.g., designing staff networks, employees, and daily business operations – and managing external coordination and collaboration

across partners. Co-location facilitates this dual role by connecting internal (e.g., staff, investors) and external networks (e.g., suppliers, complementors, vendors, suppliers, target markets, etc.). Partners and activities which contribute to the flourishing of the ecosystem include:

Collaborate with customers. Most customers comprise clubs and hobby communities where initial visits spur visits from other groups. Visitors participate in various hosted activities, enabling co-creation between the ecosystem and customers.

Promote co-creation with customers. Kopi Gincu offers several features supporting social media engagement—various photogenic spots prompt sharing on social platforms, turning visitors into promoters.

Recruit local talent. The stage located in the venue facilitates local musicians, providing unique experiences. Customers can also contribute to stage performance, fostering further co-creation.

Embrace local people. Kopi Gincu strives to integrate locals representing social value through involving community members, coffee farmers, and residents, aiming to provide jobs and empower surrounding communities. In total, there are 21 farmer groups with 1,295 members maintaining 43,254 mango trees.

Family-friendly venue. With amenities catering across age groups, parents can have meetings while children enjoy the educative game of the Gincu Kidsland playground area.

Partners Tiering System. The key to being a successful orchestrator is how to manage a high diversity of partners with the use of a tiered approach. For core partners, firms must develop strong shared value and trust-based relationships. These partners offer the ecosystem operations stability. Meanwhile, for the second-tier partners, firms must adopt easy plug-and-play, enabling them to bind the partners into a cohesive ecosystem.

The first-tier partners or core partners. The first-tier partners, also called core partners, represent enfranchised stakeholders possessing bargaining power based on resource contributions and value co-creation capabilities within the ecosystem. They co-invest specialized assets, capabilities, and resources toward collective value creation. To identify first-tier partners, Kopi Gincu leverages regional proximity and trust to intermediate interactions among disconnected actors. The first-tier partners encompass resident musicians, baristas, food vendors, architects, interior designers, and English training providers. As these parties are permanent partners, the orchestrator must ensure that these core partners share identical visions with the ecosystem.

The second-tier partners. Second-tier partners represent complementors – entities directly serving customers leveraging Kopi Gincu's infrastructure as an innovation hub while delivering supplementary value. Their offerings complement, reinforce, or expand the core value proposition of Kopi Gincu. Kopi Gincu's ecosystem encompasses three broad complementor categories of activities:

- i. Sports and hobbies: automotive clubs, cycling clubs, alumni reunions, socialite groups, teen research clubs, elderly groups, etc.
- ii. Arts and culture: Independence Day celebrations, women's day events, Mother's Day events and other national holidays, Ramadan observances, religious days, music concerts, parties, leisure entertainment, meetings, birthdays, weddings, etc.
- iii. Education: achievement and motivation training, free English lessons, free painting and cooking classes, outdoor training workshops, etc.

In summary, the core partners maintain the ecosystem's core business and atmosphere with a clear value proposition. In contrast, the second-tier partners facilitate gradual business scope expansion – scaling up the pie of the ecosystem. Kopi Gincu began with a focused value proposition through collaboration with core partners and expanded its business scope through collaborations with the complementors.

Data analysis

We performed coding procedures on the collected data, from which emerged codes comprising capabilities strategies for ecosystem management. The results are presented visually in Figure 1, with descriptions for each coded theme on ecosystem management capabilities italicized and bolded in the following paragraph.

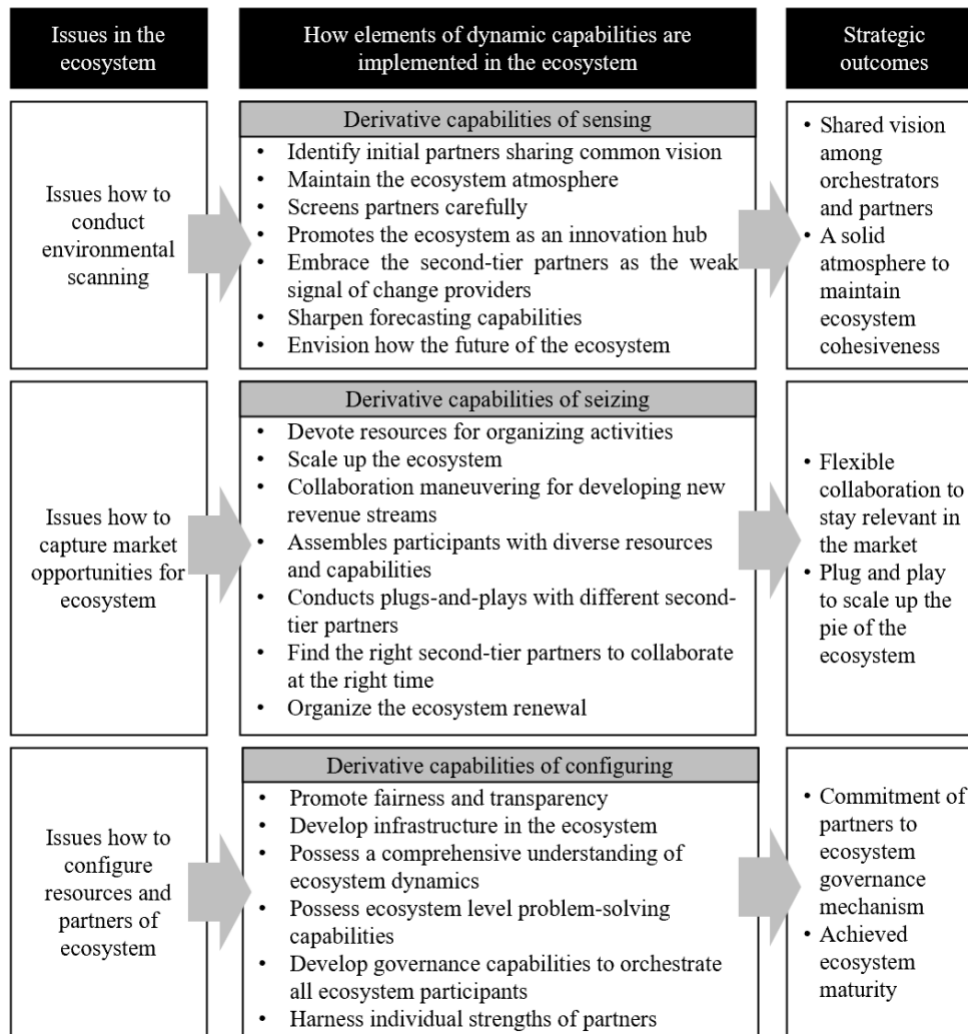


Figure 1: Derivative capabilities for addressing issues in the ecosystem; **Source:** Authors

Sensing: how to conduct environmental scanning

Derivative capabilities of sensing are mostly cognitive processes for developing the atmosphere and shared vision of the ecosystem, finding appropriate partners, and building a partner tiering system. At the beginning of the coffee shop development, Kopi Gincu attempted to identify initial partners who shared a common vision. An architect was selected as the core partner for designing the physical infrastructure embodying the ecosystem’s identity, ideals, and atmosphere. This architect remains an ongoing partner for interior design updates and creating a certain ambiance within the shop.

“At first it was just me myself, then I joined this coffee community too. And also, other friends who just clicked [emotionally]. Then we started grabbing coffee together regularly in the mango orchard which is now the venue. From time to time, slowly, more and more people started joining in over time.” (Founder, Kopi Gincu)

The social bonds and shared values help create a coherent vision among members that keeps the ecosystem intact. As such, Kopi Gincu should maintain the ecosystem atmosphere changes within an acceptable range, as achieving perpetual stability is difficult, if not impossible.

Kopi Gincu screens partners carefully to ensure they have a shared vision before collaborating. It is good to have new partners with some degree of background differences to spur vibrant, innovative culture and creativity. However, it might endanger the shared vision regarding how the big picture of the ecosystem in the future. When selecting the second-tier partners – designated in the grey-shaded area of Figure 2a – the orchestrator contemplates environmental factors, including beliefs, religions, tribal affiliations, behavioral norms, cultural dimensions, etc.

To be a successful orchestrator, Kopi Gincu promotes its venue as an innovation hub that connects various parties. To achieve this goal, Kopi Gincu organizes various activities from partners who have diverse backgrounds and creates creative spaces. The success in becoming an innovation hub is one of the critical factors that ensures that the business ecosystem is always dynamic, as stated by the founder:

“Well for our vision Kopi Gincu wants to be useful for lots of people you know...So Kopi Gincu gives out lots of support, like when one day there was an author releasing a new book I supported him, and next there’s a new band having a new song launch I support them, or if there’s soccer club I give support too. I always open to everyone.” (Founder of Kopi Gincu)

Kopi Gincu receives ample feedback from the second-tier partners and ecosystem participants, which is then elaborated with Kopi Gincu’s first-tier partners. The second-tiers and participants maintain some distance from the orchestrator while contributing to value creation, value proposition, and value capture. This distance allows them to provide feedback more independently and thoughtfully. Their position, not deeply embedded in the ecosystem, also enables a realistic approach when formulating policies on ecosystem direction. For this reason, Kopi Gincu embraces these parties as the weak signal change providers from the periphery.

Signals of environmental change indicate the need for new capabilities. Therefore, the orchestrator should sharpen forecasting capabilities, including how to combine resources, scan the environment, interpret information, conduct modeling scenarios, apply analytical frameworks, and enable individual as well as team creative thinking. This supports Kopi Gincu in preparing the capabilities of individual ecosystem partners and the collective capabilities of the ecosystem partners. When conducting capability forecasts, instinct and intuition sometimes outweigh cognitive processes. As such, Kopi Gincu communicates with various partners to convey future projections, especially when the forecasts seem difficult to accept logically.

Kopi Gincu organizes collective planning to envision how the future of the ecosystem. The orchestrator endowed with collective planning is vital in conceiving novel platform designs, revenue architectures, and partnership models. These issues take time and involve many parties to address fully. Kopi Gincu should tailor timeframes and allocate investments within predefined periods divided into various short-term ranges. Here, the emphasis is on the entrepreneur leveraging a strategic plan to envision and drive the ecosystem to evolve into a changing environment, as explained below:

“We also have to think coffee drinking preferences 5 years from now could be different, behavior of visitors too. So, we have to adjust” (Manager, Kopi Gincu)

Seizing: how to capture market opportunities for the ecosystem

Derivative capabilities of seizing mostly deal with external parties and resources. During the seizing stage, Kopi Gincu attempts to capture value from emerging opportunities by combining internal resources and capabilities with those of the partners. Seizing entails modifying ecosystem resources and capabilities to maintain alignment with business environmental changes. Seizing is an adaptation process for preserving ecosystem resources and the relevance of capabilities amidst external shifts.

Once potential partners have agreed to participate, they must demonstrate their commitments. When participating in the ecosystem, the partners must devote resources to organizing activities in the venue of the coffee shop. As the orchestrator and innovation hub, Kopi Gincu has demonstrated a serious commitment to ecosystem development through infrastructure investments. This decision signals to partners that the entrepreneur has undertaken risks, indirectly suggesting they may also securely invest within the ecosystem. Partners then begin co-investing in various production equipment and facilities.

Kopi Gincu conducts collaborative maneuvers to develop new revenue streams adjacent to, or at least related to, its core business. To enable this, Kopi Gincu attempts to connect with partners related to or nearby to its core business because the firm does not have all the capabilities required to modify its value proposition. The new value stream adds value to the orchestrator’s business and scales up the ecosystem. In other words, the orchestrator attempts to “increase the size of the pie” so that innovative collaboration allows all parties to reap more remarkable success. Below is an example how sizing up the pie is undertaken:

“Oh yeah, there are people interested in hosting an outbond here. We are totally cool with it, I mean it benefits us too getting more crowded and all. But the issue is we just do not have the money for those kinds of facilities. If this becomes an outbond place, it feels like moving forward it will be very lively even more at our coffee shop.” (Founder, Kopi Gincu)

Figures 2a and 2b, respectively, illustrate ecosystem size before and after engaging complementors. Specifically, Figure 2a exhibits a scope comprising solely the core partners – i.e., occupy the inner ecosystem circle with black shading – and the second-tier partners, indicated in the grey shading area. Meanwhile, Figure 2b signifies an expanded ecosystem scale once complementors participate. An example of developing a new value stream for increasing the size of the pie is cooperation with outbound training operators; Kopi Gincu designs customized courses that meet client objectives, whether building trust, communication skills, or strategic thinking. The design of the training requires expertise in the field of psychology, and Kopi Gincu does not have the knowledge and capabilities in this area. The knowledge and capabilities of these complementors are integrated with the logistics and infrastructure provided by Kopi Gincu – e.g., transport, equipment, food, and first aid – thus forming a complete bundling and compelling solutions to customers.



Figure 2.a. Size of the ecosystem consisting of core and second-tier partners



Figure 2.b. Size of the ecosystem after collaboration with complementors

Figure 2: Scaling up the size of the ecosystem: **Source:** Authors

Kopi Gincu assembles participants with diverse resources and capabilities. In early ecosystem development, there was a lack of clarity regarding who must do what. Kopi Gincu actively assumes responsibility for addressing this ambiguity. Coordination and collaboration issues are mitigated by establishing governing mechanisms alongside a shared vision. Although detailed formal written rules are not available, partners comply due to the social bounds among participants in the ecosystem.

The orchestrator conducts plug-and-play with different second-tier partners to execute the ecosystem strategies as they develop. How the orchestrator implements plug and play for the complementors so they can come and go is presented in Figures 3b, 3c, and 3d. Plug and play is applied to the complementors only, while the core partners are attached to the ecosystem permanently. These complementors – shown in white color fonts in the figures – participate in the ecosystem’s activities when their value proposition is in accordance with the value proposition offered by the ecosystem. Subsequently, they will leave and be replaced by other partners with a more appropriate value proposition. For example, the ecosystem offers a value proposition in education, usually during the school term, by involving several complementors (Figure 1b), such as cooking and painting class training vendors, achievement and motivation trainers, etc.



Figure 3.a. Overall ecosystem's partners and complementors



Figure 3.b. Orchestrator, partners, and complementors delivers values in education fields

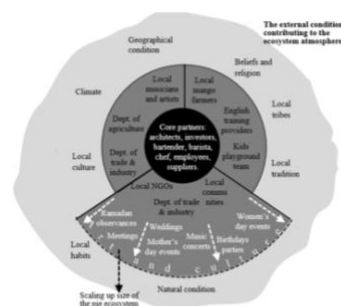


Figure 3.c. Orchestrator, partners, and complementors delivers values in the art and culture fields

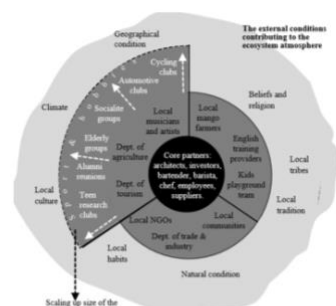


Figure 3.d. Orchestrator, partners, and complementors deliver values in sports and hobby fields

Figure 3: Plug and play of complementors for delivering different values to the market; **Source:** Authors

Over time, the value proposition offered by the ecosystem shifted from education to art and culture (Figure 3c), involving different complementors. Previous complementors contributing to education departed and were replaced by complementors in art and culture fields, such as wedding parties, music concerts, and Independence Day organizers, as indicated in white fonts in Figure 1c. In a similar vein, the transition occurs from Figure 3c to Figure 3d. To ensure the continuity of these dynamics, the marketing staff conducts scouting to identify suitable second-tier partners. In short, Kopi Gincu must find the right second-tier partners to collaborate with at the right time, which is well aligned with their value proposition.

Kopi Gincu must be responsible for the evolving value proposition offered to the market by the ecosystem. In addition, Kopi Gincu must also provide sufficient space for the partners to capture sufficient value for themselves. Sometimes, under certain conditions, the ecosystem experiences saturation and, therefore, requires renewal to reignite competitiveness. Organizing ecosystem renewal requires leaders to foster exploratory partnerships, nurture emerging niches, and influence participants to diversify into adjacent spaces ripe for expansion. The need for renewal can be identified from the declining performance of the ecosystem or benchmarking results against others. In the renewal process, the orchestrator mobilizes all core partners to renew the value proposition offered to customers. The process might require reconfiguration of the physical infrastructure involving a large amount of investment.

Configuring: how to configure resources and partners of the ecosystem

Derivative capabilities of configuring are internally oriented, focusing on how to manage resources and partners within the ecosystem. Besides combining resources and capabilities, Kopi Gincu maintains the ecosystem vision and upholds the established atmosphere. Numerous points of collaboration agreements require negotiation with partners for satisfactory alignment across parties. This stage necessitates rapid, flexible decision-making, allowing the ecosystem to respond to environmental dynamics.

The benefit received in monetary reward is necessary but insufficient for nurturing commitment among partners. Promoting fairness and transparency in the relationship among the partners is desperately needed. Here, transparency refers to the ease with which partners can understand the governance mechanism set up by the leaders. The mechanism must also be consistent over time. The mechanism must be set up as simple as possible so that the participants understand it clearly. The manager of Kopi Gincu prefers informal communication and personal contacts rather than formal mechanisms due to the traditional nature of the SME partners.

To gain legitimacy as an orchestrator and innovation hub, Kopi Gincu invested substantial funds in developing ecosystem infrastructure, including meeting rooms, playground areas, a sky swimming pool, restaurants, an outdoor zone, plantations, and a parking area. As ecosystem-specific investments, these expenditures cannot be recouped elsewhere if retracted. Such investments are signals of the orchestrator's credibility, making it more likely that the partners will follow suit. By seriously staking capital, attracting partners to shoulder similar risks becomes easier. The orchestrator's infrastructure serves as a hub for diverse collaborating parties to pursue co-creation in the ecosystem.

"There should be like a 5–10-year plan so our investment in a big café is not a waste...that's not including renting cost of 13 hectares of land, we spend 200 milion [Indonesian rupiah] for every 3 years". (Manager, Kopin Gincu)

Kopi Gincu possesses a comprehensive understanding of ecosystem dynamics. This holistic comprehension encapsulates all partners' viewpoints. As the orchestrator, Kopi Gincu adopts systems thinking regarding the impact of a partner's actions on others. The impact is not only about overlapping capabilities with the existing partners but also how the value proposition is composed – i.e., whether to transform or modify the existing value proposition slightly because of a new partner.

In order for the ecosystem to run stable and smoothly, coordination and collaboration problems can be solved on an ad hoc basis. The typical problems that arise and need to be solved are related to perspective differences between parties. The diversity of views of ecosystem participants occurs because partners interpret the "vision" of the ecosystem not identical entirely. The emergence of a conflict in one relationship has the potential to spread across the ecosystem. When an orchestrator confers a sanction to a partner, it not only punishes that particular partner. Instead, the orchestrator signals to other partners that comparable treatment awaits those demonstrating identical behavior. For this reason, the orchestrator must possess ecosystem-level problem-solving capabilities.

"We have camping [facilities] here too, combining our coffee shop and agrotourism. So, we embrace everybody you know. We want to grow together. If any issues come up, we discuss them politely to figure out solutions."

As an orchestrator possessing a holistic ecosystem perspective, Kopi Gincu develops governance capabilities to orchestrate all ecosystem participants. This governance also resolves participant coordination and collaboration challenges. Ecosystem partnerships seem fragile – interdependent yet voluntary. Therefore, governance mechanisms are built on mutual interests to support collaboration.

"[if our kids visit Kopi Gincu] they can stay overnight at villager homes, but it has to be coordinated with the village officials." (Junior high school headmaster and customer)

"...turns out we are doing simple things but if taken seriously it benefits many people. Many university students, elementary and middle schools as well since we have Gincu Learning here too. Farmers are benefited. Craftmakers too. There is a showroom for handicraft [nearby the gate]." (Founder, Kopi Gincu)

Kopi Gincu, as the orchestrator, drives firms, partners, entrepreneurs, and complementors to form a complex network, each playing a unique role in shaping the value proposition in the ecosystem. When these entities collaborate, they harness their strengths, resulting in collective economic impacts for them. In order to carry out activities that have this collective economic impact, Kopi Gincu develops a common agenda with shared values among participants. Communication with ecosystem participants is carried out regularly to ensure that the evolving values do not shift. Sometimes, activities with values that deviate slightly are not a problem as long as they are followed by subsequent activities that restore the core values.

Activities stemming from all three stages of dynamic capabilities – i.e. sensing, seizing, and configuring – are needed to produce expected strategic outcome. In other words, all strategic outcomes require all elements of dynamic capabilities. To produce different strategic outcomes, different capabilities are needed; even the same capabilities to execute identical strategies at different times may not produce the same outcome. Thus, possessing the capabilities to execute strategies does not guarantee that particular expected strategic outcomes can be realized.

Discussion: executing the capabilities to realize strategic outcomes

One key to the success of an ecosystem orchestrator is expanding its capabilities to have a broad range of options for executing strategies. Dynamic capabilities have been shown to facilitate orchestrators investing in various derivative capabilities in anticipation of ecosystem context dynamics. Investing in derivative capabilities requires a balance between depth and breadth, mainly due to limited resources (Pisano, 2017). We suggest that the orchestrator focuses its investment on the most relevant capabilities developed in sufficient depth rather than developing many derivative capabilities superficially. A lack of depth in derivative capabilities will create superficial advantages, meaning a firm might adapt to the changing environment but do not necessarily gain a competitive edge. Additionally, derivative capabilities should form a coherent portfolio; each capability complements the others toward a unified direction for executing strategies. It is important to emphasize that firms can formulate various strategies, but their capabilities can be the constraints for execution. The derivative capabilities in the middle column of Figure 1 resulted in strategic outcomes as presented in the rightmost column will be elaborated on the following paragraph.

Sensing: developing solid atmosphere and shared strategic imagination

Sensing refers to the ecosystem leader's capability to scan for, spot, and interpret environmental changes, evolving customer needs, and nascent technological opportunities (Teece & Linden, 2017). It also covers the ability to identify, interpret, and pursue new opportunities in the business environment (Teece, 2007). It is an exploratory capability critical to identify promising new avenues for value creation. During the sensing process, the orchestrator gathers insights externally and internally.

The orchestrator attempts to identify potential first-tier partners through scanning and collaboration with them to develop a solid ecosystem atmosphere to maintain cohesiveness. When all partners in the ecosystem share the same atmosphere, it becomes easier for them to understand the “dos and don'ts” of behavior within the ecosystem. In other words, the atmosphere helps the orchestrator create relationship cohesiveness among partners (Gomes et al., 2018).

This cohesiveness helps the ecosystem craft strategic imagination of what will be done in the long run, for example, five or ten years ahead. The partners, both the core partners and the second-tier partners, support the ecosystem in identifying weak signals of change. This enables the ecosystem to stay updated with the evolving states and needs of broader ecosystem participants, such as achievement and motivation training providers, sports clubs, automotive clubs, musicians, and artists. Although these parties are not internal parts of the ecosystem, to some extent, they have contributed to the success of implementing the ecosystem vision (Foss et al., 2023).

Seizing: plug and play to scale up the pie of the ecosystem

Kopi Gincu collaborates with complementors to co-evolve by configuring resources. The success of this co-evolution is determined by the collective efforts between Kopi Gincu and the complementors; Kopi Gincu, as the orchestrator, is at the center of this evolutionary process. In this co-evolutionary process, the orchestrator and complementors involve learning by conducting various experimentations and not just running “routines” (Jacobides et al., 2018). This process does not occur linearly but by combining evolution and adaptation (Cristofaro & Lovallo, 2022).

One key to successful configuration is creating a pattern of fair relationships between partners by answering questions: can the orchestrator resolve conflicts between different partners? Can the orchestrator communicate to partners when it is the time to come and leave for complementors in an acceptable way? This plug-and-play role is to obtain the proper orchestration of resources so that the ecosystem can make evolutionary fitness with market changes (Cristofaro & Lovallo, 2022).

Core partners provide the ecosystem stability while the complementors enable some degree of flexibility and scale up ecosystem economic activities. For complementary partners, the orchestrator must adopt easy plug-and-play, enabling some flexibility in ecosystem operations. Through plug and play, the orchestrator can scale up the pie of the ecosystem but still maintain the stability of the ecosystem atmosphere with core partners. Scaling up this ecosystem is undertaken by modifying value propositions, through designing innovative events, incorporating new complementors, or the ecosystem offering new products. For example, when an outbound training vendor joins the ecosystem, it will attract new ecosystem participants. The outbound training participants have different characters from current visitors. Consequently, Kopi Gincu must offer more varied products to reach a more diverse market.

Configuring: from commitment to governance mechanism to ecosystem maturity

The main issues during coordination and cooperation in the ecosystem are “developing mutual understanding of value proposition, participants’ roles and capabilities, interdependencies etc.” (Foss et al., 2023). All of these can be achieved by creating governance mechanisms so that the value proposition created can be delivered to customers as envisioned. We agree with previous research that defines the concept of mechanism as “the formal and informal rules and procedures that control resource accumulation, development, and allocation; the distribution of the organization’s productions; and the resolution of the conflicts of interest associated with group behavior” (p. 9) (Klein et al., 2019). From this definition, governance mechanisms are identical with “rules of the game” that specify “what to do” and “what not to do”, as well as “who must do what.”

The major investment in infrastructure by Kopi Gincu provides legitimacy that the firm has some authority to regulate. For this reason, all participants believe in the commitment to the rules and regulations set by Kopi Gincu as the orchestrator and innovation hub. When doing this plug-and-play, Kopi Gincu periodically plans the annual cycles regarding what value will be offered. Different value offerings will require different partners with different configurations so that the ecosystem can pursue evolutionary changes.

The partnership configuration at Kopi Gincu has undergone increasing maturity over time; the interdependence of participants with the ecosystem indicates this. Kopi Gincu’s partners willingly comply with the rules set by it as an innovation hub. On the other hand, innovation hubs must not abuse the trust and commitment that partners have given. The expected strategic outcomes of capabilities execution in ecosystem management can be depicted as in Figure 4.

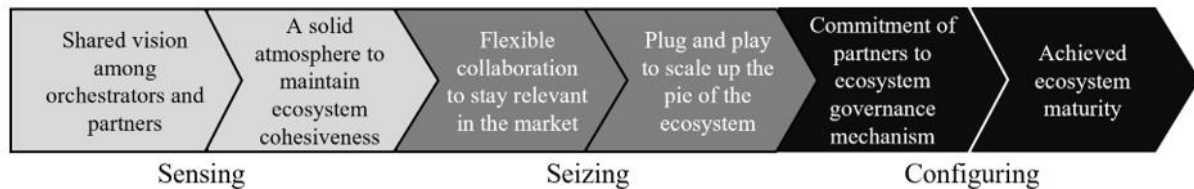


Figure 4: Dynamic capabilities and the strategic outcomes; **Source:** Authors

Discussion: executing the capabilities to realize strategic outcomes

This study aims to analyze how a coffee shop as the orchestrator deploys dynamic capabilities to manage collaboration among the participants of an ecosystem. At the beginning of the ecosystem formation, the orchestrator, initiated by the founder, should formulate a vision of the ecosystem and identify core partners to realize it. Sensing encompasses not only vision but also the creation of an atmosphere conducive to the ecosystem. Vision and atmosphere assist partners in creating cohesive collaboration so that all participants can build identical chemistry. Also, an appropriate ecosystem atmosphere acts as a catalyst so that the governance mechanism – which is created in the seizing stage – can be accepted by ecosystem participants.

Seizing encompasses organizing partners in the ecosystem to enable resource coordination for capturing emerging innovation spaces. Plug-and-play collaborations with the complementors enable the ecosystem to offer value propositions for specific periods only. The plug-and-play actions between partners determine the success of collaboration between partners, which then determines the overall value offered by the ecosystem. The ecosystem’s value offering is more relevant than the individual coffee shop’s offering.

Configuring shows the orchestrator’s leadership role by creating a governance mechanism. One requirement for developing a governance mechanism is understanding system-wide knowledge of customer needs and partner requirements. There was a high level of uncertainty at the beginning of Kopi Gincu's establishment; at this stage, rules and agreements had to be made between ecosystem participants. The design of resource configuration at the early stage of ecosystem development highly affects how the pattern of ecosystem development will be subsequently. Because the bonds in the ecosystem are loose, the role played by the orchestrator is dynamic and, to some extent, informal. The orchestrator develops the design of the ecosystem’s governance mechanism somewhat closed; then, once the core partners have settled along with a shared vision with the leader, the ecosystem smoothly becomes more open. The dynamics of this governance mechanism can be observed longitudinally to analyze when governance mechanisms should be updated and how strict or loose the mechanism should be applied, which can be an exciting topic for further research.

Acknowledgement

Author Contributions: Conceptualization: AP, SAS, AM; Methodology: AP, SAS, NS; Formal analysis and investigation: AP, AM, NS; Writing - original draft preparation: AP, AM, NS; Writing - review and editing: AP, SAS; Funding acquisition: AP, SAS; Resources: AM, NS.

Funding: This research was financially supported by the Center for Management Development, Universitas Islam Indonesia, through 2024 International Matching Fund Scheme in Collaboration with Universiti Sains Islam Malaysia.

Institutional Review Board Statement: Ethical review and approval were waived for this study, due to that the research does not deal with vulnerable groups or sensitive issues.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Adner, R. (2017). Ecosystem as structure: An actionable construct for strategy. *Journal of Management*, 43(1), 39–58. <https://doi.org/10.1177/0149206316678451>
- Bamford, D. (2008). The use of grounded theory in change management research. *Journal of Change Management*, 8(2), 111–121. <https://doi.org/10.1080/14697010801907286>
- Batterink, M. H., Wubben, E. F., Klerkx, L., & Omta, S. W. F. (2010). Orchestrating innovation networks: The case of innovation brokers in the agri-food sector. *Entrepreneurship and Regional Development*, 22(1), 47–76. <https://doi.org/10.1080/08985620903220512>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Clarysse, B., Wright, M., Bruneel, J., & Mahajan, A. (2014). Creating value in ecosystems: Crossing the chasm between knowledge and business ecosystems. *Research Policy*, 43(7), 1164–1176. <https://doi.org/10.1016/j.respol.2014.04.014>
- Cristofaro, M., & Lovallo, D. (2022). From framework to theory: An evolutionary view of dynamic capabilities and their microfoundations. *Journal of Management & Organization*, 28(3), 429–450. <https://doi.org/10.1017/jmo.2022.46>
- Dedehayir, O., Mäkinen, S. J., & Ortt, J. R. (2018). Roles during innovation ecosystem genesis: A literature review. *Technological Forecasting and Social Change*, 136, 18–29. <https://doi.org/10.1016/j.techfore.2016.11.028>
- Dhanaraj, C., & Parkhe, A. (2006). Orchestrating innovation networks. *Academy of Management Review*, 31(3), 659–669. <https://doi.org/10.5465/amr.2006.21318923>
- Eisenhardt, K. M. (1989). Building theories from case study research. *The Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.5465/amr.1989.4308385>
- Foss, N. J., Schmidt, J., & Teece, D. J. (2023). Ecosystem leadership as a dynamic capability. *Long Range Planning*, 56(1), 102270. <https://doi.org/10.1016/j.lrp.2022.102270>
- Gomes, L. A. V., Facin, A. L. F., Salerno, M. S., & Ikenami, R. K. (2018). Unpacking the innovation ecosystem construct: Evolution, gaps and trends. *Technological Forecasting and Social Change*, 136, 30–48. <https://doi.org/10.1016/j.techfore.2016.11.009>
- Helfat, C. E., & Raubitschek, R. S. (2018). Dynamic and integrative capabilities for profiting from innovation in digital platform-based ecosystems. *Research Policy*, 47(8), 1391–1399. <https://doi.org/10.1016/j.respol.2018.01.019>
- Hurmelinna-Laukkanen, P., Möller, K., & Nätti, S. (2022). Orchestrating innovation networks: Alignment and orchestration profile approach. *Journal of Business Research*, 140(February), 170–188. <https://doi.org/10.1016/j.jbusres.2021.11.084>
- Iansiti, M., & Levien, R. (2004). Strategy as ecology. *Harvard Business Review*, 82(3), 68–81.
- Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic Management Journal*, 39(8), 2255–2276. <https://doi.org/10.1002/smj.2904>
- Jick, T. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24, 602–611. <https://doi.org/10.2307/2392366>
- Jørgensen, L., & Holt, R. (2019). Organization, atmosphere, and digital technologies: Designing sensory order. *Organization*, 26(5), 673–695. <https://doi.org/10.1177/1350508419855698>
- Kapoor, R. (2018). Ecosystems: Broadening the locus of value creation. *Journal of Organization Design*, 7(1), 1–16. <https://doi.org/10.1186/s41469-018-0035-4>
- Kapoor, R., & Agarwal, S. (2017). Sustaining superior performance in business ecosystems: Evidence from application software developers in the iOS and Android smartphone ecosystems. *Organization Science*, 28(3), 531–551. <https://doi.org/10.1287/orsc.2017.1122>
- Klein, P. G., Mahoney, J. T., McGahan, A. M., & Pitelis, C. N. (2019). Organizational governance adaptation: Who is in, who is out, and who gets what. *Academy of Management Review*, 44(1), 6–27. <https://doi.org/10.5465/amr.2014.0459>
- Lingens, B., Böger, M., & Gassmann, O. (2021). Even a small conductor can lead a large orchestra: How startups orchestrate ecosystems. *California Management Review*, 63(3), 118–143. <https://doi.org/10.1177/000812562110054>
- Nilsen, E. R., & Gausdal, A. H. (2017). The multifaceted role of the network orchestrator—A longitudinal case study. *International Journal of Innovation Management*, 21(06), 1750046. <https://doi.org/10.1142/S1363919617500463>
- Pisano, G. P. (2017). Toward a prescriptive theory of dynamic capabilities: Connecting strategic choice, learning, and competition. *Industrial and Corporate Change*, 26(5), 747–762. <https://doi.org/10.1093/icc/dtx026>
- Prabowo, G. M., Priyono, A., Suhartini, & Hidayat, A. (2025). How to orchestrate participants of an ecosystem to foster innovation: An exploratory analysis on the network level. *Kybernetes*, 25(1), 203–222. <https://doi.org/10.1108/K-03-2023-0501>
- Priyono, A., & Hidayat, A. (2024). Fostering innovation through learning from digital business ecosystem: A dynamic capability perspective. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(1), 100196. <https://doi.org/10.1016/j.joitmc.2023.100196>
- Priyono, A., Nursyamsiah, S., & Darmawan, B. A. (2020). Network-based dynamic capabilities in internationalisation of SMEs: Case studies in emerging economy. *International Journal of Trade and Global Markets*, 13(1), 11–20. <https://doi.org/10.1504/IJTGM.2020.104907>

- Quarter, I. (2023). What is an innovation hub? *Innovation Quarter*. <https://www.innovationquarter.com/articles/what-is-an-innovation-hub/>
- Radziwon, A., & Bogers, M. (2019). Open innovation in SMEs: Exploring inter-organizational relationships in an ecosystem. *Technological Forecasting and Social Change*, 146, 573–587. <https://doi.org/10.1016/j.techfore.2018.04.021>
- Randhawa, K., West, J., Skellern, K., & Josserand, E. (2021). Evolving a value chain to an open innovation ecosystem: Cognitive engagement of stakeholders in customizing medical implants. *California Management Review*, 63(2), 101–134.
- Schmidt, J., & Foss, N. J. (2023). Modularity, adaptation problems, and the governance and problem-solving capabilities of core firms in ecosystems. *Journal of Management*, 01492063231215023. <https://doi.org/10.1177/01492063231215023>
- Siggelkow, N. (2007). Persuasion with case studies. *Academy of Management Journal*, 50(1), 20–24. <https://doi.org/10.5465/amj.2007.24160882>
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj>
- Teece, D. J. (2020). Hand in glove: Open innovation and the dynamic capabilities framework. *Strategic Management Review*, 1(2), 233–253.
- Teece, D. J., & Linden, G. (2017). Business models, value capture, and the digital enterprise. *Journal of Organization Design*, 6(1), 1–14. <https://doi.org/10.1186/s41469-017-0018-x>
- Voss, C., Tsikriktsis, N., & Frohlich, M. (2002). Case research in operations management. *International Journal of Operations & Production Management*, 22(2), 195–219.
- Warner, K. S., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, 52(3), 326–349. <https://doi.org/10.1016/j.lrp.2018.12.001>
- Yin, R. K. (2018). *Case study research and applications* (6th ed.). Sage Publications, Inc.
- Zamiri, M., Ferreira, J., Sarraipa, J., Sassanelli, C., Gusmeroli, S., & Jardim-Goncalves, R. (2021). Towards a conceptual framework for developing sustainable digital innovation hubs. *2021 IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC)*, June, 1–7.

Publisher's Note: Bussecon International stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



International Journal of Business Ecosystem and Strategy by [Bussecon International Academy](#) is licensed under a [Creative Commons Attribution 4.0 International License](#).