

Entrepreneurial Ecosystems Literature and Frameworks

The following are brief synopses of some of the literature addressing entrepreneurial ecosystems. This is not an exhaustive review but does provide an introduction to some authors and concepts. The reviews here are meant to provide applicants reference resources for understanding the logic and current work in the field of entrepreneurship driving the creation of ROI as a strategy in Oregon.

Resources:

Energizing Entrepreneurs: Charting a Course for Rural Communities

Markley, D., Macke, D. & Luther V. September 2005. Lincoln, NE: Heartland Center for Leadership Development. [Resource download.](#)

Energizing Entrepreneurs is a guide for the rural community leader who is helping to transform their communities into hotbeds of entrepreneurship. It discusses what communities can do to energize entrepreneurship in general, and how to support local entrepreneurs individually. Packed with insightful tips and advice from experts with years of experience in the field, *Energizing Entrepreneurs* is a “must have” for anyone working to create supportive environments for entrepreneurs, new sources of wealth and sustaining economic betterment.

Startup Communities

Feld, B. September 2013. Hoboken, NJ: John Wiley & Sons, Inc.

“Startup communities” are popping up everywhere, from cities all over the United States like Boulder, Boston, New York, Seattle, and Omaha to countries like Iceland. These entrepreneurial ecosystems are driving innovation, new business creation, and job growth. *Startup Communities* documents the strategy, dynamics, tactics, and long-term perspective required for building communities of entrepreneurs who can feed off of each other’s talent, creativity, and support. So, if you think Silicon Valley is the only place to start your next venture, think again. These days, great business ideas can come from anywhere, and this audiobook is the smart wake-up call you’ve been waiting for.

Disrupted: Strategy for Exponential Change

Quick, L. & Platt, D. September 2015. Victoria, Australia: Resilient Futures Media.

Disrupted is a guidebook to the exponential era and a toolbox for proactively leveraging change. By exploring well-known examples of disruption-opportunists like Apple and Tesla Motors, *Disrupted* helps readers to understand the kind of “strategic thinking” that allow teams and leaders to confidently pursue opportunities with a shared strategic language, and a methodology designed for timely and agile execution at all levels of their organization.

Entrepreneurial Ecosystem Diagnostic Toolkit

Aspen Network of Development Entrepreneurs. December 2013. Washington, DC: The Aspen Institute. [Document download.](#)

The toolkit presents findings from a review of nine frameworks that are designed to assess entrepreneurial ecosystems. The frameworks vary based on geographic unit of analysis, level of detail, and domains of analysis. The assessment frameworks address one or more of three foci: entrepreneurship determinants (e.g., services, finance), entrepreneurial performance (e.g., number of firms, firm survival rate, jobs created), and impact (e.g., employment levels, GDP). The authors define eight factors (culture, finance, human capital, infrastructure, markets, policy, business support, R&D) and offer a draft set of indicators for each, though suggest that indicators be tailored (e.g., additions or deletions) as appropriate.

Enabling Entrepreneurial Ecosystems

Auerswald, P. A. October 2015. Kansas City, MO: Ewing Marion Kauffman Foundation. [Document download](#).

The author provides an in-depth exploration of the meaning of entrepreneurship and discusses the meaning and relevance of the ecosystem concept to entrepreneurship. The author also cites research on factors that influence entrepreneurs' location and start-up decisions (finance, human resources, market opportunities, quality of life of location). Six strategies for enabling entrepreneurial ecosystems are offered: favor incumbents less; listen to entrepreneurs; map the ecosystem; think big, start small, move fast; avoid artificially segmenting your community or your strategies.

A critical review of entrepreneurial ecosystems: towards a future research agenda

Borissenko, Y. and Boschma, R. (November 2016). The Netherlands: Utrecht University. [Review download](#).

This paper explores the concept of entrepreneurial ecosystems, including limits to current theory. The information may be useful for informing program design and evaluation.

How to Cook Up a Vibrant Entrepreneurial Ecosystem

Ewing Marion Kauffman Foundation. November 4, 2015. Entrepreneurship Policy Digest.

This policy digest offers three myths and facts regarding entrepreneurial ecosystems and provides "ingredients" for a recipe for entrepreneurial success. The suggest that venture capital is not essential for ecosystems to flourish; business performance is not correlated with incubator and accelerator affiliation; incubator and accelerator quality vary dramatically and additional research regarding their effects is needed; and university research funding does not necessarily lead to more new business creation.

City Initiatives for Technology, Innovation, and Entrepreneurship: A Resource for City Leadership

Gibson, J., Robinson, M. and Cain, S. 2015. [Download the report](#).

City Initiatives for Technology, Innovation, and Entrepreneurship (CITIE) supports policymakers to create policy initiatives that catalyze innovation and entrepreneurship in cities. The focus is on tech and innovation, however, a number of points are relevant to entrepreneurship in general. The CITIE effort includes a diagnostic tool and survey of 40 leading cities from around the world. Three key findings from high-performing governments include: policy coherence (policies in one area don't undermine policies in another); default to openness (habitually connect with people outside of city hall to solve problems); government work styles more closely associated with start-ups than bureaucracies. The CITIE framework identifies nine roles in three policy dimensions that can influence entrepreneurship and innovation. These policy dimensions (and roles) are openness (regulator, advocate, customer), infrastructure (host, investor, connector), leadership (strategist, digital governor, datavore).

Introducing the Entrepreneurship Ecosystem: Four Defining Characteristics

Isenberg, D. May 25, 2011. Forbes.

The author suggests that each entrepreneurial ecosystem is unique but that all are comprised of six domains (factors), which consist of hundreds of elements. The six general domains include culture, finance, human capital, markets, policy, and supports. The author suggests that success breeds success and that once the six domains are strong enough they become relatively self-sustaining.

How to Start an Entrepreneurial Ecosystem

Isenberg, Daniel J. 2010. Harvard Business Review 88(6): 40-50.

The author emphasizes that ecosystem performance is a function of the interaction between ecosystem elements, not merely the presence of those elements. He suggests a holistic approach and offers nine principles for creating an entrepreneurial ecosystem. These include shaping an ecosystem to local conditions and engaging the private sector from the start. Of particular value, the

article includes a set of questions for assessing entrepreneurial ecosystem that may be adapted for use on the ROI survey.

The article generated significant interest and the author wrote a follow-up piece titled *How to Start an Entrepreneurial Ecosystem in Six Months*. The second article suggests the following: start local; get the word out quickly via town halls, convenings, and meetings; connect resources online and in bricks and mortar spaces; support and mentor entrepreneurs and latent entrepreneurs to find customers, advisors, investors, and business partners; bring visibility; have a small group of advisors; connect to leaders.

The entrepreneurial development system: Transforming business talent and community economies

Lichenstein, Gregg A., and Lyons, Thomas S. 2001. *Economic Development Quarterly*. 15(1): 3-20.

The focus here is on entrepreneurial development systems rather than entrepreneurial ecosystems, however, the article has value for considering the technical, managerial, entrepreneurial, and personal skills identified as important to for entrepreneurial development.

Gauging a Region's Entrepreneurial Potential

Low, S. Henderson, J. and Weiler, S. 2005. *Economic Review*. 90(3): 61-89.

The authors propose measures to assess the breadth (quantity) of entrepreneurs and depth (quality) of entrepreneurs in a region. The first is calculated as the number of self-employed persons divided by the total employment and the later is calculated by average income and revenue capture. The measures are intended to assess the degree to which entrepreneurs add value in the form of income, wealth, or jobs. The authors suggest a range of factors that influence breadth and depth including the size of the local economy, human capital, amenities, financial capital, and infrastructure.

The evolutionary dynamics of entrepreneurial ecosystems

Mack, E., and Mayer, H. 2016. *Urban Studies* 53(10): 2118-2133.

Using Phoenix, Arizona, as a case, the authors explore how elements of an entrepreneurial ecosystem interact and evolve over time. The authors use Isenberg's six factors (policy, finance, culture, support, human capital, markets, and policy) and create metrics for the stages of ecosystem birth, growth, sustainment, and decline. Their assessment statements could be adapted for use on the ROI assessment.

Creating entrepreneurial communities: building community capacity for ecosystem development

Markley, D. Lyons, T., and Macke, D. 2015. *Community Development Journal* 46(5):580-598.

The authors suggest a systems approach to entrepreneurial development that bridges business development approaches (i.e., a focus on individual entrepreneurs) and community development approaches (i.e., a focus on place context). Building on the work of Lichtenstein and Lyons they suggest a focus on enhancing the skills of entrepreneurs (technical, managerial, entrepreneurial, and personal maturity), while also enhancing the system of supports available to entrepreneurs.

Making (and Measuring) an Entrepreneurial Ecosystem

Meyers, M. 2015. *Economic Development Journal*. 14(3): 28-36.

This article identifies key entrepreneurial ecosystem activities to be mapping assets, making them visible, and strengthening the network. The author suggests that communities exist at various stages of entrepreneurial development and that programs and metrics need to be appropriately matched to a community's stage, though does not define these various stages.

Creating an Entrepreneurial Appalachian Region: Findings and Lessons from an Evaluation of the Appalachian Regional Commission's Entrepreneurship Initiative 1997-2005

RUPRI Center for Rural Entrepreneurship and Appalachian Regional Commission. 2008. [Download report.](#)

This report includes impacts, lessons for practitioners and policy makers, and recommendations. Key lessons include incorporating capacity assessment and capacity building into program design, focusing investments on long term approaches, requiring initiatives to be market driven and practice continuous improvement, emphasizing investments in initiatives that demonstrate the ability to partner and collaborate, and investing in evaluation.

Measuring an Entrepreneurial Ecosystem

Stangler, D. and Bell-Masterson, J. March 2015. Kansas City, MO: Ewing Marion Kauffman Foundation. The authors propose four indicators of entrepreneurial ecosystem vibrancy (density, fluidity, connectivity, and diversity) and suggest potential measures for each. The article includes an appendix of potential data sources and gaps.

The Rainforest Canvas

T2 Venture Capital. Nd. [Download report.](#)

Designed similarly to a business model canvas, the *Rainforest Canvas* is used to identify assets and opportunities in the following nine categories: Leaders, Stakeholders, Frameworks, Resources, Activities, Engagement, Role Models, Infrastructure, Capability and Community, Culture. Questions are listed for each and some could be adapted for use on the ROI assessment.

Building the Rural Economy with High-Growth Entrepreneurs

Henderson, J. September 2002. Economic Review Q3: Federal Reserve Bank of Kansas City. [Download report.](#)

Entrepreneurs create economic growth in their communities by forming new firms. Each year during the past decade, more than half a million businesses were started that added new jobs in the United States. In the 1990s, during the longest economic expansion in the United States economy, the majority of new jobs were created by small- and medium-sized entrepreneurs operating high-growth businesses. Because entrepreneurs are such a wellspring of growth in the economy, many rural policymakers have shifted their long-time focus of recruiting existing firms, such as branch plants, to developing new entrepreneurs. New policies generally support a wide range of entrepreneurs. However, policies often fail to recognize that the benefits of entrepreneurs can vary dramatically, depending on the entrepreneur's desire to build a high-growth business. And rural areas often lack these high-growth entrepreneurs. Henderson reviews entrepreneurial activity in rural America and discusses some of the new ways policymakers are beginning to encourage high-growth entrepreneurs in their communities. After discussing the benefits entrepreneurs offer communities, he examines the pattern of entrepreneurship in rural areas and the difficulties many rural communities face in supporting high-growth entrepreneurs. Finally, he discusses some of the policies supporting the startup and growth of this valuable resource.

Community Readiness

RUPRI. December 2013. Lincoln, NE: Center for Rural Entrepreneurship. [Download document.](#)

Economic development is hard, long-term work. To be successful, communities must be ready to launch a new initiative. We define community readiness as having the understanding, capacity and commitment to engage in entrepreneur-focused development. Our collection of Community Readiness resources can help you assess your community's readiness for entrepreneur-focused economic development.

Unlocking Entrepreneurship: A Handbook for Economic Developers

Garmise, PhD, S. & Ghosh, S. 2011. Washington, DC: International Economic Development Council. [Download handbook.](#)

Unlocking Entrepreneurship: A Handbook for Economic Developers has been developed by IEDC under the guidance of its Economic Development Research Partners (EDRP) Program. It introduces economic development professionals to the increasingly urgent need to support entrepreneurship as

a necessary strategy, explains what entrepreneurship is and who entrepreneurs are, dissects the essential components of an entrepreneurship ecosystem, and includes a toolkit for practitioners to assess and implement economic development strategies in their communities. Several case studies of entrepreneurial firms as well as organizations that support these businesses provide an insight into the variety of policies and programs out there to support and foster entrepreneurship in a community.

Revitalizing Rural Economies Through Entrepreneurship Development Systems

Edgcomb, E., Klein, J., & Black, D. December 2008. Washington, DC: The Aspen Institute. [Download report.](#)

Entrepreneurship development systems (EDSs) reflect a theory whose time has come. Emerging across the country as rural practitioners seek more effective engines for rural revitalization, these systems are intended to strengthen and integrate programs, products and services to better meet the needs of entrepreneurs. They are designed to: create a pipeline of entrepreneurs by identifying and supporting youth and adult entrepreneurs, implement a system of financial and technical support for entrepreneurs of all types, and foster a policy and cultural environment that is supportive of entrepreneurship.

Examining the Connections within the Startup Ecosystem: A Case Study of St. Louis

Motoyama, PhD, Y. & Watkins, K. September 2014. [Download report.](#)

We critically examine how an entrepreneurial ecosystem is structured using an exploratory and bottom-up approach. Past studies in this area have discussed the presence of elements in the system or captured the ecosystem as holistically as possible by extending to social, cultural, and institutional dimension. However, we find that such aggregated conceptualizations gave limited understanding to how different elements are connected and constitute the system. Here, we apply a social network approach by analyzing the connections of the ecosystem at multiple layers: (1) among entrepreneurs, (2) among support organizations, and (3) between and among entrepreneurs and key support organizations. Through a series of interviews with entrepreneurs and support organizations in St. Louis, we find that the ways in which support organizations in this region interacted with each other and with entrepreneurs, including explicit cross-organizational collaboration and strategic structuring of resources, significantly impacted the way that entrepreneurs interacted with one another and with organizations, thus deepening our understanding of these connections and identifying intervening points within the ecosystem.

Enabling Entrepreneurial Ecosystems

Davis, Susan. *Innovations: Technology, Governance, Globalization*, vol. 7, no. 2, 2012. [Download resource.](#)

The journal features cases authored by exceptional innovators; commentary and research from leading academics; and essays from globally recognized executives and political leaders. The journal is jointly hosted at George Mason University's School of Public Policy, Harvard's Kennedy School of Government, and MIT's Legatum Center for Development and Entrepreneurship. Topics of interest include entrepreneurship and global development, the revolution in mobile communications, global public health, water and sanitation, and energy and climate.