



ANDE

●●● Fundación Coppel

# ENTREPRENEURIAL ECOSYSTEM DIAGNOSTIC TOOLKIT



# ABOUT ANDE

The Aspen Network of Development Entrepreneurs (ANDE) is a global network of more than 230 organizations in 190 countries that propel entrepreneurship in developing economies. ANDE members provide financial, educational, and business support services to Small and Growing Businesses (SGBs), based on the conviction that SGBs create jobs, stimulate long-term economic growth, and produce environmental and social benefits. Since 2009, ANDE has built knowledge, mobilized resources, and connected institutions that support entrepreneurs in the creation of inclusive prosperity.

## About Fundación Coppel

ANDE acknowledges Fundación Coppel, whose sponsorship made this second edition of the Entrepreneurship Ecosystem Diagnosis Model possible.

Fundación Coppel contributes to generating opportunities that promote social mobility in Mexico. Since 2021, it has worked to improve the quality of life in the communities where it operates, supporting initiatives that allow individuals to develop their full potential. Through entrepreneurship, Fundación Coppel promotes the strengthening of micro, small, and medium-sized enterprises (MSMEs) as a driver of inclusive and sustainable growth.

## Technical Team

- Pedro Martínez, Regional Director for Latin America, ANDE
- José Ibáñez, Senior Coordinator for Central America and Mexico, ANDE
- Luis Almanza, Regional Director, Eugenio Garza Lagüera Institute of Entrepreneurship, Tecnológico de Monterrey
- Geraldina Silveyra, Entrepreneurship formation director, Tecnológico de Monterrey

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# INDEX

# 1. INTRODUCTION

At ANDE, we believe that small and growing businesses (SGBs) are the most powerful engine for generating employment, innovation, and inclusive prosperity in developing economies. But entrepreneurs do not operate in a vacuum. Their success depends on the ecosystem that surrounds them.

ANDE gratefully acknowledges Fundación Coppel for their generous support of this second edition. Their commitment to Mexico's economic and social development made it possible to update a tool that had not been revised in over a decade. ANDE also thanks the teams at the Instituto de Emprendimiento Eugenio Garza Lagüera del Tecnológico de Monterrey and at Seedstars, whose methodologies enrich this edition.

In 2013, ANDE published the first edition of this toolkit with an idea that remains valid: before investing resources or proposing strategies aimed at strengthening an entrepreneurial ecosystem, it is necessary to understand its current situation. That first tool synthesized nine international frameworks and proposed an eight-domain structure that has been adopted by governments, foundations, and development organizations in cities and regions around the world. The lesson from over a decade of working with these organizations is clear: the most effective interventions and strategies begin with an assessment that identifies both domains and how ecosystem organizations interact with one another.

The assessment-first principle reflects a broader idea guiding the toolkit's design: systemic change. The literature on social development distinguishes between isolated interventions and systemic transformations. The former treats symptoms; the latter addresses the structural conditions that produce them (Kania & Kramer, 2011). An ecosystem diagnostic enables systemic change when it creates the right conditions: a shared understanding of the problem among diverse actors, common indicators, and clarity on where the actions of different organizations can complement rather than duplicate one another. Without these conditions, even well-intentioned interventions operate in fragmented ways. The toolkit presented in this document was designed to create those conditions.

The field has advanced significantly since then. Initially, the focus was on mapping actors—counting incubators, investment funds, and university entrepreneurship programs. Those questions remain useful, but they tell only part of the story. Today we know that ecosystems function as systems: the interaction among their elements matters as much as their existence. The central question has shifted from “What do we have?” to “How well does what we have work?”

This second edition incorporates these findings. It preserves principles that have proven useful while adding three main contributions: an expanded methodology review synthesizing 28 models (compared to the original 9), an adjusted domain structure, and integration of models from Tecnológico de Monterrey and global accelerator Seedstars.

This document is designed for ecosystem decision-makers: foundations, NGOs, support organizations, governments, universities, entrepreneurs, and any organization needing a structured starting point to diagnose its local context. It is not a purely academic document. Its purpose is practical: to offer a methodology that can be implemented with available resources, adapted to context, and translated into concrete decisions.



## **About ANDE's Toolkit**

The toolkit aims to help decision-makers answer three questions before funding or launching a program or intervention:

### **What conditions exist in the ecosystem?**

The diagnostic evaluates **seven domains** that determine the capacity of a city or region to generate and scale ventures: Policy, Finance, Culture, Support Services, Human Capital, Markets, and R&D/Innovation.

### **Who can act to improve it?**

The toolkit identifies **five types of actors**: Government, Academia, Entrepreneurial Support Organizations (ESOs), Private Sector, and Capital Providers. It then analyzes in which domains each participates and with what level of activity.

This cross-reference generates a matrix revealing three key signals: gaps (domains where certain actors are absent), concentrations (domains where multiple actors report high activity, requiring exploration of whether there is coordination or duplication), and dependencies (domains relying on a single type of actor, representing a fragility risk).

**Does the ecosystem work?**

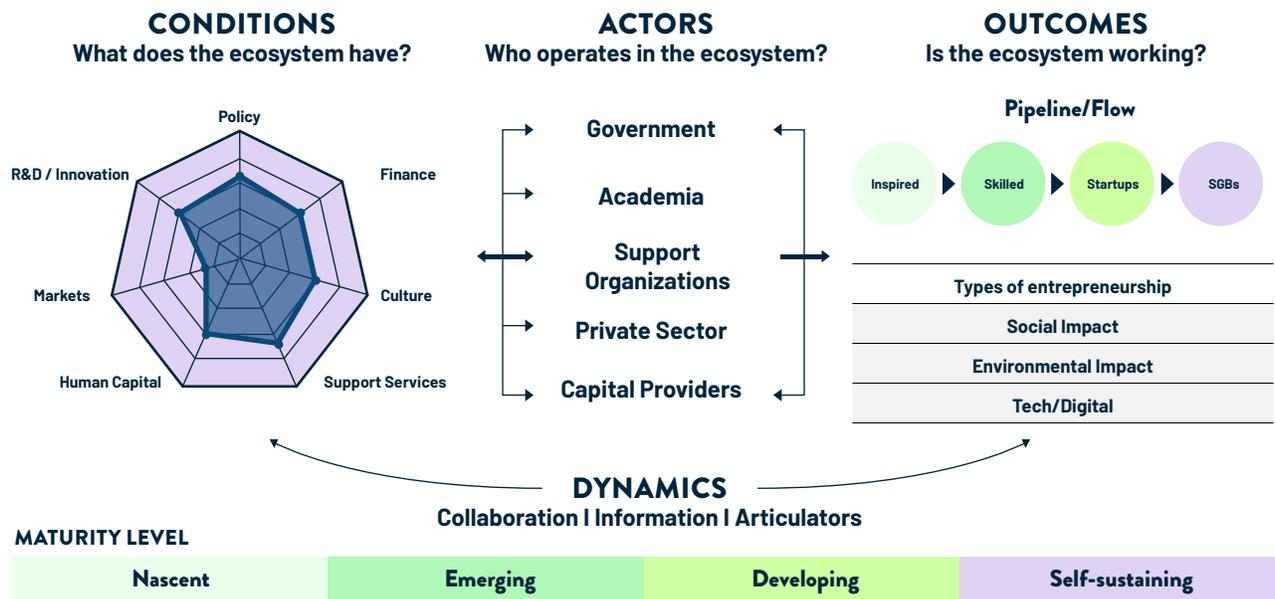
The toolkit measures the flow of people advancing through **four stages of entrepreneurial development**: inspired individuals, trained individuals, startups, and small and growing businesses (SGBs). When conditions are favorable and actors are present, the expected result is steady advancement from inspiration to business growth. When this flow is interrupted at any stage, the diagnostic pinpoints where the problem lies. Additionally, the toolkit evaluates what types of entrepreneurship the ecosystem can support: **social impact, environmental impact, and technological/digital**.

The toolkit uses **Small and Growing Businesses (SGBs)** as an alternative to “scaleups” for three reasons. First, ANDE defines SGBs with precise operational criteria: commercially viable businesses with between 5 and 250 employees, with potential and ambition for growth, that typically seek capital between USD 20,000 and USD 2 million (ANDE, 2021). Second, the term “scaleup” lacks a consensus definition in the literature: some authors use it for companies that double their revenue in three years, others for any post-Series A company. Third, “Small and Growing Businesses” more accurately describes the reality of ecosystems in developing economies, where the goal is not necessarily to produce unicorns, but companies that generate quality jobs and sustained growth.

The toolkit also classifies ecosystems by maturity level: Nascent, Emerging, Developing, or Self-Sustaining. This classification matters because interventions that work at one stage may fail at another. The transition from one stage to another depends not only on accumulating more actors or resources, but on generating a virtuous cycle: successful entrepreneurs who reinvest their capital, time, and knowledge in mentoring the next generation.

**Figure 1.1: ANDE Entrepreneurial Ecosystem Model**

**HOW TO STRENGTHEN AN ENTREPRENEURSHIP ECOSYSTEM?**



**Chapter 2** analyzes the field's evolution over the last decade, synthesizing lessons from 28 international frameworks. **Chapter 3** presents the complete model: the domains, the actor taxonomy, the development stages, and the integration of the methodologies developed by Tecnológico de Monterrey and the global accelerator Seedstars. **Chapter 4** offers the practical implementation guide, with a two-phase methodology (plus an optional third phase) that produces three diagnostic tools. **Chapter 5** translates the findings into differentiated recommendations for each type of actor.

A distinctive contribution of this second edition is its attention to **ecosystem dynamics**. Knowing which actors exist is not enough; what matters is understanding whether they collaborate, whether information about opportunities circulates adequately, and who the connectors are that link the system together. An ecosystem can have all the right actors and still function poorly if they work in silos. The assessment captures these dynamics to offer a more complete picture.

The ultimate goal is not a perfect diagnostic, but an ecosystem that works. And an ecosystem that works is one where entrepreneurs and local actors themselves lead its development, where connections among actors are dense and productive, and where the system eventually organizes itself and reinvests in its own capacity.

Achieving that goal requires more than individual diagnostics—complex problems cannot be solved through isolated interventions. An entrepreneurial ecosystem involves Government, Academia, Private Sector, ESOs, and Capital Providers, each with their own priorities and resource constraints. Without coordination, these actors operate in parallel, compete for the same entrepreneurs, and leave gaps that no one addresses. The diagnostic that this toolkit proposes not only describes the current state of the ecosystem; it generates the conditions for diverse actors to align around shared priorities and act in complementary ways.

This toolkit does not claim to be exhaustive nor to offer universal recipes. The indicators we propose are suggestions that should be adjusted based on data availability and local priorities. What it does offer is a structured starting point and accumulated experience that can save time and prevent errors. We invite you to use this tool as a foundation, adapt it, and above all, translate the findings into action.

***The Aspen Network of Development Entrepreneurs (ANDE) is a global network of organizations that operate in nearly every developing economy. Since 2009, ANDE has built knowledge, mobilized resources, and connected institutions that support entrepreneurs in creating inclusive prosperity.***



## 2. THE EVOLUTION OF ENTREPRENEURIAL ECOSYSTEMS

For decades, economists, governments, and academics studied why certain regions prospered while others with similar resources fell behind. The answer seemed simple: attract large factories, build industrial parks, offer tax incentives. But experience showed that this approach had significant limitations. Companies would arrive and leave with economic cycles, rarely building lasting ties to local communities.

The shift toward the entrepreneurial ecosystem concept represents a fundamental change in how we understand economic development. Unlike earlier models that focused on attracting established companies, the ecosystem approach recognizes that the true engine of sustainable growth is local entrepreneurs: people who identify opportunities, create businesses, and generate jobs rooted in their communities (Stam & Spigel, 2017).

Since 2009, ANDE has played a key role in shaping this field. As we mentioned in the introduction, when we launched the first edition in 2013, the field was just beginning to create diagnostic tools beyond actor mapping. Now, analysis has advanced toward frameworks that capture ecosystems' true complexity: connections between actors, knowledge flows, and collaboration dynamics that determine whether a territory can sustain and scale entrepreneurial activity (Acs et al., 2017).

## From Actor Mapping to Ecosystem Diagnostics

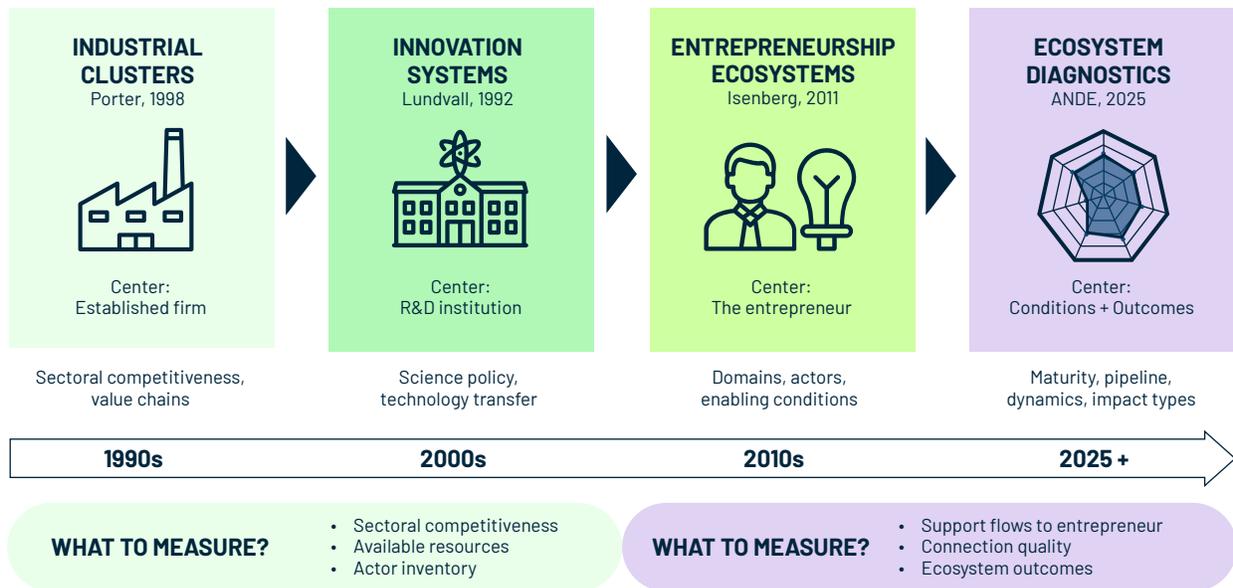
Before entrepreneurial ecosystems, there were industrial clusters and innovation systems. Industrial clusters, popularized by Michael Porter in the 1990s, focused on geographic concentrations of established companies within specific sectors (Porter, 1998). Innovation systems prioritized universities, research centers, and science and technology policies as drivers of development (Lundvall, 1992). Both approaches shared a limitation: they placed companies or institutions at the center of analysis, overlooking the entrepreneur’s role as an agent of economic change.

The entrepreneurial ecosystem concept inverts this logic. As Isenberg (2011) points out, entrepreneurship is a local phenomenon that requires infrastructure, capital, culture, mentorship networks, and tolerance for failure. The ecosystem approach does not seek to optimize specific industrial sectors; it seeks to create conditions enabling entrepreneurs across sectors to identify opportunities, access resources, and scale their businesses.

This conceptual difference has direct consequences for diagnostics. When established companies are at the center, we measure sectoral competitiveness, value chains, and industrial productivity. When entrepreneurs are at the center, we measure support flows, connection quality, and resource alignment with entrepreneurial stages. The entrepreneur-centered perspective modifies both what we measure and the interventions we design.

The first edition of the ANDE toolkit in 2013 captured this shift in perspective. It proposed eight domains that make up any ecosystem (Policy, Finance, Culture, Support Services, Human Capital, Markets, Infrastructure, and R&D/Innovation) and a three-level analysis framework that links ecosystem conditions to observable business outcomes. That framework remains valid, but the past decade has yielded new insights that this second edition incorporates.

**Figure 2.1: Evolution of thinking about economic and social development**



From static snapshots to diagnostics that capture dynamics and outcomes

## Four Transformations in Ecosystem Thinking

Over the past ten years, significant shifts have reshaped how we understand and diagnose entrepreneurial ecosystems.

**From static inventories to temporal dynamics.** Early diagnostics produced snapshots of ecosystems without capturing their evolution. Current models recognize that ecosystems go through life cycles with stages of emergence, growth, maturity, and renewal (Mack & Mayer, 2016). A Nascent ecosystem needs very different interventions than a mature one. Importing technology startup acceleration programs to places without a critical mass of entrepreneurs with validated ideas makes little sense. Similarly, continuing to invest in awareness programs yields little benefit in ecosystems where the bottleneck is access to growth capital.

**From quantity of resources to quality of connections.** Two cities can have similar density of actors (the same number of accelerators, funds, and universities), but generate opposite results depending on how they connect with each other. This regional variability explains why research using entire countries as the unit of analysis may produce inaccurate measurements, generalizing conditions across nations where development, industry, and resources vary significantly between regions. Entrepreneurship operates at the subnational level, where each is affected by its locality’s specific resources and actors (Martínez-Estrada, 2019).

**From linear systems to adaptive complexity.** Ecosystems are no longer understood as machines where more resources proportionally generate more results. Each ecosystem develops unique characteristics based on its industrial history, local culture, and resource endowment (Roundy et al., 2018). Context-specificity makes exact replication of external models counterproductive. Silicon Valley’s success stems from factors that cannot be simply transplanted to Guadalajara or Medellín. The alternative is to understand the underlying principles and adapt them to the local context.

**From digital as a tool to digital as an enabler.** Digital transformation has not only digitized existing processes—it has redefined ecosystems’ geographic boundaries. Today, entrepreneurs in mid-sized cities access global mentors, international capital, and remote markets. This means any diagnostic must evaluate digital maturity as a cross-cutting dimension, not as an isolated indicator within Infrastructure.

**Tabla 2.1: Transformaciones conceptuales en ecosistemas de emprendimiento (2013-2025)**

Transformation	2013 Approach	2025 Approach	Implications for Diagnostics
<b>Dynamics</b>	Static inventories of actors	Recognition of dynamics and life cycles	Interventions according to ecosystem stage of development
<b>Coordination</b>	Quantity of available resources	Quality of connections and collaboration	Actor-stage alignment to maximize effectiveness of support
<b>Complexity</b>	Linear systems (inputs → outputs)	Feedback and contextual heterogeneity	Valuing collective learning and local adaptation
<b>Digitalization</b>	Complementary tool	Cross-cutting ecosystem enabler	Access to global resources and redefinition of geographic boundaries

**These four transformations reflect a deeper change in how we understand ecosystem improvement. Traditional approaches assumed that adding more resources would produce more results: more funds, more programs, more actors. Evidence shows that adding resources does not work when actors work in silos. Systemic change occurs when actors develop a shared vision of the problem, measure their progress with common indicators, and align their actions to fill gaps instead of competing for the same beneficiaries. The diagnostic that this toolkit proposes generates the foundation for that coordination: it identifies the current state, reveals who does what, and signals where collaboration can have the greatest impact.**

### **Key Findings from 28 International Frameworks**

The first finding confirmed what many of us suspected: there is global consensus on fundamental domains. All the models analyzed include some form of Policy, Finance, and Human Capital. Most incorporate Markets, Infrastructure, and R&D/Innovation. Six out of ten models recognize entrepreneurial culture as a differentiating factor, despite ongoing measurement challenges. Entrepreneurial Support Organizations (ESOs), previously considered peripheral elements, appear as central components in more recent frameworks (Spigel, 2017).

The second finding identified what was missing. Most frameworks offer lists of what to measure, but few provide guidance on how to do it with limited resources. They describe the ideal state of an ecosystem, but not the path to diagnosing it when budgets and time are limited.

The third finding revealed that the most useful models distinguish between types of actors and stages of entrepreneurial development. The Babson model identifies six categories of actors. The Global Entrepreneurship Index differentiates between attitudes, aspirations, and entrepreneurial activity according to the individual's maturity. Mack and Mayer's Evolutionary Framework formalizes stages of emergence, growth, maturity, and renewal. This evidence underpins two decisions in the ANDE 2025 toolkit: a taxonomy of five actor types (Government, Academia, Private Sector, Capital Providers, and Entrepreneurial Support Organizations) and the four development stages (inspired individuals, trained individuals, startups, and small and growing businesses) that represent the ecosystem's pipeline or flow.

Distinguishing these four stages allows us to identify where the flow of entrepreneurs is interrupted in an ecosystem. Knowing that mentors exist is not enough; what matters is knowing if they are aligned with the needs of each phase. An ecosystem can excel at inspiring people but struggle to train them, or it can train many entrepreneurs who never manage to establish companies. Each interruption in the pipeline signals a different intervention opportunity.

Annex A presents the 28 models analyzed, along with the organizations behind them and domains covered, for those seeking detailed justification of methodological decisions.

### **Key Challenges for Ecosystem Assessment**

The analysis of international frameworks confirmed the importance of domains and the conceptual transformations of ecosystems. But it also revealed a significant challenge: bridging the theory available in the literature with the practical needs of those who work with ecosystems. Governments, foundations, development agencies, and support organizations that consult these frameworks face concrete challenges the literature seldom addresses.

Any intervention must begin with understanding the current state. What is the ecosystem's maturity level? Which domains are strong and which are weak? What types of ventures are most common: those with traditional economic impact, those seeking to solve social problems, or those oriented toward environmental sustainability? Without this initial picture, investment decisions rely on intuition or trends borrowed from other contexts.

But a general overview is not enough. We also need to understand who does what. An ecosystem can have dozens of actors, but if all of them serve the same entrepreneurial stage, the system has critical gaps. When all organizations offer initial training and no one supports scaling, the pipeline is interrupted. Mapping what actors exist, what programs they operate, and what stage they serve allows us to identify both redundancies and gaps that limit the flow of entrepreneurs through the system.

With this information, the next step is to translate it into action. Decision-makers are not looking for academic documents; they need guidance on what programs to implement, what alliances to form, and where to invest scarce resources. A useful diagnostic goes beyond describing the current state to recommend specific interventions according to the context and maturity of the ecosystem.

Finally, any serious intervention requires the ability to measure its impact. Governments designing policies, foundations awarding grants, and investors deploying capital need evidence to justify their decisions and correct course when something is not working. A rigorous baseline makes this evaluation possible. Without measurement, there is no learning; without learning, there is no sustained improvement.

## **The Future of Entrepreneurial Ecosystems**

The global map of ecosystems is being redrawn. For decades, Silicon Valley was the sole reference: the model to emulate, the metric against which everyone measured themselves. That era is ending. Mid-sized cities in Latin America, Asia, and Africa are developing ecosystems with their own characteristics, focused on solving local problems rather than replicating the California model. Martínez-Estrada (2019) argues that the true test of an economy's likely future success lies in the quality of ventures in medium-sized cities, not in the large megalopolises that frequently overshadow the reality of entrepreneurs.

The Global Startup Ecosystem Report 2025 documents this change: Bengaluru rose seven positions to rank 14th globally; Shenzhen advanced eleven places; Hong Kong jumped from the emerging ecosystems category to 27th worldwide (Startup Genome, 2025). In Latin America, São Paulo, Mexico City, Bogotá, and Córdoba are consolidating their presence in regional rankings. This decentralization validates a principle that ANDE has long emphasized: there is no single model of a successful ecosystem. Each geography develops its own based on its advantages, limitations, and problems to solve.

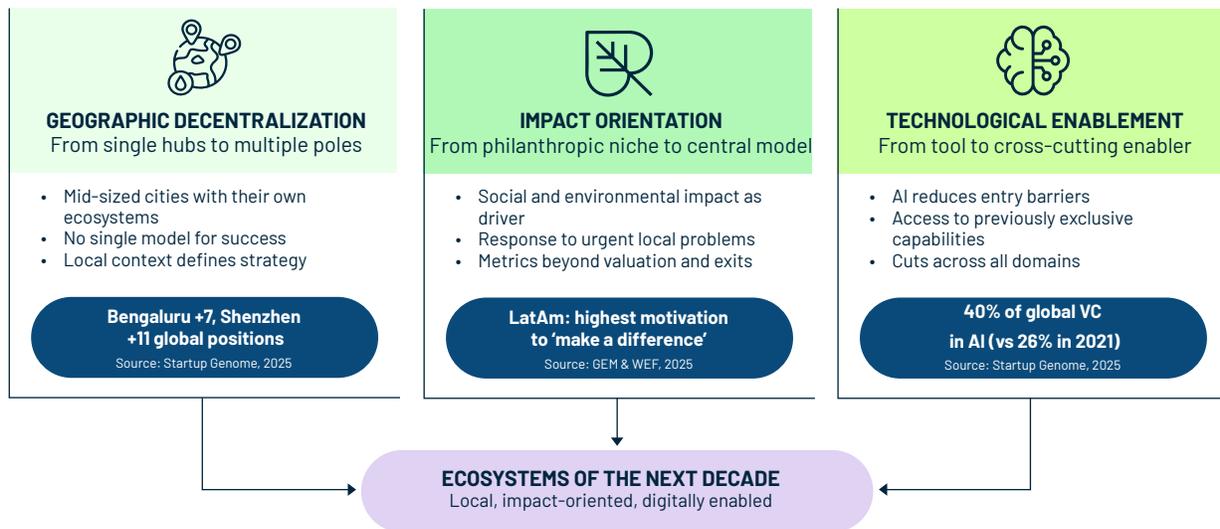
Beyond geographic location, what distinguishes these emerging ecosystems is their orientation. According to data from the Global Entrepreneurship Monitor, entrepreneurs in low-income economies such as Guatemala and India report the highest rates of motivation to "make a difference in the world," and the highest concentration of entrepreneurs meeting all four GEM sustainability criteria is found in Latin America and the Caribbean, not Europe (GEM & WEF, 2025).

This is not mere idealism—it is a rational response to contexts where social and environmental problems are more urgent and visible. When healthcare fails to reach rural communities, telemedicine ventures emerge. When electrical infrastructure is deficient, distributed solar energy solutions arise. When the financial system excludes the majority, inclusion fintechs appear. Impact entrepreneurship occupies a central place in emerging market ecosystems, not just a philanthropic niche. This has direct implications for diagnostics: measuring only valuations and exits captures just a fraction of what these ecosystems produce.

A third force that is transforming ecosystems is artificial intelligence. Unlike previous technological waves that primarily benefited those who already had resources, AI is dramatically reducing barriers to entry. Today, an entrepreneur in a mid-sized city can access data analysis, content generation, process automation, and software development capabilities that five years ago required specialized teams and multimillion-dollar budgets. Capital flows reveal the magnitude of this shift: AI now attracts 40% of all global venture capital funding, compared to 26% in 2021 (Startup Genome, 2025). But more relevant than investment volume is the nature of the technology: AI functions as a general-purpose technology, a cross-cutting enabler that spans Finance, Support Services, Markets, and R&D/Innovation. Any ecosystem diagnostic that ignores the digital maturity of the territory will become obsolete before it is finished.

**Figure 2.2: Three forces transforming ecosystems**

## FORCES RESHAPING ECOSYSTEMS 2025+ CONTEXT



**Implication:** Any diagnostic must assess local context, impact capacity, and digital maturity

These three forces (geographic decentralization, impact orientation, and technological enablement) shape the context in which ecosystems will operate over the next decade. Ecosystems that understand their starting point and design interventions adapted to their reality will have an advantage over those who continue borrowing formulas from other contexts.

The following chapter presents the toolkit that this second edition proposes for that diagnostic: a structure of domains, actors, and stages for evaluating ecosystems of any size, with any level of available resources, and with the flexibility to capture both traditional economic performance and the social and environmental impact that defines emerging ecosystems.



### 3. THE ANDE ECOSYSTEM DIAGNOSTIC TOOLKIT

The first edition of this toolkit, published by ANDE in 2013, established a framework for diagnosing entrepreneurial ecosystems based on eight domains derived from Isenberg's model (2010, 2011). That framework proved useful across more than a decade of applications in developing economies. However, accumulated experience revealed limitations: the original model did not capture which actors operated in each domain, nor did it allow evaluation of whether the ecosystem was producing results.

This second edition updates the model by integrating learnings from multiple sources. From ANDE's first edition, it preserves the structure of domains as conditions that determine an ecosystem's entrepreneurial capacity. From the Tecnológico de Monterrey model, developed by Sánchez-Domínguez and Almanza-Rueda (2025), it incorporates the concepts of entrepreneurial development stages and actor mapping. From the Seedstars Index (Seedstars, 2020), it adopts the domain scoring approach and the bottleneck concept. From Cukier and Kon's model (2018), it integrates the classification of maturity levels and the concept of generations, helping explain maturity not only as an accumulation of resources, but as the system's capacity to regenerate when successful entrepreneurs reinvest in the next generation.

A note on design decisions: the Tecnológico de Monterrey model includes "Connectors and Communities" as a separate actor category. This toolkit does not adopt this approach because any actor type can perform the connecting function depending on context. What matters is identifying whether someone fulfills that function, not classifying them in a separate category.

The result is a model that answers three fundamental questions:

- 1. What conditions does the ecosystem have?** This is answered by evaluating seven domains that determine the ecosystem’s capacity to generate and scale ventures, which may be technology-based and have social or environmental impact.
- 2. Who can act to improve it?** This is answered by identifying the five types of actors and their presence and activity in each domain.
- 3. Is it working?** This is answered by measuring outcome indicators that capture whether the ecosystem produces entrepreneurs or companies advancing through the development stages.

These questions are answered through a process organized in two phases, with a third optional phase for those requiring greater depth.

**Phase 1: Assessment of conditions.** This phase collects public data to evaluate the seven domains, identifies the ecosystem’s maturity level, and detects the main constraint.

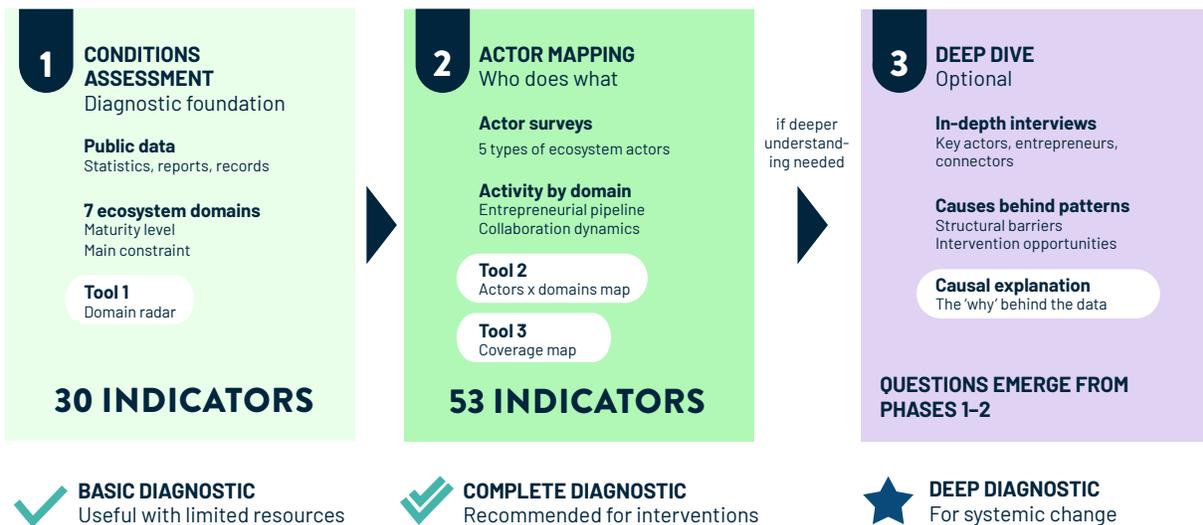
**Phase 2: Identification and activity of actors.** This phase maps the actors present in the ecosystem, classifies them by type, and determines their operating domains and activity levels. This phase requires desk research and short interviews.

**Phase 3: Deep-dive (optional).** Activate this phase when you need to understand the causes behind the identified gaps. It involves in-depth interviews with key actors and entrepreneurs, focusing on the bottleneck.

**Figure 3.1: Phases of the ecosystem diagnostic**

## DIAGNOSTIC PHASES

A modular process adaptable to available resources



The toolkit is designed to be modular. An ecosystem with limited resources can complete only Phase 1 and obtain a useful diagnostic. One with greater capacity can deploy all three phases. Chapter 4 details the implementation of each phase.

This structure separates conditions from results. **The domains measure what the ecosystem has; outcome indicators measure what the ecosystem produces.** An ecosystem can have favorable conditions but poor results (indicating a connection or effectiveness problem), or acceptable results with weak conditions (indicating a fragile system dependent on few actors). The separation allows for more precise diagnostics.

A fundamental principle guides this model: no actor occupies the center of the ecosystem. In a forest, no species is more important than another—trees, soil, insects, water, and sunlight are all equally necessary, and the system works because each element fulfills its function and connects to the others. The same is true of entrepreneurial ecosystems. Government is not more important than Academia, nor are Capital Providers more important than Entrepreneurial Support Organizations (ESOs). What makes an ecosystem work is not the hierarchy among its parts, but the quality of connections between them (Stam & Van de Ven, 2021).

But before diagnosing the components, we must answer a prior question: what type of ecosystem do we have?

### **Ecosystem Maturity Levels**

Ecosystems are not static; they pass through development stages with distinctive characteristics. Comparing an emerging ecosystem with more advanced ecosystems worldwide is not only unfair—it is counterproductive, generating misaligned expectations and inapplicable recommendations. A nascent ecosystem needs to build culture and community; a mature one needs to solve bottlenecks of scale. Interventions that work in one may fail in another.

This second edition enriches the maturity classification by integrating Cukier and Kon's model (2018). Integrating this model enables us to understand maturity not merely as resource accumulation (how many incubators or funds exist), but as an evolution in interaction quality and the system's capacity to regenerate.

The diagnostic classifies the ecosystem into four progressive levels. This classification serves three functions:

- 1. Calibrate expectations:** Success indicators vary by stage. Measuring “unicorns” in a nascent ecosystem is a methodological error.
- 2. Guide interventions:** Distinguish between essential factors (mandatory requirements for advancement) and complementary factors (desirable, but not blocking).
- 3. Evaluate self-sustainability:** Determine whether the ecosystem depends perpetually on external injections or whether it has managed to activate an internal virtuous cycle.

ANDE's research on ecosystems has identified patterns to consider. First, we know there is no single recipe: although development stages can be simply defined, the growth trajectory between stages is neither linear nor predictable. Most of today's established ecosystems developed organically over decades; intentional ecosystem-building interventions are a more recent experiment (ANDE, 2021).

However, mature ecosystems share common factors. Networks linking institutions and entrepreneurs, a culture that normalizes entrepreneurship, active support organizations, accessible early-stage financing, and a favorable regulatory environment consistently appear in ecosystems that have reached maturity. These factors act as catalysts and indicate areas that can be targeted for intervention.

A fundamental contribution from Cukier and Kon is the concept of generations. Maturity is not achieved simply by attracting more actors, but rather when successful entrepreneurs from one generation decide to reinvest their resources (capital, time, reputation) in the next generation:

**Generation 0:** There is no track record of local entrepreneurs investing in others.

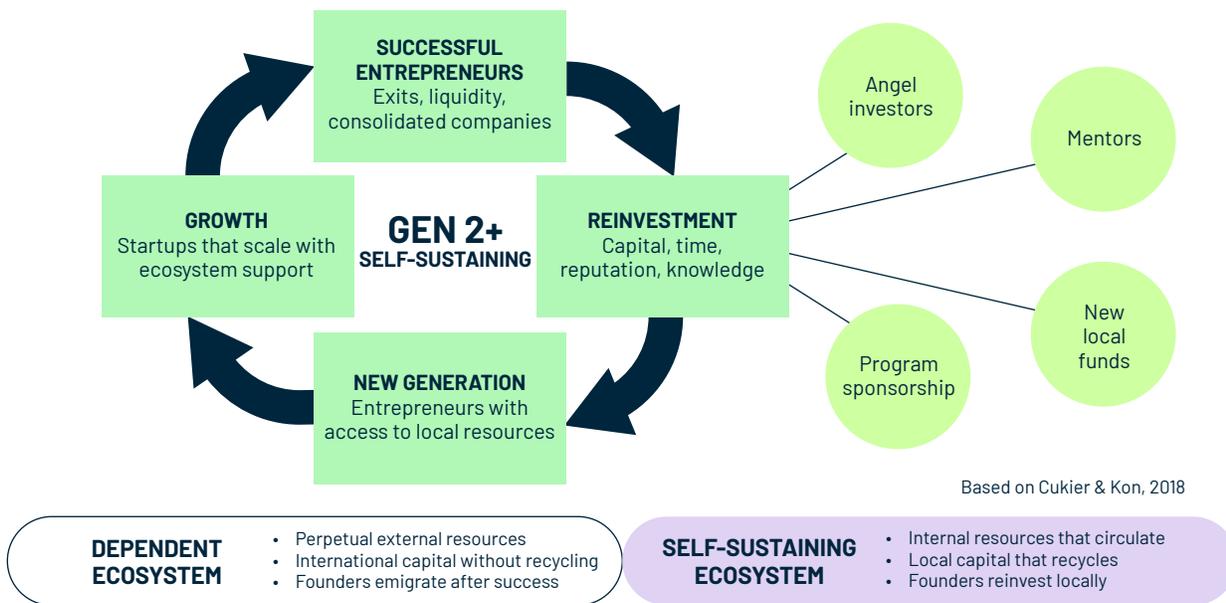
**Generation 1:** The first successful founders emerge, but they are still focused on their own companies.

**Generation 2+ (the virtuous cycle):** Founders from the first wave have had exits or liquidity and return to the ecosystem as angel investors, mentors, and creators of new funds.

**Figure 3.2: The virtuous cycle of self-sustaining ecosystems**

### THE VIRTUOUS CYCLE

How ecosystems become self-sustaining



The generational model has a clear implication: no one can force the emergence of companies like Google or Mercado Libre, but we can strengthen conditions that increase the probability of high-growth companies emerging. The diagnostic serves precisely this purpose: to identify which of these factors are present, which are missing, and which can be strengthened given the context.

The following table merges ANDE’s practical perspective with Cukier and Kon’s findings, presenting the typical characteristics and priority focus for each level.

**Table 3.1: Entrepreneurial ecosystem maturity levels**

Level	Characteristics	Intervention Focus
<b>Nascent (Generation 0)</b>	Incipient and sporadic entrepreneurial activity. Few formal actors. High dependence on government or international development initiatives.	Build community and culture. Foster awareness events to connect dispersed actors. Introduce basic entrepreneurship education.
<b>Emerging (Generation 1)</b>	Appearance of the first support organizations. Formation of initial investor networks. Significant financing gaps.	Formalize and specialize. Professionalize support organizations. Attract technical talent. Reduce regulatory barriers.
<b>Developing (Transition Gen 1 → Gen 2)</b>	Functional ecosystem with actors in most domains. Active local investment funds. Startups begin targeting regional or global markets.	Scale and connect. Facilitate access to growth capital. Connect the ecosystem with international networks. Foster linkages with corporates.
<b>Self-Sustaining (Generation 2+)</b>	High density of startups and capital flow. Diversified exit options. Normalized risk culture. Net attraction of talent and capital.	Maintain and innovate. Preserve favorable conditions. Avoid regulatory complacency. Support the development of neighboring ecosystems.

**The maturity level determines how to interpret diagnostic results. A nascent ecosystem with a low financing score is in a normal situation; its priority should be strengthening the base of entrepreneurs before creating funds that would have nothing to invest in.**

**Attempting to skip stages usually results in inefficiency and resource loss. Evolution requires a sequence: first culture and talent, then support institutions, and finally growth capital and exit options. Chapter 4 details the indicators and criteria for identifying the maturity level.**

### **Entrepreneurial Ecosystem Domains**

Domains are the conditions that determine an ecosystem’s capacity to generate, develop, and scale ventures. Each domain addresses different needs of the entrepreneurial process. Understanding and diagnosing them together allows for identifying strengths, bottlenecks, and intervention opportunities.

The first edition established eight domains following Isenberg’s model (2010, 2011). This second edition reduces them to seven by consolidating Infrastructure into Support Services.

This decision is practical: over years of implementation, diagnostic teams repeatedly encountered ambiguity: Is a collaborative workspace infrastructure or a support service? Does a technology park belong to infrastructure or to R&D? Physical and digital infrastructure gains value when it is integrated as a service accessible to entrepreneurs; an empty building does not strengthen the ecosystem, but that same building operating as an innovation center does. The result is seven domains:

**Policy and Regulation:** Establishes the rules of the game. It spans from the procedures to incorporate a company to intellectual property protection and tax conditions. When the regulatory environment is efficient, barriers to entry decrease and there is greater legal certainty for investment.

**Finance:** Encompasses access to capital at all stages, from initial grants to growth rounds. It includes public funds, development banking, angel investors, venture capital, and other financial instruments.

**Entrepreneurial Culture:** Encompasses social norms surrounding entrepreneurship—how it is perceived, whether failure is stigmatized or seen as learning, whether visible role models exist. This domain is difficult to measure directly, but its influence is critical.

**Support Services:** Includes both support programs (incubators, accelerators, mentors, professional services) and the physical and digital conditions that enable activity (connectivity, workspaces, technology parks).

**Human Capital:** Refers to available talent—people with technical skills, managerial experience, and entrepreneurial competencies. Talent scarcity is often the hardest bottleneck to address, requiring years of development.

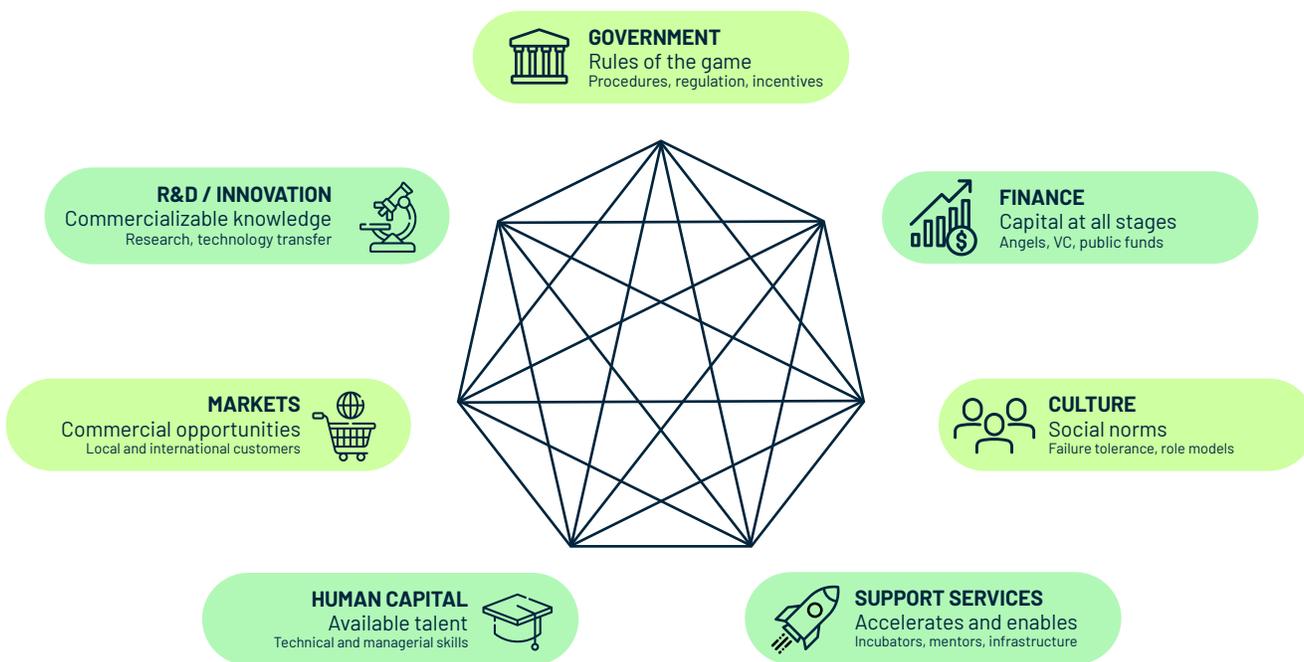
**Markets:** Represents access to customers and commercial opportunities: local market size, access to international markets, demand sophistication, existing value chains.

**R&D and Innovation:** Includes research capacity, technology transfer mechanisms, and innovation programs that generate commercializable knowledge.

**Figure 3.3: The seven entrepreneurial ecosystem domains**

## THE SEVEN DOMAINS

Conditions that determine ecosystem capacity



**Table 3.2: Entrepreneurial ecosystem domains**

Domain	Primary Function	Typical Actors
Policy and Regulation	Establishes rules and reduces administrative barriers	Government, regulatory agencies, legislators
Finance	Provides capital at all development stages	Investment funds, angels, banks, public funds
Entrepreneurial Culture	Legitimizes entrepreneurship and normalizes risk	Media, entrepreneur networks, universities
Support Services	Accelerates development and enables operations	Incubators, accelerators, mentors, technology parks
Human Capital	Develops talent with entrepreneurial competencies	Universities, training centers, companies
Markets	Offers commercialization and growth opportunities	Corporations, chambers of commerce, consumers
R&D and Innovation	Generates commercializable knowledge and technologies	Universities, R&D centers, laboratories

**A consistent finding in the literature is that no domain functions in isolation. Weaknesses in one can neutralize strengths in others. An ecosystem may have excellent universities, but without available financing, talented graduates emigrate or seek employment instead of starting ventures. The weakest domain acts as a bottleneck that limits overall system performance (Acs et al., 2014).**

### **Ecosystem Actor Taxonomy**

Diagnosing an ecosystem requires identifying the actors involved in venture development. The first edition organized actors within each domain, listing which organizations typically operate in Finance, Policy, or Support Services. This approach makes it easy to identify gaps within each domain, but harder to understand how organizations contributing to multiple domains operate.

This second edition introduces a complementary taxonomy: classifying actors by type of organization. A university, for example, contributes to Human Capital (educating students), R&D (research), Culture (entrepreneurship awareness), and Support Services (if it operates an incubator). Categorizing only by domain fragments this view; categorizing by actor type integrates it. The result is five types of actors:

**Government and Public Sector** includes ministries, secretariats, economic development agencies, and municipalities. They contribute primarily to Policy and Regulation, but also to Finance through public funds and tax incentives.

**Academia and Research** encompasses universities, R&D centers, and technology institutes. They operate primarily in Human Capital and R&D, but also contribute to Entrepreneurial Culture and Support Services when they operate incubators.



**Table 3.3: Ecosystem actor taxonomy**

Category	Examples	Typical Contributions
<b>Government and Public Sector</b>	Ministries, development agencies, municipalities	Policy and regulation, public financing
<b>Academia and Research</b>	Universities, R&D centers, technology institutes	Human capital, R&D, entrepreneurship education
<b>Entrepreneurial Support Organizations (ESOs)</b>	Incubators, accelerators, foundations, mentor networks	Support services, knowledge transfer
<b>Private Sector</b>	Large companies, mid-sized businesses, business chambers	Market access, corporate investment
<b>Capital Providers</b>	Investment funds, angels, family offices, development banks	Financing, validation, strategic mentoring

**The diagnostic value emerges by crossing the actor mapping with the domains. The cross-reference reveals which domains have actors present and active, and which have gaps that require attention.**

### **Entrepreneurial Development Stages**

A healthy ecosystem does not just have entrepreneurs. It has people constantly advancing from inspiration to growth. The ANDE 2025 model distinguishes four stages, that represent the ecosystem’s pipeline. The diagnostic must identify where activity is concentrated and where gaps interrupt this flow. The first edition did not address this dimension; this second edition incorporates it, following the model developed by Tecnológico de Monterrey.

**Inspired Individuals** are people who have been exposed to entrepreneurship and are considering the possibility of starting a venture. They attended an event, met an entrepreneur, or explored a business idea. They do not yet have technical competencies, nor have they started a formal project, but the interest is there.

**Trained Individuals** have developed entrepreneurial competencies through training programs, incubation, or practical experience. They have the tools to structure a business model, validate a value proposition, or manage an early-stage team. Startups are formally constituted companies in the validation or early growth stage. They have tested their model with real customers, generate revenue, and are seeking capital to scale, although they typically operate with small teams and limited resources.

**Startups** are formally incorporated entities currently in the validation or early growth stages. These enterprises have proven their business models with actual customers, are revenue-generating, and actively seek capital to scale, despite typically operating with small teams and limited resources. Their primary needs include seed capital, incubation or acceleration support, and access to early adopters willing to pilot novel solutions.

**Small and Growing Businesses (SGBs)** are enterprises that have validated their business models and are pursuing sustainable growth. ANDE defines SGBs using precise operational criteria: commercially viable businesses employing between 5 and 250 individuals, possessing both the potential and ambition for growth, and typically seeking investment capital ranging from \$20,000 to \$2 million. These businesses

require growth capital, experienced executive talent, and strategic partnerships with the private sector. Notably, SGBs are the primary drivers of high-impact quality employment and ecosystem visibility.

**Table 3.4: Entrepreneurial development stages**

Stage	Definition	Typical Needs
<b>Inspired individuals</b>	People considering entrepreneurship as a viable option	Role models, awareness events
<b>Trained individuals</b>	People developing competencies for entrepreneurship	Training, workshops, pre-incubation, mentors
<b>Startups</b>	Companies seeking to validate their business model	Initial capital, incubation, mentoring, early customers
<b>Small and growing businesses (SGBs)</b>	Validated companies seeking to scale	Growth capital, alliances, internationalization

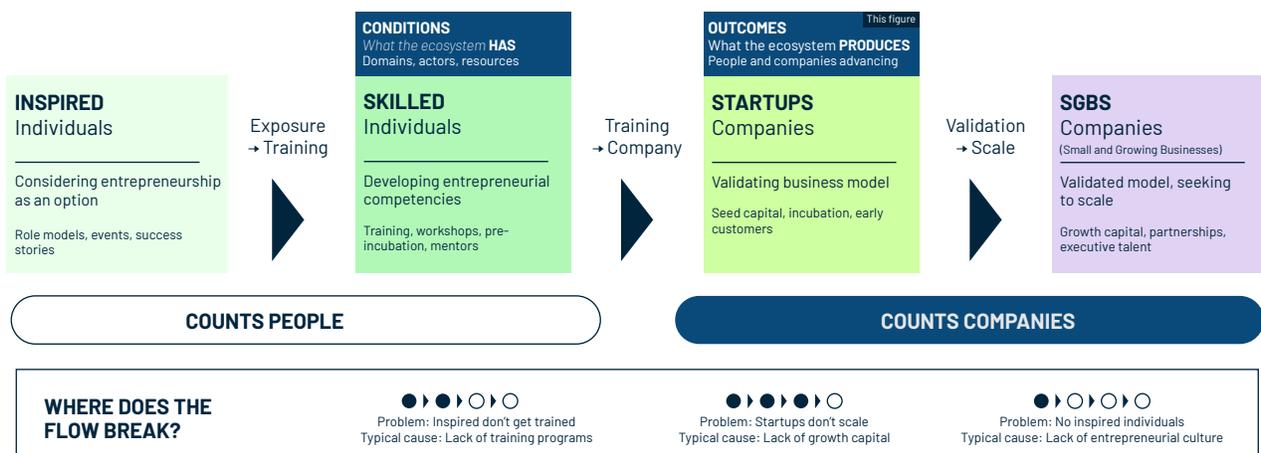
This section clarifies how the model uses these stages. The first edition of the ANDE toolkit (2013) focused on mapping ecosystem conditions: what actors existed, what resources were available, what barriers entrepreneurs faced. It was essentially an inventory of elements. However, it did not measure whether those conditions were producing results; that is, whether people were actually advancing from inspiration to business growth.

Other frameworks have attempted to capture this dimension in different ways. The Global Entrepreneurship Monitor (GEM), for example, measures entrepreneurial intentions, early entrepreneurial activity, and established businesses at the population level. However, these measurements operate at the national scale and require costly representative surveys that are beyond the reach of most local diagnostics. Babson’s model and Mack and Mayer’s Evolutionary Framework recognize the importance of evolutionary stages, but apply them to the ecosystem as a system, not to the flow of individuals passing through it.

**Figure 3.5: Development stages as outcome indicators**

## THE ENTREPRENEURIAL PIPELINE

Development stages as ecosystem outcome indicators



This second edition adopts a different approach: the stages are not a dimension for classifying actors or domains, but rather an outcome indicator of the ecosystem. Stage flow measures whether the ecosystem is working. When conditions are favorable and actors are present, the expected result is that people advance from inspiration to becoming SGBs. Measuring how many people are at each stage, and where advancement stalls, reveals the ecosystem's effectiveness directly and practically.

The condition-outcome distinction has concrete implications for intervention. An excellent acceleration program is useless if there are not enough startups prepared to take advantage of it. An abundance of growth capital is irrelevant if startups cannot validate their models to reach that stage. The diagnostic of conditions (domains and actors) indicates what the ecosystem has; flow by stage indicates whether what it has is working.

### **Synthesis: Bringing the Model Together**

The previous sections presented the model's components: ecosystem maturity level, the seven domains, the five actor types, and the four entrepreneurial development stages. This section explains how they integrate to generate the diagnostic.

The model produces three key tools:

The **domain radar** is a visualization showing each domain's relative score on a seven-axis chart. It reveals at a glance which domains are strong, which are weak, and which bottleneck is limiting the ecosystem. The radar uses 30 public data indicators (Annex B.1) and does not require surveys.

The **actor map by domain** is a simple matrix that shows which actor types are present and active in each domain. It reveals gaps (domains without actors or with weak actors) and possible concentrations (many actors in one domain while others remain unattended). Beyond activity by domain, this tool captures interaction dynamics between actors: whether they collaborate or work in isolation, whether institutional coordination exists, and who serves as connectors linking the system together.

The **ecosystem coverage map** shows which actors serve each entrepreneurial development stage (inspired, trained, startups, and SGBs) and what types of entrepreneurship the ecosystem can support (social impact, environmental impact, and technology/digital). This tool reveals gaps that the domain map does not capture. The map also identifies where entrepreneurs' progress between stages stalls.

The ecosystem's maturity level provides context for interpreting the three tools. In a Nascent ecosystem, capital providers typically have low presence and coverage of advanced stages is limited; the focus should be on strengthening government and academia activity in early stages. In a Developing ecosystem, low presence of capital providers or gaps in the transition from startups to SGBs would be warning signs requiring intervention.

Chapter 4 presents the implementation methodology: which indicators to use and how to interpret results according to the ecosystem's maturity level.



## 4. THE TOOLKIT IN PRACTICE

The previous chapter presented the components of the toolkit: the maturity levels of ecosystems, the seven domains that determine the entrepreneurial capacity of a city or region, and the five types of actors that drive it. This chapter explains how these components translate into a diagnostic generating useful information for decision-making.

An ecosystem diagnostic answers specific questions. What is our ecosystem's development level compared to other regions? Which domain is limiting ecosystem growth? Which actors are operating in each domain and where are there gaps? Is the ecosystem producing ventures or is the activity not translating into results? The answers to these questions enable the design of interventions that address root causes rather than visible symptoms.

Before starting any diagnostic, two aspects require clarity:

- 1. Geographic scope:** Is this a specific city, a metropolitan area, a region, or an entire state? This definition determines which actors are relevant and which comparisons make sense.
- 2. Purpose and goals:** What decisions will be made with the results? A state government designing public policy has different needs than a foundation evaluating where to focus resources or an accelerator identifying collaboration opportunities. The purpose guides the interpretation of findings and the level of depth required.

## **Phase 1: Classification and Initial Mapping**

The first phase of the diagnostic answers two fundamental questions: what is this ecosystem's maturity level? and which domain most limits its development?

Phase 1 uses 30 indicators constructed from public sources: investment databases, government records, event platforms, organizational directories, and specialized publications. Table 4.1 presents a summary by domain; Annex B includes the complete detail with data sources and measurement criteria.

**Table 4.1: Phase 1 Indicators by Domain**

<b>Domain</b>	<b>Indicators</b>	<b>What is measured (examples)</b>
<b><i>Policy and Regulation</i></b>	3	Days to register a company, existence of special tax regime
<b><i>Finance</i></b>	6	Annual investment rounds, VCs with local presence, documented exits
<b><i>Culture</i></b>	5	Ecosystem events, specialized media, level of social trust
<b><i>Support Services</i></b>	5	Active accelerators, incubators, coworking spaces, connectivity
<b><i>Human Capital</i></b>	5	STEM graduates, university entrepreneurship programs, tech talent
<b><i>Markets</i></b>	3	Identified startups, tech corporate offices, specialized sectors
<b><i>R&amp;D/Innovation</i></b>	3	Registered patents, research centers, indexed publications
<b>Total</b>	<b>30</b>	

The toolkit distinguishes between two types of indicators. **Condition indicators** measure ecosystem infrastructure, actors, and resources: how many accelerators exist, how quickly a company can be registered, how many STEM graduates the region produces. **Outcome indicators** measure what the ecosystem is producing: how many companies or startups have been created, how many investment rounds have closed, how many exits have occurred. Of the 30 Phase 1 indicators, four are outcome indicators:

**Table 4.2: Outcome Indicators in Phase 1**

ID	Indicator	Rationale
F1	Total reported investment	Capital that has already flowed to ventures
F2	Number of investment rounds	Transactions that occurred
F5	Documented exits	Companies that achieved liquidity
M1	Identified startups	Companies that were created

**The condition–outcome distinction enables a more complete interpretation of the diagnostic. An ecosystem may have good conditions but low outcomes, indicating an effectiveness problem—actors exist but are not generating ventures. Or it may have high outcomes with low conditions, indicating fragility: the ecosystem depends on few actors or external factors.**

**The diagnostic indicators measure very different variables: days to register a company, number of investment funds, percentage of university graduates. To compare them and build the radar, it is necessary to express them on a common scale.**

**When diagnosing multiple ecosystems**, his toolkit follows the approach of Stam and Van de Ven (2021): the average of all ecosystems analyzed serves as the reference point (value = 1), and each ecosystem is measured as a deviation from that average. A value of 1.3 indicates 30% above average; a value of 0.7 indicates 30% below. This method has the advantage of not requiring predefined external benchmarks.

**When diagnosing a single ecosystem**, the objective is to identify the internal relative profile: which domains are more developed than others within the same territory. The radar displays this comparative profile. The score for each domain is the average of its indicators. The global score is the average of the seven domains; that is, all domains receive equal weight. Stam and Van de Ven (2021) adopted this equal weighting for its simplicity and transparency, although they acknowledge that “other weighting techniques could be applied in future phases of research, based on expert opinion or statistical properties of the data” (p. 826).

For mid-sized or small cities, it is recommended to adjust count indicators (number of startups, events, mentors) per 100,000 inhabitants. This enables comparison of entrepreneurial density between territories of different sizes.

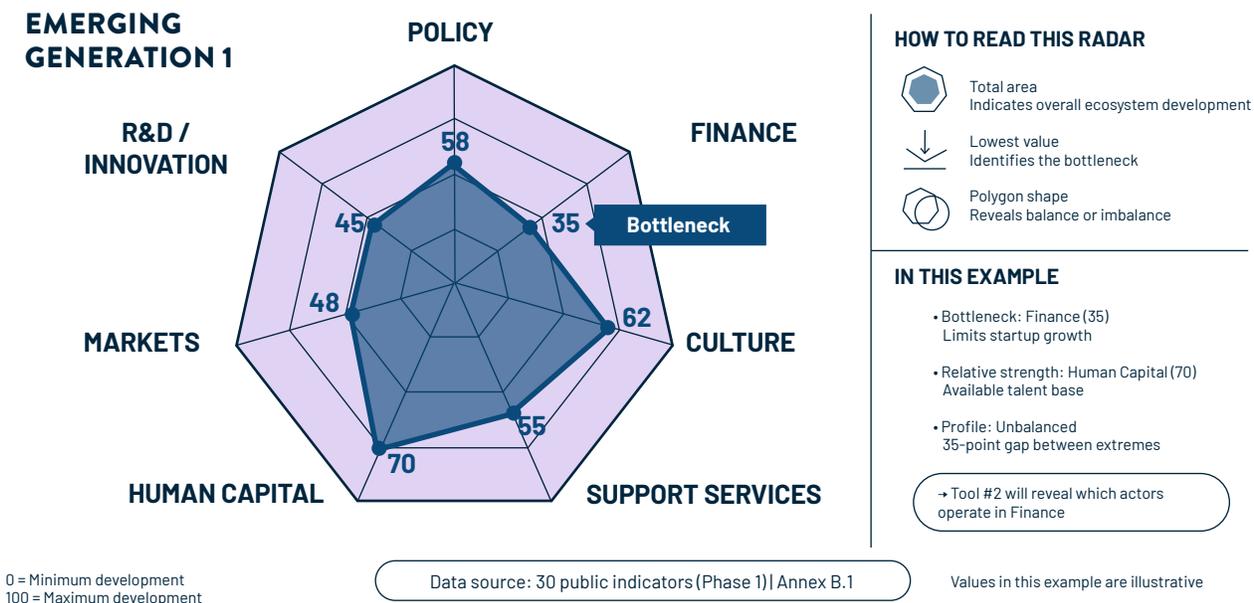
### **The Domain Radar**

Phase 1 presents its results in a radar that visualizes the ecosystem’s seven domains. This first diagnostic tool quickly identifies the ecosystem’s profile and maturity: its relative strengths, its areas that need improvement, and the domains that require priority attention.

**Figure 4.1: Domain Radar and Maturity Level (Tool #1)**

**DOMAIN RADAR**

Diagnostic Tool #1 – Illustrative Example



The radar shows the relative development of each domain within the same ecosystem. A domain with a high value indicates greater development compared to the others; a low value indicates a weaker area. The shape of the polygon reveals the profile: a balanced ecosystem will have a shape close to a circle; one with pronounced gaps will show peaks and valleys.

**Sequence matters more than score.** An unexpected finding from ecosystem studies is that the lowest-scoring domain on the radar is not always the one that should be addressed first. The Kauffman Foundation documented that investing in venture capital when there are no startups to invest in is as inefficient as building highways to cities that do not exist (Harrington, 2017). Ecosystems evolve in successive layers: first culture and talent, then support services, then capital and markets.

The interpretation of the radar must consider the ecosystem’s maturity level. A Nascent ecosystem with a low score in Finance does not have the same diagnosis as a Developing one with the same score. In the former, the absence of investors is expected; the priority is to strengthen the base of entrepreneurs. In the latter, the lack of financing is a real bottleneck that is holding back startups ready to grow.

Table 4.3 guides interpretation according to maturity level, indicating the appropriate intervention type for each domain at each stage.

**Table 4.3: Intervention Types by Domain and Maturity Level**

<b>Domain</b>	<b>Nascent</b>	<b>Emerging</b>	<b>Developing</b>	<b>Self-Sustaining</b>
<b>Culture</b>	Build	Strengthen	Maintain	Maintain
<b>Human Capital</b>	Build	Strengthen	Scale	Maintain
<b>Support Services</b>	Build	Strengthen	Scale	Maintain
<b>Policy</b>	Wait	Build	Strengthen	Maintain
<b>Finance</b>	Wait	Build	Strengthen	Scale
<b>Markets</b>	Wait	Wait	Strengthen	Scale
<b>R&amp;D/Innovation</b>	Wait	Wait	Build	Strengthen

**Each cell indicates the appropriate type of intervention for that domain at that maturity level:**

**Build** means the domain is incipient and represents the main bottleneck to progress. The action is foundational: creating the first programs, attracting the first actors, establishing the foundations. A Nascent ecosystem needs to build entrepreneurial culture before anything else; without people who want to start ventures, there is no ecosystem.

**Strengthen** indicates that the domain is fragile or insufficient to sustain growth. Actors are already operating, but they need to professionalize, increase their capacity, or improve their quality. This is consolidation investment: moving from having an improvised incubator to having one with a proven methodology; from having some informal angels to having an organized network.

**Scale** applies when the domain is functioning but needs to grow to meet the ecosystem's increasing demand. The basic infrastructure exists; the next step is to diversify options, expand coverage, and connect with external networks.

**Maintain** means the domain is operating adequately and is not a limiting factor. The focus should be on preserving favorable conditions, avoiding complacency, and monitoring that it does not deteriorate. It does not require intensive investment, but it should not be neglected either.

**Wait** indicates that investing in that domain would be premature for the current maturity level. The domain still matters, but other domains must develop first. A Nascent ecosystem investing in venture capital fund creation before having investable startups wastes resources and generates frustration.

For example, if a Nascent ecosystem shows a low score in Finance, the table indicates "Wait": this is normal because there are not yet startups that require investment. The real priority is to build Culture, Human Capital, and Support Services. If the same low score appears in a Developing ecosystem, the table indicates "Strengthen": in this case it does represent a bottleneck that requires consolidating existing financing options.

When searching for information about each domain during Phase 1, practitioners simultaneously identify the organizations operating in the ecosystem: which government secretariats or agencies have support programs, which universities offer entrepreneurial training, which accelerators and incubators are active, which investment funds have local presence, which corporations operate open innovation programs. This inventory of actors is the main input for Phase 2 and for the second diagnostic tool: the actor map by domain.

## **Phase 2: Actor Mapping and Results Validation**

The second phase of the diagnostic delves into how the ecosystem functions. While Phase 1 measures what exists, Phase 2 reveals who does what, in which domains, and with what intensity. It also validates whether all that activity is generating results: entrepreneurs advancing through the stages of entrepreneurial development.

The information for Phase 2 comes from surveys administered to the actors identified in Phase 1. The questionnaire includes 53 indicators organized into four blocks, each designed to capture a different dimension of the ecosystem:

**Table 4.4: Structure of Phase 2 Indicators**

<b>Block</b>	<b>Indicators</b>	<b>What does it measure?</b>
A: Activity by domain	25	What actors do in each domain: programs operated, entrepreneurs served, resources deployed, perceptions about the ecosystem
B: Pipeline or number of ventures	8	Flow of people and companies at each stage of entrepreneurial development: how many inspired, trained, startups, SGBs
C: Types of Entrepreneurship (TE)	10	Ecosystem capacity to serve ventures with social purpose, environmental purpose, or technological business model
D: Cross-cutting dynamics	10	How actors interact: collaboration, information flows, coordination, identification of connectors
<b>Total</b>	<b>53</b>	

**Not all actors answer all questions. The questionnaire assigns questions according to the type of actor and their natural role in the ecosystem. For example, questions about regulatory policy are directed primarily at the government, while those about technology transfer go to academia and corporations.**

### **Actor Map by Domain**

The central instrument of this phase is the actor map by domain. This map shows which types of actors are operating in each domain, with what level of activity, and how they interact with each other. Unlike more complex matrices crossing multiple dimensions, this map maintains the simplicity necessary for usefulness: a panoramic view of who is doing what in the ecosystem.

**Table 4.5: Activity Levels**

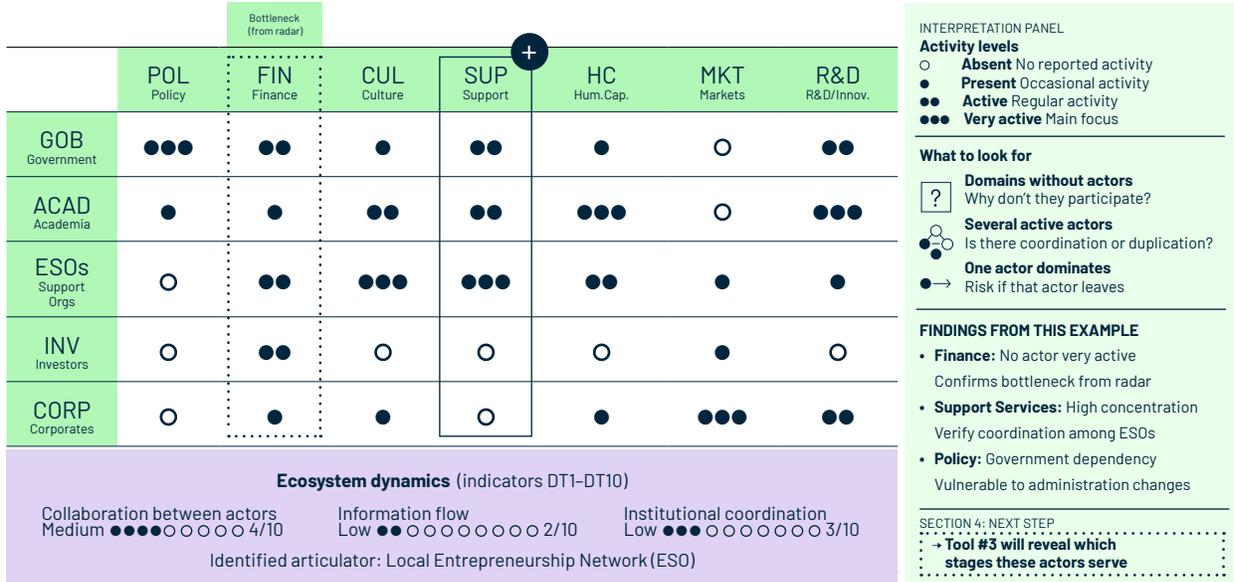
<b>Level</b>	<b>Symbol</b>	<b>Criteria</b>
Absent	(empty)	Does not report activity in this domain
Present	●	Occasional or limited activity
Active	●●	Regular and programmatic activity
Very active	●●●	This domain is the main focus of their operation

The activity level is determined by aggregating the responses of all actors of each type. If the majority of surveyed accelerators report high activity in Support Services, the map will show ●●● in that cell. Figure 4.2 shows an example of the complete map.

Figure 4.2: Actor Map by Domain (Tool #2)

## ACTOR MAP BY DOMAIN

Diagnostic Tool #2 – Illustrative Example



Data source: Actor surveys – Blocks A and D (35 indicators) | Phase 2

Values in this example are illustrative

The map identifies three types of findings. First, gaps: domains where certain actors are absent, raising questions like: Why are corporations not participating in Culture? What prevents academia from engaging with Markets? Second, concentrations: domains where multiple actors report high activity, which requires exploring whether actors coordinate or duplicate efforts. Third, dependencies: domains that depend on a single type of actor, which represents a risk; if only Government is active in Policy, what happens when the administration changes?

**Table 4.6: Interpreting Findings by Maturity Level**

Finding	Nascent Ecosystem	Developing Ecosystem
<b>Capital Providers with low activity</b>	Expected. Prioritize strengthening support services to generate flow of investable companies.	Warning sign. Requires intervention to attract or develop capital.
<b>Academia concentrated in Human Capital and R&amp;D</b>	Normal. That is their natural role.	Opportunity to link with Markets for technology transfer.
<b>Private Sector absent in several domains</b>	Expected. There is not yet a critical mass of ventures relevant to them.	Concerning disconnect. The local market is not absorbing the innovation.
<b>Multiple ESOs very active in Support Services</b>	May indicate momentum and energy in the ecosystem.	Review coordination and differentiation. Possible competition for the same entrepreneurs.

The actor map shows who is present in each domain, but it does not reveal how actors interact with each other. An ecosystem may have actors in all domains and still function poorly if they work in silos, compete for the same resources, or distrust one another. That is why the survey also captures collaboration dynamics: whether actors work together or in isolation, whether information flows adequately, whether there is institutional coordination or duplication, and whether successful entrepreneurs are reinvesting in the ecosystem. Annex B details the specific indicators for measuring these dynamics.

The interpretation of the map should always consider these dynamics. High activity in several domains may mean a coordinated and efficient ecosystem, or a fragmented system where each actor works on their own and resources are wasted. A gap in a critical domain is more serious if collaboration is low, because no one will step in to fill the gap. However, it can be an opportunity if actors are accustomed to coordinating.

**Table 4.7: Interpreting the Map by Collaboration Level**

Situation on the map	If collaboration is low	If collaboration is high
High activity in several domains	Risk of duplication and waste of resources	Coordinated and efficient ecosystem
Gaps in critical domains	No one fills the gap, serious problem	Opportunity for coordinated action
One actor dominates a domain	Risky dependency, no backup	Clear leadership with ecosystem support

A particularly valuable element that emerges from the surveys is the identification of the ecosystem’s **connectors**. These are the people or organizations that other actors repeatedly cite as key connectors: those who facilitate information flows, mobilize resources, and convene joint initiatives. Connectors are not a separate actor category; they may be in government, academia, ESOs, or any sector. What distinguishes them is their ability to build bridges between actors who would otherwise not interact.

Identifying the connectors is valuable for two reasons. First, any intervention strategy should involve them as natural multipliers of impact. Second, their absence may explain why an ecosystem with good actors fails to achieve results. A mature ecosystem typically has several connectors distributed across different sectors. A Nascent ecosystem may depend on one or two connectors whose eventual departure would put the system’s connectivity at risk. The diagnostic should identify this concentration as a fragility factor.

**Ecosystem Coverage Map**

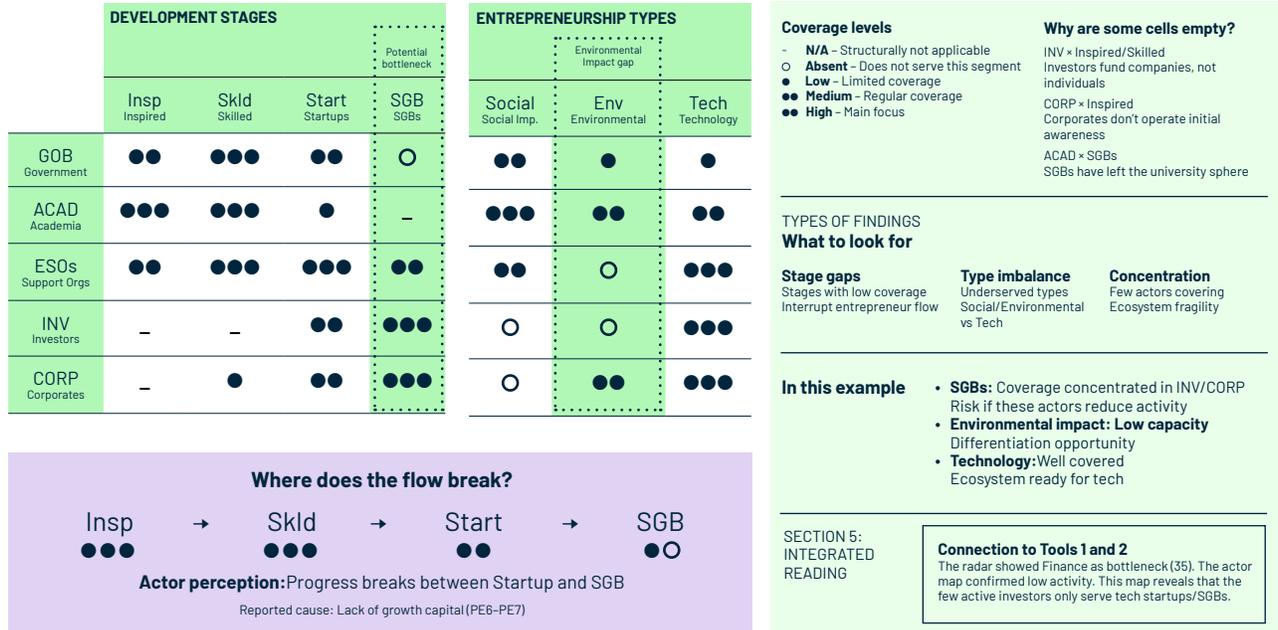
The actor map by domain shows who is active in each thematic area of the ecosystem, but it does not reveal whether those actors are serving entrepreneurs at all stages of their development, nor what types of entrepreneurship they can support. An ecosystem may have many incubators active in the Support Services domain, but if all of them focus on tech startups and none serves social impact ventures, there is a gap that the domain map does not capture.

The coverage map complements this view. It uses the same five types of actors, but maps them against two dimensions: the stages of entrepreneurial development and the types of entrepreneurship. The result is a matrix that shows which actors are serving each segment of the ecosystem.

**Figure 4.3: Ecosystem Coverage Map (Tool #3)**

**ECOSYSTEM COVERAGE MAP**

Diagnostic Tool #3 – Illustrative Example



Data source: Actor surveys – Blocks B and C (7 indicators) | Phase 2

Values in this example are illustrative

The columns on the left represent the four stages of entrepreneurial development: inspired individuals who are considering starting a venture, individuals in active training, startups validating their business model, and small and growing businesses (SGBs) that have already validated their model and seek to scale. The columns on the right represent the three types of entrepreneurship according to their business model: social impact, environmental impact, and technological/digital.

**Figure 4.4: Stages of Entrepreneurial Development and Types of Entrepreneurship**

**Table 4.8: Types of Entrepreneurship**

Type	Definition	Examples
Social impact	Business model that solves a social problem	Fintech for inclusion, accessible edtech, community healthtech
Environmental impact	Business model that solves an environmental problem	Clean energy, circular economy, sustainable agtech
Technological/digital	Business model enabled by digital technology	SaaS, platforms, apps, marketplaces

**These categories are not mutually exclusive. A fintech for financial inclusion is both technological and social impact. A circular economy platform is both technological and environmental impact. The survey asks each actor whether they serve each type and with what level of specialization. Annex B contains the specific questions.**

**Each cell of the map indicates the level of coverage using the same scale as Tool 2:**

**Table 4.9: Coverage Levels**

Symbol	Level	Criterion
○	Absent / Not applicable	Does not serve or is structurally not applicable
●	Low	Limited or occasional coverage
●●	Medium	Regular coverage
●●●	High	High coverage, is the focus of their operation

Some combinations of actor and stage have no operational logic and appear empty, but this does not indicate a problem. Capital Providers do not serve inspired individuals or those in training because their role is to finance companies, not individuals. Private Sector typically does not run initial awareness programs. Academia rarely serves SGBs because these companies have already moved beyond the university stage. These empty cells are structurally normal.

The coverage map identifies three types of findings. First, **gaps in entrepreneurial development**: if early stages have high coverage but company stages have low coverage, trained entrepreneurs will not find support when creating their startups; if the reverse occurs, there will be capital and infrastructure waiting for entrepreneurs who never arrive because no one inspires or trains them. Second, **imbalance by type of entrepreneurship**: an ecosystem may be well equipped for technological ventures but lack the capacity to evaluate and support impact ventures; social and environmental impact metrics require different methodologies that not all actors have mastered. Third, **concentration of roles**: if only one type of actor covers a critical stage, the ecosystem is fragile to any change in that actor.

The comparison between the activity reported in the actor map (Tool 2) and the results of the coverage map indicates the **effectiveness** of the ecosystem:

**Table 4.10: Ecosystem Effectiveness Matrix**

Actor Activity	Flow of Entrepreneurs	Interpretation
High	High	✓ Ecosystem functioning well: activity translates into ventures
High	Low	△ Effectiveness problem: actors exist, but they are not generating flow of entrepreneurs
Low	Low	Normal in a Nascent ecosystem: first capacity must be built
Low	High	△ Fragile ecosystem: results depend on few actors or external factors

The coverage map also identifies where entrepreneurial development is interrupted. If many people are being trained but few are creating startups, there is a blockage in that transition. If there are many startups but few manage to become SGBs, the problem is further along. The survey captures actors’ perceptions about where these blockages occur and why, information that is deepened in Phase 3 with qualitative interviews.

Practitioners interpret the findings of the coverage map in the context of the maturity level identified in Phase 1:

**Table 4.11: Interpreting Findings by Maturity Level**

Finding	Nascent Ecosystem	Developing Ecosystem
<b>Capital Providers absent in early stages</b>	Structurally normal	Structurally normal
<b>Capital Providers with low coverage in startups</b>	Expected, prioritize support services first	Warning sign, requires intervention
<b>Low coverage in environmental entrepreneurship</b>	Acceptable, not a priority yet	Opportunity for differentiation
<b>Only ESOs covering startups</b>	Risky but common	Very risky, diversify actors

The actor map by domain (Tool 2) and the coverage map (Tool 3) offer complementary views of the same ecosystem. The former identifies which domains require attention and how actors collaborate; the latter shows whether those actors are reaching all the entrepreneurs the ecosystem needs to support. A complete diagnostic uses both maps together.

### **Phase 3: In-Depth Interviews**

The third phase seeks to explain causes behind observed patterns. The previous phases identify what exists and how it functions; Phase 3 answers why. Why are investors not active? Why does the pipeline get interrupted at a certain stage? Why hasn’t impact venture capacity developed? What barriers do actors face in coordinating?

Unlike Phases 1 and 2, Phase 3 does not use a standardized questionnaire. Interview questions derive directly from previous phases' findings. This difference is methodologically important: Phases 1 and 2 are deductive (they start from predefined indicators), while Phase 3 is inductive (questions emerge from the findings).

**Table 4.12: Translating Findings into Interview Questions**

Finding in phases 1-2	Questions for Phase 3
Domain with low score	What structural barriers explain this weakness? Has it always been this way? What has been tried?
Actor absent in a domain	Why don't they participate? What would they need to become active? Are there misaligned incentives?
Blockage in the pipeline	Why don't entrepreneurs advance from that stage? Where do they go? What do they lack?
Duplication detected	Is there coordination among the actors? Is there real differentiation or are they competing for the same entrepreneurs?
Low entrepreneurial culture	What historical or social factors explain this? Are there local role models?
Disconnection among actors	What prevents collaboration? Is there competition for resources? Is there a lack of trust?
High activity, but low results	Why doesn't the activity translate into ventures? What is failing?

**The interviews explore five thematic categories that are adapted to specific findings (Annex B includes a guide with example questions by category and by type of finding):**

1. **Causes:** What caused this pattern?
2. **Barriers:** What prevents it from changing? Who benefits from the status quo?
3. **Dynamics:** How do actors interact? Who convenes, who participates, who is absent?
4. **History:** How did the ecosystem evolve? What events marked changes?
5. **Opportunities:** What would change the situation? Who could lead it?

This phase uses in-depth interviews with three groups of informants. The first group are the institutional actors who participated in the surveys and whose responses require explanation: if an investment fund reported low activity, the interview explores the reasons; if an accelerator reported high activity in all domains, the interview delves into how they achieve it. The second group is entrepreneurs: startup and SGB founders who can describe their experience navigating the ecosystem, the support they found, the gaps they faced, and why some decided to migrate to other cities. The third group are the connectors identified in the surveys as ecosystem connectors; their cross-cutting view helps understand dynamics that individual actors do not perceive.

Phase 3 also includes a validation stage where preliminary findings are presented to a representative group of ecosystem actors. This validation serves two purposes: verifying that the interpretation is correct and beginning to build the consensus necessary for coordinated action. Diagnostics without actor validation risk generating resistance when attempting to implement the recommendations.

## **From Diagnostic to Action**

The diagnostic has value when it helps make informed decisions, not when it produces a document that gets filed away. The findings from the three phases are integrated to generate recommendations that meet three criteria:

**Actionable recommendations.** A useful recommendation indicates what to do, who can lead it, and what result is expected. “Strengthen financing” is not actionable; “create an investment-readiness program for startups, operated by local accelerators in coordination with the angel club, to increase deal flow” is.

**Focus on the bottleneck.** Actions in the weakest domain have a higher probability of systemic impact than marginal improvements in domains that are already functioning. If the diagnostic identifies that Finance is the main constraint, the first initiatives should concentrate there.

**Implementation viability.** Recommendations must consider which actors have the capacity and willingness to act, what resources are available, and what windows of opportunity exist. A technically correct but politically unviable recommendation does not generate change.

ANDE’s vision for ecosystem strengthening is clear: ecosystems that eventually organize themselves and reinvest in their own capacity. In Nascent ecosystems, resources for ecosystem public goods come primarily from external sources: international cooperation, global philanthropy, development programs. As the ecosystem matures, internal resources complement and eventually replace these sources: successful entrepreneurs who become angel investors, accelerators that achieve financial sustainability, local governments that allocate budget because they observe returns in employment and tax revenue.

The next chapter translates these diagnostic outputs into specific guidance for each type of ecosystem actor.



## 5. FROM DIAGNOSTIC TO ACTION: ROLE-BASED GUIDANCE

The three phases of the diagnostic produce complementary information. Phase 1, based on public data, generates a domain radar that classifies the ecosystem by maturity level and identifies the bottleneck. Phase 2, through surveys of actors, produces the actor map by domain and the coverage map, which reveal who is active where, which stages of entrepreneurial development are underserved, and what types of entrepreneurship the ecosystem can support. The optional Phase 3 explores the causes behind the observed patterns.

Each tool answers different questions:

- The **domain radar** indicates the overall level of development and points to the weakest domain. It helps calibrate expectations: a Nascent ecosystem should not be compared to a mature one, and appropriate interventions vary according to the stage.
- The **actor map by domain** shows who is present, how actively, and how they collaborate. It reveals gaps (domains without actors), concentrations (possible duplication), and dependencies (fragility if a single actor dominates an area).
- The **coverage map** indicates whether existing actors serve all entrepreneurial stages and all types of entrepreneurship. An ecosystem may have actors in all domains yet still fail if no one serves the transition from trained individuals to startups, or if no actor can support environmental impact ventures.

With these three views, ecosystem actors can answer specific questions: Where should we invest resources? What programs should we design? Who should we collaborate with? What should we stop doing?

This chapter first presents ANDE's findings on what works for strengthening ecosystems, then details how each type of actor can leverage the diagnostic results, differentiating actions by ecosystem maturity level. Finally, it articulates the long-term vision: ecosystems that eventually sustain and manage themselves.

## **What We Know About Strengthening Ecosystems**

ANDE's research on entrepreneurial ecosystems has generated findings that should inform any action. There is no single recipe for success, but there are patterns that guide better decision-making.

**Mature ecosystems share common characteristics.** When studying ecosystems that have reached maturity, common factors emerge: networks linking institutions and entrepreneurs, a culture normalizing entrepreneurship, active support organizations, accessible early-stage financing, and a regulatory environment facilitating rather than obstructing growth. These factors do not guarantee success, but their absence makes success far less likely.

**Connections matter as much as actors.** Having many incubators, funds, and programs is not enough if they operate in silos. Effective ecosystems are those where elements are connected: accelerators know the investors, universities collaborate with businesses, the government engages with entrepreneurs. The diagnostic reveals these connections, or their absence.

**Initiatives should complement, not duplicate.** Before creating a new program, it is worth understanding what already exists. The most effective actions identify real gaps and fill them, rather than competing with existing efforts for the same entrepreneurs. This is one of the most consistent lessons from the ecosystem strengthening literature.

**External and unforeseen factors play a significant role.** Not everything is under control. Many mature ecosystems benefited from fortunate timing: a company growing unexpectedly, a regulatory change at just the right moment, a crisis forcing economic diversification. The most practical strategy is not to force specific results, but to create conditions for the ecosystem to seize opportunities as they arise.

**The goal is to create fertile ground.** Rather than betting everything on a specific initiative, the most effective approach is to strengthen the foundations: improve regulatory conditions, facilitate access to early-stage capital, build contact networks, develop talent. An ecosystem with solid foundations is better prepared to grow when external conditions become favorable.

**Successful entrepreneurs who reinvest are catalysts.** In Nairobi, New York, and other mature ecosystems, a common factor is entrepreneurs who achieved success and chose to reinvest locally: as angel investors, as mentors, as program sponsors. This virtuous cycle is difficult to force, but its presence or absence is an important signal of ecosystem health.

## **Recommendations by Ecosystem Role**

Each ecosystem actor serves a different function and therefore derives different value from the diagnostic. More importantly, the appropriate role of each actor varies according to the ecosystem's maturity level. What a government should do in a Nascent ecosystem is radically different from what

it should do in a Self-Sustaining one. This section presents each actor's role differentiated by maturity level, along with questions the diagnostic helps answer.

### **Foundations and Development Institutions**

Foundations and development agencies occupy a privileged position: they can invest with a long-term horizon, take risks that other actors avoid, and catalyze changes that the market alone would not generate. Their main role is not to replace the private sector or government but to fill temporary gaps while the ecosystem develops its own capacity.

ANDE's research has documented that the most effective interventions are those that identify real gaps and fill them, rather than competing with existing efforts for the same entrepreneurs. The diagnostic enables precisely this: identifying where the bottleneck lies and where investment can have the greatest systemic impact.

**Table 5.1: Role of foundations and development institutions by maturity level**

<b>Maturity</b>	<b>Priority Role</b>	<b>What to Avoid</b>
Nascent	Fund community building and the first awareness programs. Support events that connect dispersed actors. Invest in developing the first ecosystem leaders.	Funding sophisticated programs without an audience. Importing models from other contexts without adaptation. Creating dependence on a single donor.
Emerging	Professionalize existing support organizations. Fund pilot programs that can be scaled. Support the systematization of lessons learned.	Duplicating programs that already work. Competing with local ESOs instead of strengthening them.
Developing	Facilitate connections with international networks. Fund specific gaps that the market does not cover (patient capital, impact entrepreneurship). Support results measurement.	Continuing to fund basic programs that the ecosystem can already sustain. Maintaining dependence on external resources.
Self-Sustaining	Document and disseminate lessons learned. Help the ecosystem support younger ones. Fund innovation and experimentation on new frontiers.	Continuing to intervene where the ecosystem already functions on its own.

### **Reflection Questions**

1. What is the weakest domain that, if addressed, would unlock the entire system?
2. What programs already exist, and how can they be strengthened rather than duplicated?
3. Is the ecosystem mature enough to absorb the program being considered?
4. What critical gaps is no actor currently addressing?
5. Does the proposed intervention build permanent local capacity or create dependence?
6. How will the intervention's success be measured in 24-36 months?

**Government and the Public Sector**

Government holds a unique position in the ecosystem: it can remove barriers that no other actor can eliminate and can bring together actors who would not otherwise collaborate. Its main role is not to create businesses or replace the private sector, but to create conditions that make entrepreneurship a viable option.

Evidence indicates that administrative simplification reforms have high impact at relatively low cost. Reducing the number of days to incorporate a company, digitizing procedures, and creating favorable tax regimes are interventions where only government can act.

**Table 5.2: Role of government and the public sector by maturity level**

<b>Maturity</b>	<b>Priority Role</b>	<b>What to Avoid</b>
<b>Nascent</b>	Simplify basic procedures (business incorporation, permits). Legitimize entrepreneurship as a life option through public communication. Connect actors who are not yet networked.	Creating investment funds without a critical mass of startups. Importing programs designed for other contexts. Centralizing all operations in a single agency.
<b>Emerging</b>	Co-finance initiatives that the private sector cannot yet support on its own. Create tax incentives for angel investment. Facilitate connections with external markets. Reduce specific regulatory barriers identified in the diagnostic.	Duplicating efforts that ESOs are already carrying out. Directly operating programs that others can run better.
<b>Developing</b>	Act as coordinator between government agencies. Institutionalize policies that survive administration changes. Create regulatory frameworks for new business models (fintech, sharing economy).	Competing with the private sector in financing. Creating excessive bureaucracy to access support.
<b>Self-Sustaining</b>	Maintain favorable conditions. Avoid regulatory complacency. Act as international promoter of the ecosystem. Support the development of less mature neighboring ecosystems.	Intervening in dynamics the ecosystem already handles independently. Over-regulating emerging sectors.

**Reflection Questions**

1. How many days and how many procedures does it take to incorporate a company in this territory? How does this compare to the national average?
2. Which government agencies operate entrepreneurship support programs? Is there coordination among them, or is there duplication?
3. Does the diagnostic reveal a weak domain where public action could be catalytic?
4. Do current programs address the real needs identified, or do they reflect imported models?
5. What is the government doing that no one else can do? What is it doing that others could do better?
6. Are entrepreneurship support policies institutionalized, or do they depend on the current administration?

***Entrepreneurial Support Organizations (ESOs)***

ESOs are the ecosystem's operational muscle—incubators, accelerators, mentor networks, and organizations working directly with entrepreneurs. Their value lies in their specialization and agility in responding to changing needs.

The diagnostic allows ESOs to position themselves strategically: identify underserved niches, avoid saturation, and back funding proposals with evidence of the ecosystem's real needs.

**Table 5.3: Role of ESOs by maturity level**

<b>Maturity</b>	<b>Priority Role</b>	<b>What to Avoid</b>
<b>Nascent</b>	Build community through events and gathering spaces. Offer basic awareness programs. Identify and connect the first entrepreneurs. Document local success stories, however small.	Offering sophisticated services without demand. Competing among ESOs when the market is small. Depending on a single funder.
<b>Emerging</b>	Professionalize methodologies and measure results. Specialize in specific stages or sectors. Build alliances with other ESOs to cover the full spectrum. Develop relationships with investors.	Focusing only on awareness when critical mass already exists. Duplicating services that others offer.
<b>Developing</b>	Scale proven programs. Connect entrepreneurs with external markets and capital. Offer specialized services (investment readiness, internationalization). Develop financial sustainability models.	Depending exclusively on grants. Ignoring impact metrics. Serving only tech ventures if there is demand for other types.
<b>Self-Sustaining</b>	Innovate with frontier services. Export methodologies to other ecosystems. Facilitate successful entrepreneurs reinvesting in the ecosystem. Maintain relevance amid technological change.	Stagnating in models that worked but are no longer needed.

**Reflection Questions**

1. What service gaps can our organization fill?
2. What areas show saturation we should avoid?
3. What stage of entrepreneurial development is least served in the ecosystem?
4. What actors could be strategic allies rather than competitors?
5. How can we use the diagnostic findings to strengthen funding proposals?
6. Are our programs generating the results that the ecosystem needs?

### ***Academia and Research Centers***

Academia plays a dual role: training talent the ecosystem needs and generating commercializable knowledge. Its contribution goes beyond university entrepreneurship programs; it includes the quality of technical training, applied research, and technology transfer mechanisms.

The Human Capital domain frequently appears as a bottleneck in developing ecosystems. The shortage of technical talent is hard to solve quickly because it requires years of training. This is why academia has a longer impact horizon than other actors.

**Table 5.4: Role of academia and research centers by maturity level**

<b>Maturity</b>	<b>Priority Role</b>	<b>What to Avoid</b>
<b>Nascent</b>	Introduce basic entrepreneurship education in existing programs. Organize events that expose students to entrepreneurship. Identify research with potential commercial application.	Creating entrepreneurship master's programs without demand. Measuring success only by number of companies created by students.
<b>Emerging</b>	Develop formal entrepreneurship training programs. Create university-business linkage mechanisms. Operate university incubators with professional methodology. Train technical talent aligned with ecosystem needs.	Operating in isolation from the rest of the ecosystem. Ignoring skills gaps reported by employers.
<b>Developing</b>	Strengthen technology transfer and spin-off creation. Offer continuing education programs for entrepreneurs. Attract and retain research talent. Collaborate with corporations on applied R&D.	Measuring success only by academic publications. Creating excessive bureaucracy for technology transfer.
<b>Self-Sustaining</b>	Lead frontier research with commercial application. Attract international talent. Become a regional reference in entrepreneurship training. Document and disseminate ecosystem lessons learned.	Remaining stuck in training models that no longer meet market needs.

### **Reflection Questions**

1. What skills does the ecosystem demand that academia is not providing?
2. Is university research reaching the market? How many patents, spin-offs, or licensing deals are being generated?
3. Do entrepreneurship programs cover all stages or only the initial ones?
4. How many graduates are starting businesses or working in local startups?
5. Are there effective university-industry partnerships?
6. Does trained talent stay in the ecosystem or leave?

**Capital Providers**

Investors—venture capital funds, angels, family offices, development banks—play a role extending beyond providing capital. They validate business models, bring access to networks, and strengthen management practices. Their presence or absence is frequently the factor that determines whether startups can scale.

The diagnostic allows Capital Providers to understand the context in which their portfolios operate and identify both opportunities and systemic risks affecting their investments.

**Table 5.5: Role of capital providers by maturity level**

<b>Maturity</b>	<b>Priority Role</b>	<b>What to Avoid</b>
<b>Nascent</b>	Participate as mentors before acting as investors. Educate the ecosystem about what investors look for. Identify the first entrepreneurs with potential. Invest small amounts in many experiments.	Expecting quality deal flow that does not yet exist. Applying criteria from mature ecosystems to a nascent one.
<b>Emerging</b>	Formalize angel networks. Make the first documented seed investments. Collaborate with ESOs on preparing companies for investment. Attract co-investment from external funds.	Concentrating all capital in a few companies. Ignoring ventures outside the technology sector.
<b>Developing</b>	Diversify instruments (debt, equity, hybrid instruments). Lead rounds and attract external capital. Invest in emerging sectors within the ecosystem. Facilitate connections with exit markets.	Creating destructive competition among investors. Ignoring impact ventures based on traditional metrics.
<b>Self-Sustaining</b>	Lead growth rounds. Facilitate exits that recycle capital back to the ecosystem. Invest in new generations of local funds. Export capital and knowledge to neighboring ecosystems.	Focusing only on the most obvious deals. Losing connection with early stages.

**Reflection Questions**

1. Does this ecosystem have the maturity for the type of investment we want to make?
2. Where is the gap in the funding continuum (seed, Series A, growth)?
3. Do the complementary actors (accelerators, talent, markets) exist for our investments to succeed?
4. What systemic risks do companies in this ecosystem face?
5. Are there successful entrepreneurs reinvesting as angels? Can we co-invest with them?
6. What exit options exist for portfolio companies?

### **Corporations and Large Enterprises**

Corporations can be startup clients, partners, acquirers, or competitors. Their involvement in the ecosystem ranges from corporate social responsibility programs to open innovation strategies that are central to their competitiveness.

The diagnostic reveals collaboration opportunities: startups that solve problems relevant to the business, locally trained talent, and areas where corporate investment can have systemic impact.

**Table 5.6: Role of corporations and large enterprises by maturity level**

<b>Maturity</b>	<b>Priority Role</b>	<b>What to Avoid</b>
<b>Nascent</b>	Participate in ecosystem events. Offer mentorship drawing on corporate experience. Open doors for startups to present solutions. Sponsor awareness programs.	Expecting startups ready to be suppliers when the ecosystem is just forming. Creating innovation programs without real purchasing intent.
<b>Emerging</b>	Launch open innovation programs with genuine commitment. Pilot solutions from local startups. Offer market access as a first customer. Invest in corporate accelerators aligned with the business.	Creating "innovation theater" without results. Extracting value from the ecosystem without contributing.
<b>Developing</b>	Integrate startups as strategic suppliers. Invest directly in relevant startups (corporate venture). Collaborate with academia on R&D. Facilitate access to international markets.	Acquiring startups only to eliminate competition. Ignoring the local ecosystem when seeking innovation only abroad.
<b>Self-Sustaining</b>	Lead sector innovation initiatives. Facilitate exits through strategic acquisitions. Recycle talent and capital back into the ecosystem. Be international ambassadors for the ecosystem.	Becoming complacent with established suppliers. Losing connection with new generations of startups.

### **Reflection Questions**

1. Are there local startups that solve problems relevant to our business?
2. Where can we act for greatest systemic impact: as customers, mentors, investors, or sponsors?
3. Which ecosystem actors should we partner with?
4. What internal barriers prevent collaboration with startups?
5. Are our innovation programs generating real value, or are they just for image?
6. Are we channeling talent and lessons learned back into the ecosystem?

### **Entrepreneurs and Small and Growing Businesses**

Entrepreneurs are the direct beneficiaries of the ecosystem, but they are also actors who shape it. Their decisions about where to locate, with whom to collaborate, and how to grow have ripple effects beyond their own company.

The diagnostic provides visibility into available resources, helps anticipate obstacles, and enables informed decisions about when to seek resources outside the territory.

**Table 5.7: Role of entrepreneurs and SGBs by maturity level**

<b>Maturity</b>	<b>Priority Role</b>	<b>What to Avoid</b>
<b>Nascent</b>	Participate actively in the community, even if small. Share lessons learned with other entrepreneurs. Be visible as a reference case (even if modest). Give feedback to ESOs about what they need.	Working in isolation while waiting for the ecosystem to mature. Leaving at the first obstacle without trying to address it locally.
<b>Emerging</b>	Professionalize operations and measure results. Actively seek available support programs. Build relationships with potential investors. Collaborate with other entrepreneurs rather than seeing them only as competitors.	Waiting for resources to materialize. Ignoring mentorship and training opportunities.
<b>Developing</b>	Seek markets beyond the local territory. Prepare professionally to raise investment. Connect with international networks. Begin giving back to the ecosystem (mentorship, talks, referrals).	Remaining in the comfort zone of the local market. Ignoring internationalization opportunities.
<b>Self-Sustaining</b>	Reinvest in the ecosystem as an angel, mentor, or sponsor. Hire local talent and build teams. Be an ambassador for the ecosystem. Create the next generation of entrepreneurs.	Disconnecting from the ecosystem after success. Taking capital and talent elsewhere.

### **Reflection Questions**

1. What support programs exist for my development stage?
2. Where can I find financing appropriate for my type of company?
3. Which entrepreneur networks and communities are active?
4. What systemic barriers does this ecosystem face that I should anticipate?
5. What can I contribute to the ecosystem, even if my company is small?
6. When does it make sense to seek resources outside the territory?

## **The Goal: Building Self-Sustaining Ecosystems**

We approached this toolkit update with one premise: investing in ecosystem strengthening without understanding current conditions is like prescribing treatment without a diagnosis. The previous chapters provided the tools to conduct that diagnostic. This chapter showed how different actors can use the results. Yet the diagnostic is only the beginning.

The vision behind this work points to a clear goal: **ecosystems that eventually sustain and manage themselves.**

In early stages, resources for ecosystem strengthening come primarily from external sources: international cooperation agencies, global foundations, government programs. This dependence is natural at the beginning, but it cannot be permanent. An ecosystem that depends indefinitely on external resources is fragile.

As the ecosystem matures, external sources should complement and eventually be replaced by internal resources. Entrepreneurs who achieve success become angel investors and mentors. Accelerators develop self-sustaining business models. Corporations establish innovation programs as a business strategy. Governments allocate recurring budget because they see measurable returns.

Some signals that the ecosystem is moving toward self-sustainability:

- **Successful entrepreneurs do not disappear.** They stay, invest in new startups, mentor the next generation, and sponsor programs. This virtuous cycle distinguishes thriving ecosystems from those permanently dependent on outside resources.
- **Support organizations diversify their revenue sources.** They do not depend on a single donor or program.
- **Local capital emerges.** Regional investors begin participating in rounds, not just international ones.
- **Government institutionalizes support for entrepreneurship.** It is not a program that disappears with each administration, but lasting policy.
- **Companies created in the ecosystem remain and grow locally.**

Reaching this point takes time. Ecosystems do not transform overnight. A reasonable timeframe for observing significant changes is 24 to 36 months. ANDE recommends repeating the diagnostic after this period to assess whether the implemented actions had an effect and to adjust priorities based on actual evolution.

This document offers a framework for understanding the ecosystem's current state and guiding interventions. It does not offer guarantees. ANDE's research has documented that successful ecosystems share certain factors but also that many benefited from luck that cannot be intentionally replicated.

What is under control is the quality of the diagnostic, the clarity of priorities, and the coordination among actors. An ecosystem that understands where it stands, that knows its bottleneck, and that has actors willing to collaborate is better prepared to seize opportunities when they arise.

This horizon of self-sustainability represents the most concrete form of systemic change in entrepreneurial ecosystems. It is not about one organization growing or one program succeeding—it is about the entire system functioning differently: resources circulating, actors coordinating without an external facilitator, knowledge passing between generations of entrepreneurs. No single organization can transform an ecosystem by itself. The diagnostic creates the conditions for many organizations to do so together.

***The diagnostic alone does not strengthen the ecosystem; the decisions made based on it will determine whether it does.***

***The Aspen Network of Development Entrepreneurs (ANDE) offers additional resources for diagnostic implementers, including survey templates, analysis guides, and access to a community of practice. More information at [andeglobal.org](http://andeglobal.org)***

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## ANNEX A

### International Ecosystem Diagnostic Frameworks

This appendix presents the 28 international frameworks reviewed to develop the ANDE 2025 toolkit. The table shows the organization responsible for each framework, its primary focus, and the domains it covers.

The frameworks are organized into five categories according to their purpose: global indices that enable international comparisons, conceptual frameworks that offer theoretical reference structures, academic frameworks derived from research, practical tools designed for implementation, and sectoral frameworks focused on specific types of entrepreneurship.

The domains column indicates which ecosystem elements each framework addresses. Some frameworks use different terminology; here we present the closest equivalence to the seven domains of the ANDE toolkit.

**Note: The INF (Infrastructure) category appears in several original frameworks as a separate domain. The ANDE 2025 toolkit integrated physical and digital infrastructure within Support Services and R&D/Innovation, since infrastructure gains value when it operates as an accessible service for entrepreneurs (see Chapter 3).**

### Global Indices and Rankings

Comparative measurements that allow evaluating ecosystems at the international level.

Framework	Organization	Focus	POL	FIN	CUL	SUP	HC	MKT	R&D	INF	Total
BEEPS	EBRD / World Bank	Business environment	✓	✓						✓	3
Digital Platform Economy Index	GEDI	Digital economy		✓				✓	✓	✓	4
Doing Business	World Bank	Regulatory ease	✓								1
GIDES	GEDI	Digital systems	✓	✓				✓	✓	✓	5
Global Competitiveness Index	WEF	Systemic competitiveness	✓	✓			✓	✓	✓	✓	6
Global Entrepreneurship Index	George Mason / GEDI	Attitudes and aspirations	✓	✓	✓		✓	✓			5
Global Entrepreneurship Monitor	GEM	Perceptions and capabilities			✓	✓	✓				3
Global Innovation Index	WIPO	Innovation capacity	✓				✓		✓	✓	4
Global Startup Ecosystem Index	StartupBlink	Comparative rankings		✓		✓		✓		✓	4
Global Startup Ecosystem Report	Startup Genome	Ecosystem performance		✓		✓	✓	✓			4
Kauffman Indicators	Kauffman Foundation	Entrepreneurial dynamism		✓			✓	✓			3

### Conceptual Frameworks

Theoretical models that structure the understanding of entrepreneurial ecosystems.

Framework	Organization	Focus	POL	FIN	CUL	SUP	HC	MKT	R&D	INF	Total
OECD Entrepreneurship Framework	OECD	Structural determinants	✓	✓			✓	✓	✓	✓	6
Six + Six Model	Koltai & Company	Actors and domains	✓	✓	✓	✓	✓	✓			6
Three Elements	Isenberg	Essential elements	✓	✓	✓						3

### Academic Frameworks

Research-derived models that provide theoretical foundations.

Framework	Organization	Focus	POL	FIN	CUL	SUP	HC	MKT	R&D	INF	Total
Babson Ecosystem Project	Babson College	Interconnected domains	✓	✓	✓	✓	✓	✓			6
Cohen Sustainable Valley	Cohen	Sustainability			✓		✓	✓			3
Evolutionary Framework	Mack & Mayer	Life cycles	✓	✓	✓	✓	✓	✓	✓	✓	8
Flexible Recycling	Bahrami & Evans	Dynamic networks					✓	✓	✓		3
Innovation Rainforest	Hwang	Innovation culture			✓	✓	✓				3
Logic Model	Neck et al.	Logic flows				✓	✓		✓		3
Causal Model	Not specified	Causal relationships	✓	✓	✓		✓				4
Sixteen Dimensions	Stephens et al.	Multidimensional complexity	✓	✓	✓	✓	✓	✓	✓	✓	8

### Practical Tools

Methodologies designed for direct implementation in diagnostics.

Framework	Organization	Focus	POL	FIN	CUL	SUP	HC	MKT	R&D	INF	Total
Asset Mapping Roadmap	U.S. Dept. of Labor	Geospatial mapping	✓	✓		✓	✓	✓	✓	✓	7
Chapco Method	Chapman & Co.	Practical methodology		✓		✓		✓			3
Ecosystem Maturity Rubric	Endeavor Insight	Evolutionary maturity		✓		✓	✓	✓			4

### Sectoral Frameworks

Models focused on specific types of entrepreneurship or technology.

Framework	Organization	Focus	POL	FIN	CUL	SUP	HC	MKT	R&D	INF	Total
Five Key Enablers	GSMA	Technology enablers		✓		✓		✓		✓	4
ICT Entrepreneurship	GSMA	Digital ecosystems		✓		✓		✓		✓	4
Social Enterprise	WEF	Social entrepreneurship		✓	✓	✓		✓			4

### Coverage Summary

Domain	Frameworks that include it	Coverage
<b>Finance (FIN)</b>	24 of 28	86%
<b>Human Capital (HC)</b>	22 of 28	79%
<b>Markets (MKT)</b>	21 of 28	75%
<b>Policy (POL)</b>	18 of 28	64%
<b>Support Services (SUP)</b>	17 of 28	61%
<b>Culture (CUL)</b>	12 of 28	43%
<b>R&amp;D/Innovation (R&amp;D)</b>	12 of 28	43%
<b>Infrastructure (INF)*</b>	12 of 28	43%

*\* Infrastructure appears as a separate domain in 12 frameworks; the ANDE 2025 toolkit integrates it into Support Services and R&D/Innovation.*

## ANNEX B

### Indicator System for the Diagnostic

This annex presents the indicators that comprise each phase of the diagnostic. Indicators were selected for their relevance to decision-making, measurement feasibility, and comparability across ecosystems.

Each indicator is classified as Condition (C)—what the ecosystem has—or Result (R)—what it produces. This distinction enables effectiveness assessment: an ecosystem with good conditions but low results has a connectivity problem; one with high results but weak conditions is fragile.

Interpretation of findings should always consider the ecosystem's maturity level (see Chapter 3). What is normal in a Nascent ecosystem may be a warning sign in a Developing one.

### **B.1 Phase 1 Indicators: Public Data**

Phase 1 uses 30 indicators built from public sources. These indicators allow for assessing the ecosystem's profile without requiring direct contact with actors.

#### **Domain 1: Policy and Regulation (3 indicators)**

ID	Indicator	Type	Source	Measurement Criteria
P1	Days to register a business	C	International ease of doing business indices / Government portals	Calendar days from application to formal registration
P2	Existence of special tax regime for startups or new businesses	C	National and local legislation / Tax authority portals	Binary: exists or does not exist
P3	Public entrepreneurship support programs	C	Economy ministry portals, development banks	Number of active programs identified

#### **Domain 2: Finance (6 indicators)**

ID	Indicator	Type	Source	Measurement Criteria
F1	Total reported investment (last 3 years)	R	Global and regional investment databases	Sum of rounds in USD
F2	Number of annual investment rounds	R	Investment databases / Press releases	Annual average over last 3 years
F3	VCs with local presence	C	Investment databases / Venture capital association directories	Funds with at least 1 investment in the region
F4	Active angel investors	C	Angel investment platforms / Local networks	Individuals with documented investments

<b>F5</b>	Documented exits (last 5 years)	<b>R</b>	Investment databases / Press releases	Acquisitions or IPOs of local startups
<b>F6</b>	Public seed capital programs	<b>C</b>	Development bank and promotion agency portals	Active government funds

### Domain 3: Culture (5 indicators)

ID	Indicator	Type	Source	Measurement Criteria
<b>C1</b>	Active entrepreneurship/tech meetups	<b>C</b>	Event and community platforms	Groups with at least 1 event in last 6 months
<b>C2</b>	Ecosystem events (annual)	<b>C</b>	Event platforms / Social media / Press	Conferences, demo days, hackathons
<b>C3</b>	Local specialized media	<b>C</b>	Web search / Directories	Blogs, podcasts, newsletters about local startups
<b>C4</b>	Active online communities	<b>C</b>	Social media / Community platforms	Groups with recent activity (last 30 days)
<b>C5</b>	Level of social trust	<b>C</b>	National or regional values surveys	% of people who believe "most people can be trusted"

**Note: C5 is an indicator available at the country or state level; for local ecosystems, the nearest regional value can be used or marked as unavailable.**

### Domain 4: Support Services (5 indicators)

ID	Indicator	Type	Source	Measurement Criteria
<b>S1</b>	Active accelerators	<b>C</b>	Startup and accelerator directories	Programs with open calls in the last 12 months
<b>S2</b>	Active incubators	<b>C</b>	Educational institution and entrepreneurship directories	Incubators with current operations
<b>S3</b>	Coworking spaces	<b>C</b>	Workspace directories / Maps	Spaces with services for startups
<b>S4</b>	Mentors registered on platforms	<b>C</b>	Mentorship platforms / Entrepreneurship networks	Mentors with active profiles
<b>S5</b>	Average internet speed	<b>C</b>	Connectivity indices	Average download Mbps

**Domain 5: Human Capital (5 indicators)**

ID	Indicator	Type	Source	Measurement Criteria
H1	Universities with entrepreneurship programs	C	University websites / Higher education directories	Institutions with entrepreneurship courses or centers
H2	Tech bootcamps and training programs	C	Bootcamp directories / Local search	Active intensive training programs
H3	Annual STEM graduates	C	Higher education statistics	Graduates from science and technology fields
H4	Tech talent on professional platforms	C	Professional platforms with talent data	Profiles with tech skills in the region
H5	Internet users (% of population)	C	National statistics / International organizations	Percentage of population with internet access

**Domain 6: Markets (3 indicators)**

ID	Indicator	Type	Source	Measurement Criteria
M1	Startups identified in the ecosystem	R	Startup databases / Local directories	Companies founded in the last 10 years with scalable models
M2	Tech corporate offices	C	Professional platforms / Maps / Corporate websites	Tech companies with local physical presence
M3	Identified specialization sectors	C	Startup analysis / Documented clusters	Verticals with startup concentration

**Domain 7: R&D/Innovation (3 indicators)**

ID	Indicator	Type	Source	Measurement Criteria
I1	Patents registered (last 5 years)	C	National and international intellectual property offices	Patents with inventors from the region
I2	Research centers	C	Research center directories / Science agencies	Centers with documented R&D activity
I3	Indexed scientific publications	C	Academic publication databases	Articles with local institutional affiliation

## B.2 Phase 2 Indicators: Actor Surveys

Phase 2 uses 53 indicators collected through surveys administered to ecosystem actors. Indicators are organized into four blocks:

- **Block A:** Activity by domain (25 indicators)
- **Block B:** Entrepreneurial pipeline (8 indicators)
- **Block C:** Types of entrepreneurship (10 indicators)
- **Block D:** Cross-cutting dynamics (10 indicators)

### Block A: Activity by Domain (25 indicators)

This block measures what ecosystem actors do: programs they operate, entrepreneurs they serve, resources they deploy, and their perception of ecosystem conditions.

#### Policy and Regulation

ID	Indicator	Question	Data	Actors
AD1	Programs operated	How many entrepreneurship support programs does your organization currently operate?	Number	Gov., ESOs
AD2	Program beneficiaries	How many entrepreneurs or businesses benefited from these programs in the last year?	Number	Gov., ESOs
AD3	Perception of regulatory framework	How favorable is the regulatory framework for starting a business in this ecosystem?	Scale 1-5	All
AD4	Policy continuity	Do public policies supporting entrepreneurship persist across changes in administration?	Scale 1-5	All

#### Finance

ID	Indicator	Question	Data	Actors
AD5	Investments made	How many investments or financing transactions did your organization make to entrepreneurs in the last year?	Number	Gov., ESOs, Capital P., Priv. S.
AD6	Total amount invested	What was the total amount invested or channeled to entrepreneurs in the last year?	USD	Gov., ESOs, Capital P., Priv. S.
AD7	Average ticket size	What is the typical investment or financial support amount per entrepreneur?	USD	Gov., ESOs, Capital P., Priv. S.
AD8	Perception of access to capital	How easy is it for local entrepreneurs to access financing?	Scale 1-5	All
AD9	Non-dilutive financing	Are there accessible non-dilutive financing options (grants, subsidies, soft loans)?	Scale 1-5	All

**Culture**

ID	Indicator	Question	Data	Actors
AD10	Events held	How many entrepreneurship-related events did your organization hold or sponsor in the last year?	Number	Gov., Acad., ESOs, Priv. S.
AD11	Event attendees	How many people attended these events in total?	Number	Gov., Acad., ESOs, Priv. S.
AD12	Perception of entrepreneurial culture	How socially valued is being an entrepreneur in this ecosystem?	Scale 1-5	All
AD13	Tolerance for failure	How accepted is business failure in the local culture?	Scale 1-5	All

**Support Services**

ID	Indicator	Question	Data	Actors
AD14	Entrepreneurs served	How many entrepreneurs or businesses did your organization serve in the last year?	Number	All
AD15	Incubation / acceleration programs	How many structured incubation or acceleration programs does your organization operate?	Number	Gov., Acad., ESOs, Priv. S.
AD16	Program graduates	How many entrepreneurs or businesses completed (graduated from) these programs in the last year?	Number	Gov., Acad., ESOs
AD17	Post-program success rate	Of the graduates, what percentage is still operating or has raised investment after 2 years?	Percentage	Gov., Acad., ESOs
AD18	Perception of infrastructure	How adequate is the entrepreneurship support infrastructure in the ecosystem? (coworkings, labs, connectivity)	Scale 1-5	All

**Human Capital**

ID	Indicator	Question	Data	Actors
AD19	People trained in entrepreneurship	How many people did your organization train in entrepreneurial skills in the last year?	Number	Gov., Acad., ESOs, Priv. S.
AD20	Perception of technical talent	How easy is it to find technical talent for startups in this ecosystem?	Scale 1-5	All
AD21	Perception of digital skills	How easy is it to find talent with digital skills? (programming, data, UX)	Scale 1-5	All

**Markets**

ID	Indicator	Question	Data	Actors
<b>AD22</b>	Startup-corporate connections	How many connections between startups and corporates did your organization facilitate in the last year?	Number	ESOs, Capital P., Priv. S.
<b>AD23</b>	Access to first customers	How easy is it for local startups to acquire their first customers?	Scale 1-5	ESOs, Capital P., Priv. S.

**R&D/Innovation**

ID	Indicator	Question	Data	Actors
<b>AD24</b>	Technology transfer projects	How many technology transfer projects or spin-offs did your organization generate in the last year?	Number	Gov., Acad., ESOs, Priv. S.
<b>AD25</b>	University-business collaboration	How active is collaboration between research institutions and businesses in the ecosystem?	Scale 1-5	Gov., Acad., ESOs, Priv. S.

**Block B: Entrepreneurial Pipeline (8 indicators)**

This block measures the number of individuals and businesses at each stage of entrepreneurial development. The first two stages (inspired and trained) count people; the next two (startups and SGBs) count businesses. Block B captures outcome indicators for the ecosystem.

ID	Indicator	Question	Data	Actors
<b>PE1</b>	Flow at inspiration stage	How many people at the "considering entrepreneurship" stage did your organization serve in the last year?	Number	Gov., Acad., ESOs
<b>PE2</b>	Flow at training stage	How many people in entrepreneurial training did your organization serve in the last year?	Number	Gov., Acad., ESOs, Priv. S.
<b>PE3</b>	Startups served	How many startups (businesses validating their model) did your organization serve in the last year?	Number	All
<b>PE4</b>	SGBs served	How many SGBs (small and growing businesses) did your organization serve in the last year?	Number	Gov., ESOs, Capital P., Priv. S.
<b>PE5</b>	Perception of overall flow	Are there enough entrepreneurs and businesses at each stage for the ecosystem to function?	Scale 1-5	All
<b>PE6</b>	Pipeline blockage	At which stage does entrepreneur advancement "break" or get interrupted?	Selection	All

<b>PE7</b>	Reason for interruption	Why do you think advancement gets interrupted at that stage?	Open-ended	All
<b>PE8</b>	Destination of those who do not advance	What happens to entrepreneurs or businesses that do not advance to the next stage?	Multiple selection	All

**Options PE6: Inspiration / Training / Startup / SGB / None**

**Options PE8: Migrate to another ecosystem / Quit / Get employed / Pivot / Other**

**Block C: Types of Entrepreneurship (10 indicators)**

This block characterizes the ecosystem’s capacity to support different types of entrepreneurship based on their impact and business model.

**Definitions**

Type	Description	Examples
<b>Social impact</b>	Business model that solves a social problem	Fintech for inclusion, accessible edtech, community healthtech
<b>Environmental impact</b>	Business model that solves an environmental problem	Clean energy, circular economy, sustainable agtech
<b>Technological/digital</b>	Business model enabled by digital technology	SaaS, platforms, apps, marketplaces

**Note: These categories are not mutually exclusive. A venture can be technological AND social impact.**

**Service Indicators**

ID	Indicator	Question	Data	Actors
<b>TE1</b>	Service to social impact ventures	Does your organization serve ventures whose business model solves a social problem?	Scale 0-3	All
<b>TE2</b>	Service to environmental impact ventures	Does your organization serve ventures whose business model solves an environmental problem?	Scale 0-3	All
<b>TE3</b>	Service to technology ventures	Does your organization serve ventures whose business model is enabled by digital technology?	Scale 0-3	All

**Scale 0-3: 0=We do not serve, 1=Occasionally, 2=Regularly, 3=It is our main focus**

**Specialized Capacity Indicators**

ID	Indicator	Question	Data	Actors
TE4	Specialized capacity for social impact	Does your organization have methodologies, resources, or personnel specific to social impact ventures?	Yes/No/In development	Gov., Acad., ESOs, Capital P.
TE5	Specialized capacity for environmental impact	Does your organization have methodologies, resources, or personnel specific to environmental impact ventures?	Yes/No/In development	Gov., Acad., ESOs, Capital P.
TE6	Specialized capacity for technology	Does your organization have methodologies, resources, or personnel specific to technology ventures?	Yes/No/In development	All

**Ecosystem Perception Indicators**

ID	Indicator	Question	Data	Actors
TE7	Perception of impact demand	Are there enough entrepreneurs focused on solving social or environmental problems in the ecosystem?	Scale 1-5	All
TE8	Perception of tech demand	Are there enough entrepreneurs with technology-based business models in the ecosystem?	Scale 1-5	All
TE9	Perception of impact supply	Does the ecosystem have enough specialized resources (funds, accelerators, mentors) for impact ventures?	Scale 1-5	All
TE10	Perception of tech supply	Does the ecosystem have enough specialized resources for technology ventures?	Scale 1-5	All

**Block D: Cross-Cutting Dynamics (10 indicators)**

This block explores connections, coordination, and leadership within the ecosystem.

ID	Indicator	Question	Data	Actors
DT1	Collaboration among actors	Is there effective collaboration among different types of actors in the ecosystem?	Scale 1-5	All
DT2	Information flows	Does information about opportunities and resources flow adequately in the ecosystem?	Scale 1-5	All
DT3	Duplication of efforts	Do you identify duplication or unnecessary competition among ecosystem actors?	Scale 1-5	All
DT4	Institutional coordination	Is there effective coordination among institutions that support entrepreneurship?	Scale 1-5	All
DT5	Successful entrepreneurs reinvesting	Are there entrepreneurs who achieved success and now reinvest in the ecosystem as investors, mentors, or sponsors?	Scale 1-5	All

DT6	Overall satisfaction with the ecosystem	How satisfied are you with the overall conditions for entrepreneurship in this ecosystem?	Scale 1-5	All
DT7	Main constraints	What are the 3 main obstacles for entrepreneurs in this ecosystem?	Open-ended	All
DT8	Missing actors	What types of actors or services are missing in the ecosystem?	Open-ended	All
DT9	Recent evolution	How has the ecosystem changed in the last 3 years?	Selection	All
DT10	Connectors identified	Who coordinates or connects ecosystem actors? Name people or organizations.	Open-ended	All

**Scale DT3: 1=Significant duplication, 5=No duplication**

**Options DT9: Improved significantly / Improved somewhat / No change / Worsened somewhat / Worsened significantly**

### **Phase 2 Indicator Summary**

<b>Block</b>	<b>Indicators</b>	<b>Type</b>
A: Activity by Domain	25	Condition
B: Entrepreneurial Pipeline	8	Result
C: Types of Entrepreneurship	10	Characterization
D: Cross-Cutting Dynamics	10	Diagnostic
<b>Total</b>	<b>53</b>	

### **Questions by Actor Type**

<b>Actor</b>	<b>Block A</b>	<b>Block B</b>	<b>Block C</b>	<b>Block D</b>	<b>Total</b>
<b>Gov.</b>	23	8	10	10	51
<b>Acad.</b>	19	7	10	10	46
<b>ESOs</b>	25	8	10	10	53
<b>Capital P.</b>	16	6	10	10	42
<b>Priv. S.</b>	20	7	9	10	46

### **B.3 Guide for Phase 3: In-Depth Interviews**

Phase 3 uses in-depth interviews to explain patterns observed in the previous phases. Unlike Phases 1 and 2, it does not have a standardized questionnaire; questions are derived from the specific findings of each diagnostic.

## Thematic Categories

Interviews explore five categories:

Category	Typical Questions
<b>Causes</b>	What caused this pattern? When did it start? What factors explain it?
<b>Barriers</b>	What prevents change? Who benefits from the status quo? What resources are missing?
<b>Dynamics</b>	How do actors interact? Is there coordination or competition? Who leads?
<b>History</b>	What was the ecosystem like 5-10 years ago? What events marked turning points?
<b>Opportunities</b>	What would change the situation? Who could lead it? What resources are needed?

## Translating Findings into Questions

Finding in Phases 1-2	Suggested Questions
<b>Domain with low score</b>	What structural barriers explain this weakness? Has it always been this way?
<b>Actor absent from domain</b>	Why do they not participate? What incentives would they need?
<b>Pipeline blockage</b>	Why do entrepreneurs not advance? Where do they go?
<b>Duplication detected</b>	Is there coordination among you? Is there real differentiation?
<b>High activity, low results</b>	Why does activity not translate into ventures?
<b>Low capacity for impact/tech</b>	Why has specialized capacity not developed?

## Informant Groups

Group	Suggested Number	Selection Criteria
Institutional actors	8-12	Atypical survey responses, strategic actors
Entrepreneurs	5-8	Different stages, different types of entrepreneurship
Connectors	3-5	Frequently mentioned in DT10

## Identifying Connectors

During interviews, always include these questions:

1. Who do you turn to when you need to connect with another ecosystem actor?
2. Who knows everyone in this ecosystem?
3. Who convenes when there is a collective initiative?
4. If someone new arrives in the ecosystem, who should they talk to first?

Names that appear repeatedly are candidates for ecosystem connectors.

## B.4 Recommended Data Sources

### International Sources by Data Type

Data Type	Recommended Sources
Investments and startups	Global investment databases (Crunchbase*, PitchBook*), regional capital associations (LAVCA, AVCA, AVCJ)
Ease of doing business	B-READY (World Bank), Competitiveness indices (WEF, IMD)
Events and communities	Event platforms (Meetup, Eventbrite), Social media
Talent and employment	Professional platforms (LinkedIn), National labor statistics
Connectivity	Internet speed indices (Speedtest/OOKLA), Telecommunications reports
Intellectual property	National patent offices, WIPO, USPTO, EPO
Scientific publications	Academic databases (Scopus*, Web of Science*)
Culture and values	World Values Survey, Global Entrepreneurship Monitor (GEM), National surveys
Demographic statistics	National statistics institutes, World Bank, OECD

*\* Indicates sources that require paid subscription*

### Sources by Region

Region	Types of Local Sources to Consult
<b>Latin America</b>	Capital associations (LAVCA, national associations), Development banks (IDB, CAF, national banks), Innovation agencies
<b>Africa</b>	AVCA, AfDB, Disrupt Africa, Briter Bridges
<b>Asia</b>	AVCJ, Tech in Asia, e27, National innovation agencies
<b>Europe</b>	Invest Europe, EIF, National innovation agencies
<b>North America</b>	NVCA, CVR, State economic development agencies



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ANDE offers additional resources for diagnostic implementers, including survey templates, analysis guides, and access to a community of practice. More information at [andeglobal.org](http://andeglobal.org)



Instituto de Emprendimiento  
Eugenio Garza Lagüera