MAIN MESSAGES

Developing Entrepreneurial Ecosystems for Digital Businesses and Beyond

A Diagnostic Toolkit

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An entrepreneurial ecosystem is characterized by the structure and interactions of organizations, firms, institutions, and individuals in a specific locale that is conducive to entrepreneurship. It can be defined as a set of interdependent actors and factors that are governed in such a way that they enable productive entrepreneurship in a particular territory.

WHY ARE ENTREPRENEURIAL ECOSYSTEMS IMPORTANT?

• Starting a successful business requires a combination of several complementary factors beyond entrepreneurial talent. Entrepreneurs need physical, human, and knowledge capital to transform ideas into products and services; they also need customers to buy their products and services. Further, they need finance and business-friendly regulations that facilitate resource allocation, particularly for digital, growth-oriented start-ups that need to scale up fast.

• These complementary factors are burdened by mobility costs that make the local and subnational environments critical to the quality of the entrepreneurial ecosystem.

• The challenge for entrepreneurs in developing countries starts with the lower availability of these resources (physical, human, and knowledge capital) and, in most circumstances, more limited local market demand than in developed countries. These are binding constraints even when other important factors, such as better regulations and finance, are available.

FRAMEWORK OF ENTREPRENEURIAL ECOSYSTEMS

• The World Bank Group has developed a new approach to ecosystem assessments. This approach builds on the Bank’s expertise in collecting and analyzing firm-level data, assessing the quality and efficiency of policies that support innovation and small and medium enterprise development, and deriving insights from spatial economics to inform subnational analysis.

• This new generation of ecosystem diagnostics has been piloted in Central America (Costa Rica, El Salvador, Guatemala, and Honduras), Kenya, Mexico, Nigeria, Romania, Senegal, South Africa, and Vietnam. It captures business entry and growth, supply and demand factors, barriers to the efficient allocation of resources, the quality of intermediary institutions such as incubators and accelerators, and digital market regulations that affect digital start-ups.

• Figure 1 summarizes the conceptual framework used in the World Bank assessment methodology. The framework can be used to assess entrepreneurship outputs through three dimensions: entry of new firms, firms’ growth, and innovation. The factors that determine these outputs are organized in three pillars: (1) resource endowments (physical capital, human capital, and knowledge), (2) demand for resources in the ecosystem (driven by new entrepreneurs, incumbent firms, and markets), and (3) accumulation and allocation barriers (access to finance, regulations, culture). All these factors can be affected by public policies and support from enablers (especially intermediary organizations).

• The methodology is organized into three stages: (1) context analysis (cross-country benchmarking and local entrepreneurial ecosystems); (2) mapping of public programs, regulations, and intermediary organizations supporting entrepreneurship; and (3) policy options for enhancing ecosystems.
THE DIAGNOSTIC TOOLKIT

The toolkit consists of six modules. Each module provides a detailed methodology of different analytical instruments associated with each stage of analysis, including references to data sources and examples of implementation for practitioners. Although each module can be implemented independently and through different stages, there are important complementarities between them.

Part 1: Context

**Module 1: Cross-country context analysis.** This module provides a snapshot of a country’s entrepreneurial ecosystem at the national and subnational levels based on the conceptual framework.

**Module 2: Assessing local entrepreneurial ecosystems.** This module describes a method for identifying potential local entrepreneurial ecosystems based on economies of agglomeration and by considering the diversity and quality of firms, using firm- or establishment-census data. Practitioners can use this method to select strategic localities for deep-dive analyses.

**Module 3: Digital entrepreneurship and tech start-ups.** This module describes how to assess digital entrepreneurship and tech start-ups using a new World Bank longitudinal data set of 200,000 digital businesses in 190 countries. It also describes the specifics to consider when conducting a diagnostic focusing on platform-based or data-driven business models that exert network effects (box 1).

Part 2: Mapping

**Module 4: Mapping public programs and intermediary organizations.** This module describes how to map and analyze a policy mix by identifying and analyzing the characteristics of public programs and intermediary organizations that support entrepreneurship. This exercise can identify gaps or overlaps of initiatives already in place to prioritize resources for the programs likely to have the greatest impact.

**Module 5: Digital market regulations.** This module compiles a set of regulations (such as platform regulations and data regulations) that apply to firms adopting digital business models. After the diagnostics, certain regulatory reforms and enforcement capacity-building programs can be proposed.

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**FIGURE 1**

**Entrepreneurial ecosystem framework**

Source: Audretsch, Cruz, and Torres 2022.
Part 3: Policy

Module 6: Policy options to support entrepreneurial ecosystems. This module summarizes how to use the diagnostic conducted through previous modules to identify key gaps and priorities for policy interventions, including instruments for consultation and validation with stakeholders. It also provides a list of policy instruments, including references to evidence when available, and discusses specifics of financing options targeting tech firms. Finally, it summarizes some of the instruments the World Bank has used to support entrepreneurship programs.

PRINCIPLES TO FOLLOW WHEN IMPLEMENTING ENTREPRENEURIAL ECOSYSTEM PROGRAMS

- Strengthening an entrepreneurial ecosystem is complex because the outcome depends on the interdependency of these numerous driving factors. Addressing a few policy areas alone may not bring the expected results; for example, many entrepreneurship programs focus on ecosystem support organizations without addressing other bottlenecks.

- Successful cases from advanced economies may not be proper benchmarks for developing economies. Policymakers in developing countries often search for a mechanism by which to replicate successes such as Silicon Valley. Even though many lessons can be useful, the extent of the complementary factors in Silicon Valley is unlikely to be replicated elsewhere.

- Enabling institutions and intermediary organizations (e.g., incubators and accelerators) should be subject to performance-based indicators that capture the quality of their advice and networks. These indicators need to go beyond “number of start-ups created” and also consider how impactful they are.

- Practitioners should be urged to conduct diagnostics using the highest-quality data possible, especially firm-level data, so that programs are based on a solid theory of change with a clear set of problems and expected results identified ex ante. This approach helps “discipline” entrepreneurial ecosystem programs to develop clear objectives, to target beneficiaries, and to use monitoring and evaluation results to inform and revise program design as needed. These diagnostic efforts can greatly increase the impacts and efficiency of entrepreneurship programs (box 2).
What should we do less when developing entrepreneurial ecosystems?

The following is common feedback received from practitioners implementing entrepreneurial ecosystem programs in developing countries:

- The mix of donor support in the market can be helpful, but entrepreneurs often report that these donor programs are narrowly focused. Although grants may follow a donor’s policy objectives, they may not address a priority area for the local ecosystem. External support should not be purely supply driven. Rather, it needs to be designed with a sense of the shape and performance of the local ecosystem and tailored accordingly.

- Whether the classic Silicon Valley–style early-stage technology financing model works particularly well in many emerging markets is questionable. The lack of deal flows, difficulty in scaling up quickly (because of shallower markets, a small middle class, a more conservative corporate sector, weak enabling infrastructure, and hesitancy toward some digital business models), and general business regulation challenges mean that there is not the exit market (and returns) that fuels the US model.

- Expectations about entrepreneurship and its potential need to be managed. There is much discussion about unicorns (and “creating unicorns” is often a stated goal of entrepreneurship-support strategies). But the type of hyper growth that creates unicorns is very rare in emerging markets given shallow markets, talent shortages, and many other challenges.

- Ensuring incubation and acceleration centers have quality personnel and a commercial approach is vital. Too many ecosystem-support organizations are run in an amateur fashion by governments or universities or as property management ventures (for example, co-working spaces). They are rarely financially viable without subsidies at any stage of their operation and need several years of support before being able to stand on their feet (if ever)—rendering such facilities costly and often ineffective. Public or donor support to such ecosystem-support organizations needs to be contingent on the presence of a realistic commercial business model and performance-based indicators that capture the quality of their services (for example, the number of ventures that actually scale up in the medium term and not just the number of start-ups created).

Source: Summary of interview results and common critiques from the literature.