

Creating entrepreneurial communities:
Building community capacity for ecosystem development

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Abstract

Research on the economic impact of entrepreneurship makes the case for entrepreneur-focused economic development. Community economic development practitioners and policy makers face the challenge of identifying and implementing the most promising strategies. Some community development researchers have argued effectively for an entrepreneurial development system, or ecosystem, approach as a way to build and grow a pipeline of entrepreneurial talent. Others document the importance of building community capacity as a prerequisite for the establishment of an effective ecosystem. This paper draws on field-based learning, primarily in Kansas and Australia, to develop the conceptual underpinnings for an approach to creating entrepreneurial communities that builds: (1) the capacity of the community to host and support an entrepreneurial ecosystem, and (2) the capacity of entrepreneurs to grow themselves and their businesses in support of community economic development.

Key words: entrepreneurship, economic development, community capacity building, entrepreneurial development system

Introduction

Building a community's capacity to engage in entrepreneur-focused economic development in combination with a systems approach to developing entrepreneurs creates more sustainable community economic development outcomes. This notion recognizes that entrepreneur development is a place-based activity and that the community is an active participant in establishing the community milieu within which the development of entrepreneurial talent takes place.

Current approaches tend to be fragmented; the rationale for taking a more systemic approach to entrepreneurial development arises from this failure and addresses the problem by providing a bridge between a business development approach, focusing exclusively on agency (the individual entrepreneur) and a community development approach that focuses on context (place) (Lichtenstein & Lyons, 2001). In this article, such a systemic approach provides a bridge between a business development approach that focuses exclusively on agency (the individual entrepreneur) and a community development approach that focuses on context (place). We argue that a focus on both agency *and* context (individual entrepreneurship *and* community entrepreneurship) is needed (Granovetter, 1985). In this way, we present a theory of entrepreneurial community building that connects community development practice with entrepreneur development practice in an integrative and reinforcing way. The current and future development of such a systemic approach should provide a valuable tool for both community and economic development practitioners.

The rest of this section further develops the systemic frame, defines "entrepreneurship" as we use it in this paper, and discusses its role as a development strategy. We then make the case for the importance of place in economic development. Subsequently, we will discuss the

methodology we employ in exploring the components of a system that integrates community and entrepreneur capacity building and share the results of our field studies. We conclude by offering a set of research and policy questions raised by this work.

Building the systemic frame

The significant body of research on the economic impact of entrepreneurship indicates a growing awareness of the importance of entrepreneur-focused economic development (Acs & Armington, 2004; Fritsch & Mueller, 2008; Hafer, 2013). From the perspective of community economic development practitioners and policy makers, the question becomes one of identifying and implementing the most effective strategies to support entrepreneurs. Over the years, there have been several calls to pursue entrepreneur-focused economic development by taking a systems approach at the community or regional level (Emery & Flora, 2006; Feldman, 1994; Flora, Sharp, Flora, & Newlon, 1997; Korsching & Allen, 2004; Lichtenstein & Lyons, 2006, 2010; Lichtenstein, Lyons, & Kutzhanova, 2004; Lyons, 2002b). These prescriptions assert that successful enterprise development must take into account the entire community and build the necessary capacity to foster entrepreneurship across that community.

How such a systemic approach to encouraging entrepreneurial activity should manifest itself is not entirely clear. There appears to be a bifurcation in approach, wherein some practitioners and scholars take a business development perspective, while others are community development focused. The approaches of Lichtenstein and Lyons (2001) and Macke, Markley, and Fulwider (2014) represent this split.

Lichtenstein and Lyons (2001) have effectively argued that entrepreneur-focused economic development requires creation of an entrepreneurial service system, or support ecosystem, which is systemic, focused on the needs of the entrepreneur not the business, and

committed to transforming the entrepreneur and the community. This ecosystem, however, is place-based and rooted in a particular community's environment. Thus, the capacity of the community to engage in ecosystem building may prove to be a limiting factor in the effectiveness of such a strategy, particularly in more rural places where human, physical, and financial resources are fewer.

Macke, Markley, and Fulwider (2014) report on a decade of work focused on addressing the limiting factor of community capacity by working with communities to create the intellectual, social, cultural, and financial capital needed to support a robust system. This field-based learning documents the importance of leadership, collaborative networks, and financial and political support for entrepreneurship development. In light of this, Macke et al's framework and the entrepreneurial service system approach taken by Lichtenstein and Lyons (2001) have the potential to be mutually supportive and transformational for communities and the entrepreneurs they support.

This article will develop the conceptual underpinnings for an approach to creating entrepreneurial communities that builds (1) the capacity of the community to host and support an entrepreneurial ecosystem and (2) the capacity of entrepreneurs to grow themselves and their businesses in support of community economic development. Using action research conducted in rural Kansas and Australia, along with learning from larger, more metropolitan places, we will identify the key components of a community-based entrepreneurial development system and describe both the strengths and challenges of taking a more holistic systems approach to entrepreneur-focused economic development.

Entrepreneurship as a development strategy

The term “entrepreneur” has been applied to a wide range of individuals, from small to large business owners who participate in a community’s economy on both global and local scales (Aulet & Murray, 2013). Our definition encompasses a broad notion of entrepreneurs, and includes any person who applies an entrepreneurial mindset, tools, skills and techniques to transform an idea into an enterprise that creates value for profit and/or social good.

The importance of entrepreneurs to the economic development of nations has been the subject of academic scholarship since economist Joseph Schumpeter published in the 1940s. In the last half century, Baumol (1990) has advanced understanding of the role of entrepreneurs in economic growth, challenging economists to recognize the entrepreneur’s role in combining factors of production to achieve development. Eliasson and Henrekson (2003, pp. 8-9)

summarize Baumol’s argument in this way:

The accumulation of factors of production *per se* – be they knowledge, physical or human capital – cannot alone explain economic development. They are necessary inputs in production, but they are not in themselves sufficient for economic growth to occur. . . Human creativity and productive entrepreneurship are needed to combine these inputs in profitable ways, and hence an institutional environment that encourages free entrepreneurship becomes the ultimate determinant of economic growth.

In addition to the entrepreneur, Baumol (1990) acknowledged the importance of the institutional environment as either supportive of or detrimental to the encouragement of entrepreneurship.

On a transnational level, the Global Entrepreneurship Monitor (GEM) project has provided detailed information on entrepreneurial activity since 1999 (www.gemconsortium.org). The project includes 100 country teams. Those countries cover most of the world’s geography and account for most of the world’s gross domestic product (GDP). GEM studies highlight differences in both the rate of entrepreneurial activity across countries and the character or quality of that activity. The 2012 report found that total entrepreneurial activity rates were higher in countries with low GDP per capita, but much of that activity was driven by necessity, such as

the lack of other viable ways to earn a living. Rates were lower in high GDP per capita countries, but more of the activity was driven by the recognition and pursuit of an opportunity than by the necessity of earning a living (Xavier, Kelley, Kew, Herrington, Vordewülbecke, & The Global Entrepreneurship Research Association, 2012). More significantly for this article, the 2012 report (Xavier et al., 2012, p. 18) acknowledges the place-based and skill building dimensions of the entrepreneurial process:

The entrepreneurship process is a complex endeavor carried out by people living in specific cultural and social conditions. Societies benefit from people who are able to recognise valuable business opportunities and who perceive they have the required skills to exploit them. If the economy in general has a positive attitude towards entrepreneurship, this can generate cultural and social support, financial and business assistance, and networking benefits that will encourage and facilitate potential and existing entrepreneurs.

More recently, the discussion about entrepreneurship as a development strategy has focused on the role of entrepreneurs as job creators, partially in response to the 2007-2009 Great Recession. Research advanced by the development of the Business Dynamics Series database offers useful insights into this role (<http://www.census.gov/ces/dataproducts/bds/overview.html>). Kane (2010) demonstrated the contribution that startup firms make to job creation. Gross job creation associated with startup firms from 1995 to 2005 was 3,000,000 jobs per year, as compared to 800,000 jobs created by firms in their first full year and 500,000 jobs created by firms in their third full year. This pattern was persistent over the years of this study. Kane concludes that “[E]ffective policy to promote employment growth must include a central consideration for startup firms” (Kane, 2010, p. 6). While not all of these startups are driven by entrepreneurs, they do define the pool from which entrepreneurial talent in a community or region may emerge.

Another recent study focused on the longer term trends related to job creation by new businesses and uncovered a new and discouraging trend. Using both U.S. Census Bureau and Bureau of Economic Analysis data series, the authors found that employer firms, a subset of new firms that employ people beyond the owner/entrepreneur, are starting with fewer employees (an average of 7.5 jobs per new establishment in the 1990s vs. 4.9 jobs per new establishment in 2009). Additionally, businesses that survive beyond the first year are adding jobs at a historically slower rate (Reedy & Litan, 2011). These authors conclude that rising numbers of the self-employed, particularly those associated with an increase in contract employment, are not the most effective target for entrepreneurship strategies, since many of these enterprises may not grow and employ others. Rather, “the clear challenge for the U.S. economy instead is to *start more employer businesses, ensure that they are starting larger, and nurture their growth*” (Reedy & Litan, 2011, p. 16). This research provides context for targeting entrepreneurs who are building growth or Stage 2 businesses as a core part of an entrepreneur-focused development strategy.ⁱ

While there is a research base documenting the role and importance of entrepreneurs in economic development, this research lacks clarity as a guide for practice and policy. Guidance for community practitioners and policy makers comes from the implementation, assessment, and evolution, over the past two or more decades, of the interventions associated with entrepreneurship practice. These interventions have moved from the formation of specific programs to the creation of individual support organizations to a more intentional focus on ecosystem development. This evolutionary process is illustrated with specific examples below.

Entrepreneurship programs

The origins of many of today's entrepreneurial support programs can be traced to federal recognition of the important role that small businesses play in the economy, resulting in the creation of programs including SCORE (Service Corps of Retired Executives), the Minority Business Development Agency, the Small Business Development Center system, and Women's Business Centers. Concurrently, the incubation movement began in the late 1950s but increased in acceptance in the 1980s and 1990s, with the development of notable state (e.g., Pennsylvania, one of the first states to adopt a state-wide incubation policy) and private sector efforts (e.g., Control Data Corporation, operating several of the earliest business incubators that became models for others.) Another private sector actor, The Kauffman Foundation, played an important role in training (i.e., FastTRAC), research, advocacy, and policy development.

More recent advancements in program offerings provide more targeted assistance to entrepreneurs identified through a variety of means. Accelerators, most often based in urban places (e.g., TechStars in Boulder, Colorado), combine rigorous screening of entrepreneurs with intensive mentoring and assistance over a defined period of time to help entrepreneurs move through the start-up phase. Economic Gardening, an approach to economic development pioneered in Littleton, Colorado, provides an alternative "grow from within strategy" for regional development, focused on providing market intelligence and strategic information to existing entrepreneurial companies with the potential for growth.

Entrepreneurial support organizations

The evolution toward entrepreneurial support organizations is, in part, a product of what Feldman (2014, p. 17) describes as the shift in focus of economic development "from a preoccupation with lagging regions and eradication of poverty to a new focus on innovation and international competitiveness that is universally relevant to the full range of communities." Two of the earliest place-based entrepreneurial support organizations, Kentucky Highlands

Investment Corporation (serving Appalachian Kentucky) and Coastal Enterprises Inc. (serving coastal Maine), were innovative Title VII community development corporations with a focus on job creation in areas of persistent poverty. These organizations, started in the late 1960s, evolved from a focus on creating jobs to supporting entrepreneurs by channeling technical assistance, capital access, and capacity building within their regions.

Other place-based organizations evolved from other movements or initiatives such as the federal Manufacturing Extension Partnership program. Northern Initiatives began in the mid-1980s in the Upper Peninsula of Michigan as a university-based Manufacturing Extension Partnership program. Over time, the organization has combined their technical assistance capacity with the tools of a Community Development Financial Institution to serve entrepreneurs in an ever-expanding region.

Ecosystem development

Both entrepreneurship programs and entrepreneurial support organizations focus on increasing the supply of technical assistance, other advisory services, and capital available to entrepreneurs. In 2001, Lichtenstein and Lyons argued that such an approach was not sufficient to create the scale of impact needed for regional economic development. “Entrepreneurs do not start businesses because services are available; services are demanded and used as the result of the existence of entrepreneurs. Although services are necessary, they are not sufficient to transform a region’s economy into a dynamic force” (Lichtenstein & Lyons, 2001, p. 5). What is needed instead is a systems approach based on growing the pipeline of talent in a region and connecting that talent to an integrated, facilitated support network of service providers. The Entrepreneurial Development System (Lichtenstein & Lyons, 2001) described in more detail below is one approach to ecosystem development.

The evolution of entrepreneurship practice marks the beginning of a shift from a supply-side to a demand-side focus, from providing services to developing the pool of entrepreneurs. Lichtenstein and Lyons (2001, 2010) effectively argue that this pool of entrepreneurs can be expanded over time and present a model to do so and evidence of its effectiveness. However, enterprise development is essentially a place-based activity. In the short term at least, entrepreneurs are rooted to a particular place. The capacity of the community or region to embrace and advance ecosystem development becomes a precursor to, a necessary condition for, developing entrepreneurial talent.

Importance of place in economic development

Increased globalization and technological innovations bring into question the place-based nature of economic development. In fact, one argument in favor of entrepreneurship as a development strategy particularly for rural places is the fact that, increasingly, one can start and grow a business from anywhere. Yet, at least in the U.S., communities, counties, and to some extent regional development entities are responsible for economic development planning. Absent a strong and centrally determined industrial or economic policy, local jurisdictions are charged with designing and implementing economic development strategies to achieve growth and prosperity. And, for these local and regional entities, place does matter.

The importance of place derives from the need for asset-based economic development, what Kretzmann and McKnight (1993) describe as “capacity-focused development.” There continues to be a strong rationale and theoretical basis for building on the assets of a place (Emery & Flora, 2006). In a time of constrained federal resources, local communities, rural and urban, determine their own economic futures by the decisions they make to support and build upon their assets, including their entrepreneurial talent.

For rural communities with more limited capacity to engage in effective economic development, the relationship between place and entrepreneurship is critical. Korsgaard, Müller, and Tanvig (2011, p. 7) argue that rural entrepreneurship involves a “dual and complementary dynamic.” Entrepreneurs create economic value from the local assets they use and are more likely to combine rural assets in unique and innovative ways to pursue a market opportunity. The result is a more effective use of rural resources to drive economic activity that provides benefits to both the entrepreneurs and, through jobs, revenue, and tax payments, to the community. Entrepreneurs also impact the social structure and value of the place itself. For example, the presence of a vibrant community of entrepreneurs may create an atmosphere of innovation encouraging imagination and creativity in the next generation of entrepreneurs. Likewise, area entrepreneurs may nurture generosity and encourage philanthropy in the community. In turn, rural entrepreneurs are potentially more likely to remain in their rural locale if they are deriving value from both the economic and social/cultural assets of that place.

Korsgaard, Müller, and Tanvig’s (2011) thesis on the connection between place and rural entrepreneurs focuses on entrepreneurs as the primary actors in a place. However, the broader community, through its leadership and decision making choices, also plays a role in determining the characteristics, resources, and capacity for economic development. Entrepreneurs operate within a particular economic and community environment. While they drive decision making related to how they combine assets to respond to market opportunities, their ability to easily access the resources needed to build their own skills and further develop their business enterprise may be determined by the community’s capacity and commitment to entrepreneur-focused economic development. According to Feldman (2014, p. 20), “entrepreneurial attachments and investment, government capacity building, and local communities of common interest define the

character of a place. In my conceptualization, geography provides a platform to organize resources toward a specific purpose.” In the context of this article, that purpose is the development of entrepreneurs.

Community capacity building for ecosystem development

Methods

In order to better understand the nature and composition of a holistic system for fostering entrepreneurship as a community economic development strategy, we engaged in action research in three rural regions – the state of Kansas in the United States and two sub-state regions in Victoria, Australia. Action research (AR) is a research method that engages directly with practitioners in their context for the purpose of finding solutions to problems and developing best practices (Argyris, Putnam, & Smith, 1985; Denscombe, 2010; Greenwood & Levin, 2007; Schein, 1999). At its essence, action research is a process of problem identification, field data gathering and analysis, sharing findings with participants, mutually acting on those results, and jointly reflecting on the outcomes of the action (Berg, 2008).

In Kansas, the local participants were community leaders, including those acting as community coaches, as well as the staff of regional and statewide organizations, such as NetWork Kansas, who were partners in ecosystem development. One of the authors of this paper provided remote and onsite research, community engagement and coaching support, strategy development and sustainability planning with local and state partners beginning in 2008 and continuing into 2015.

In the Australian sites, the local participants were faculty and staff of the college administering the enterprise development program in question, on-site enterprise developers/coaches, local government officials, and entrepreneurs. One of the authors of this

paper spent several months in 2013 and 2014 remotely working with college officials and the local enterprise developers to identify the problems to be addressed and to design and implement the program. In the summer of 2014, that author spent a month in Australia meeting with all the participants to better understand their needs, discuss the program's utility, and modify the program to meet the needs. This latter activity involved individual meetings, workshops, seminars and bus tours of local entrepreneurial ventures.

The regions under study were selected because they are representative of the Macke et al (Kansas) and the Lichtenstein and Lyons (Australia) approaches. They also permit examination across distinct communities in an international context. In this way, they serve as case studies for comparison and from which to cull common themes (Yin, 2003).

This methodology has its limitations. The results cannot be generalized to a larger population, nor are they conclusive (Hamilton, 1981). Baskerville (1999, p. 5) has argued that action research is more social inquiry than social science. However, we emphasize that the intention here is not to test theory but to build it.

The remainder of this section lays out the elements of a capacity-building framework for creating entrepreneurial communities, describes the elements of an entrepreneur development system, and identifies opportunities for accelerated outcomes through the intentional combination of these frameworks into an effective ecosystem.

Entrepreneurial communities framework

Communities need capacity to actively design, implement, and sustain an economic development strategy focused on entrepreneurs. Based on more than a decade of action research, the Center for Rural Entrepreneurship has developed a framework to help communities build the capacity to leverage their assets in support of entrepreneur-focused economic development (Macke, Markley, & Fulwider, 2014). Each component of the framework serves to identify,

build, or direct investment in the assets needed to support economic development. It is a framework that builds the capitals needed to create an entrepreneur development system, where those capitals are defined consistent with the Community Capitals framework. The components of this framework are outlined in more detail below and illustrated using action research in Kansas.

Readiness and organizing. Economic development, particularly when the goal is the transformation of a local or regional economy, must involve a long-term process and commitment. To generate economic development outcomes, communities must invest human and financial capital and have the political consensus to stay the course long enough to first build capacity and then achieve results. This course of action requires a degree of readiness on the part of the community, often associated with building the intellectual capital associated with seeing entrepreneurship as a development strategy and having the political capital to influence the community's preferred course of action related to economic development. Once that readiness is established, the community must create or strengthen the social capital needed to create an effective organizational structure to guide the process and commit the financial capital to support that organizing effort. The commitment to entrepreneurship and to building entrepreneurial communities in Kansas demonstrates this process (Markley & Binerer, 2014).

Public sector commitment to entrepreneurship development in Kansas began in 2001 with the launch of a pilot project focused on implementing Sirolli's Enterprise Facilitation[®] model (Sirolli, 1999) in several multi-county regions. Based on the lessons learned from this early initiative and strong collaborative support from key legislators, state agency staff, and business service providers, the Kansas Economic Growth Act of 2004 cemented support for entrepreneurship as a core development strategy through the creation of a center for rural

entrepreneurship; NetWork Kansas was established as that central hub in 2005. Through this legislation, the state signaled a readiness to embrace entrepreneurship, provided an organizing structure for distinct partners to collaborate toward that end, and provided financial capital to support both the creation of this infrastructure and the aspirations of the state's entrepreneurs.

In Kansas, readiness and organizing at the state level also transferred to the community level. NetWork Kansas' entrepreneurial leaders recognized the need to create community capacity to connect more effectively to the state's infrastructure. The E-Community Partnership was created to build stronger community capacity for entrepreneur-focused economic development. Readiness and local organizing were influenced by the best practices of the more successful partners and codified over time into the application process. Concurrent with NetWork Kansas' community engagement process, other efforts across the state focused on building community capacity for entrepreneurship through community coaching and the application of elements of the HomeTown Competitiveness[®] model (Kansas Farm Bureau, 2011).

Assessment. Readiness and organizing create the foundation for launching an entrepreneurship strategy; assessment provides communities with a deeper understanding of their development assets and opportunities. The assessment process targets five focus areas tied to entrepreneurship:

1. Development opportunities: Understanding a community's current economic structure, its place in a broader regional and statewide economy, relevant emerging sectors, and demographic trends that might be supportive of or detracting from development efforts.
2. Entrepreneurial talent: Identifying and understanding entrepreneurs, the primary assets upon which an entrepreneur-focused economic development strategy is built.

3. Relevant resources: Mapping current local and other resources that, with appropriate connections, could make up the ecosystem infrastructure serving entrepreneurs.
4. Development goals: Identifying a community's development goals and aligning an entrepreneur development strategy to achieve desired outcomes.
5. Stakeholders: Engaging stakeholders in the community or region who have a self-interest in the development of entrepreneurs and the economic development outcomes that result.

Assessment provides the information needed to drive more effective strategy development. In Kansas, assessment is a key part of efforts being undertaken by multiple partners to build entrepreneurial communities, and the information from these assessments is used in communities to design relevant strategies to address their development goals (Macke, 2013).

Strategy development and implementation. An effective strategy confronts the constraints of human, financial, and political capital by targeting development efforts to achieve the greatest return on investment. In this case, the targeting relates to the entrepreneurs prioritized by the community. Organizations have limited staff time and budget capacity. Stakeholders (particularly elected officials responsive to election cycles) increasingly focus on return on investment, wanting to achieve the greatest outcomes for their investments, in the shortest period of time. An effectively designed and well-implemented strategy focused on entrepreneurs with the potential to achieve desired outcomes is one way to increase the return on investment.

An entrepreneurial talent assessment helps to identify the community's pipeline of entrepreneurs (Figure 1), including opportunity entrepreneurs, defined by GEM as those who are "pulled into entrepreneurship" because they recognize opportunities and choose to pursue them

(Xavier et al., 2012, p. 28). An effective community-based strategy for entrepreneur development would focus on identifying and providing resources to opportunity entrepreneurs so they can accelerate economic development impacts they create.

FIGURE 1 HERE

A key part of the strategy put in place in Kansas communities has been to have an engaged community identify and connect entrepreneurs to a diverse yet coordinated set of resources needed to support the entrepreneurs' growth aspirations and potential. The result has been a stronger set of economic development activities and outcomes. Using data only from NetWork Kansas over the 2007 to 2013 period, the following outcomes were documented (Markley & Binerer, 2014, p. 22):ⁱⁱ

- Increased development impacts: nearly 400 business development deals associated with NetWork Kansas and E-Community partner efforts; \$61 million in capital allocated and leveraged; 1,060 full-time and 865 part-time jobs created.
- Increased access to resources for entrepreneurs and support providers: number of partners increased from nine to more than 500; active contacts increased from five to 436 per month; total calls increased from 23 to 192 per month; website requests increased from 74 to 179 per month;
- Increased reach of community engagement efforts: 44 E-Community partners covering 39 counties (37 % of the state's geography); 70 % of E-Community partners have less than 10,000 population; and

Scaling, impact, and transformation. A key question related to the entrepreneurial community-building efforts in Kansas is whether they are resulting in the transformation of community futures leading to widespread prosperity, particularly in more rural places. The

research base to support an answer to this question is limited. However, there is anecdotal evidence of changing trends in a few communities with a longer history of building and strengthening community capacity for entrepreneurial development. While the state has benefited recently from a strong agricultural and energy-based economy, the impacts on rural communities have been uneven. Rawlins County, an ongoing participant in the evolving work in Kansas, has experienced several potentially transformational changes in long-established trends (Macke, 2013):

- After almost three decades of stable or declining income, personal income generated by nonfarm proprietors (a proxy for entrepreneurs) increased 133 % from 2000 to 2010, a period coinciding with the community's focus on entrepreneurial development;
- County population increased from 2009 to 2010 for the first time since the 1930s; and
- Elementary school enrollment, declining from 2000-2001 to 2006-2007, stabilized in 2006-2007 and grew in the 2009-2010 school year.

The outcomes achieved in this single community represent the results of intentional efforts to build community capacity for ecosystem development and the unique application of the community's assets to this challenge.

More evidence of the outcomes associated with the entrepreneurial communities framework comes from Emery and Flora (2006). This framework grew out of one component of HomeTown Competitiveness (HTC), a comprehensive approach to community development. Emery and Flora applied the Community Capitals Framework to one community's application of HTC, including entrepreneurship development, and found increases in multiple capitals and a spiraling up in the community as a result of these interactions. While the evidence from these

communities is promising, further research is needed to understand how application of this framework can build a community's capacity to achieve similar results.

Entrepreneurial development system framework

While the entrepreneurial communities framework described above focuses on the community as the critical actor, the heart of Lichtenstein and Lyons's (2001, 2010) entrepreneurial development system framework is the entrepreneur. They offer a new enterprise development paradigm based on a number of clear principles:

1. The primary focus of enterprise development efforts must shift from providing services to developing entrepreneurs.
2. Economies require different kinds of entrepreneurs and, therefore, the focus of development efforts must be to create a diverse mix of entrepreneurs rather than a specific focus on one type of talent. A corollary to this principle is that if a community is going to invest in Stage 2 entrepreneurs (firms with 10-99 employees) as an economic development strategy, it must also invest in the development of first stage entrepreneurs who will become the next generation of Stage 2 entrepreneurs.
3. To achieve transformation of a local community, attention must be given to improving the network of relationships (social capital) that exists within the business community so that a shift in the performance of all entrepreneurs and their firms occurs.
4. Entrepreneurs need a range of skills to start and grow an enterprise, and they typically start the entrepreneurial process without all the skills they need; those skills can be intentionally developed over time.

The operational model for this new enterprise development paradigm is the Entrepreneurial Development System (EDS). The central challenge of the EDS is how to

“effectively, efficiently, equitably, and continuously develop entrepreneurial talent and build successful companies on a large scale” (Lichtenstein & Lyons, 2001, p. 11). The model includes two significant and interconnected systems: a system for developing the skills of entrepreneurs and a system for organizing and rationalizing support partners.

System for developing the skills of entrepreneurs. Drawing on research in a variety of disciplines, Lichtenstein and Lyons (2001) identify four categories of skills needed to create, operate, and grow a business:

- Technical: ability to perform key business operations;
- Managerial: ability to organize and manage business operations;
- Entrepreneurial: ability to identify and seize market opportunities; and
- Personal maturity: level of self-awareness, creativity, emotional development, and ability to shoulder responsibility.

Each entrepreneur begins the enterprise development process with a particular set of skills that can be assessed, and the entrepreneur can be assigned to a particular rung on the development ladder (Table 1).

TABLE 1 HERE

The goal of this skill-building system is to create a stronger pipeline of entrepreneurs in a community or region. To illustrate the pipeline concept, Lichtenstein and Lyons (2006) add another dimension to the analysis: stage of business development. These stages encompass the life cycle of an enterprise:

- Stage 0 – Pre-venture: idea to product or service launch;
- Stage 1 – Existence or infancy: launch to break even from sales;
- Stage 2 – Early growth: from break even to sustainable, profitable business;

- Stage 3 – Expansion or sustained growth: from incurring debt or risking equity to pursue growth to emergence as a growth company;
- Stage 4 – Maturity: from market advantage to adapting and preserving entrepreneurial spirit and market advantage; and
- Stage 5 – Decline: from complacency to either shuttering or reinvention.

The two-dimensional pipeline (Table 2) demonstrates that a goal of the EDS is to move entrepreneurs through the pipeline in both directions: first by building the entrepreneur's skills and then applying those increased skills to the successful growth of the enterprise itself. It expands upon the opportunity entrepreneur category embedded in the pipeline concept described earlier in this article.ⁱⁱⁱ

TABLE 2 HERE

Key components of the skill development system are accurate assessment of the starting point for each entrepreneur and then effective coaching to help the entrepreneurs move up the skills ladder, enabling them to make the structural changes in their businesses necessary to move from one life cycle stage to the next. Kutzhanova, Lyons, and Lichtenstein (2009) address the important role of coaching in creating the conditions under which individual entrepreneurs experience the transformations needed to move from one skill level to the next. Successful skill building hinges upon learning how to apply knowledge through strategically identified, intensive practice, with regular feedback. The coach helps the entrepreneur identify what needs to be practiced, focus on a regimen of practice, and understand what is and is not working as the entrepreneur builds her/his skills (Lichtenstein & Lyons, 2010). Action research in Australia provides insights into the skill assessment and building process.

EntruBIZ is a rural entrepreneurship development effort in Victoria, Australia, implemented by the Centre for the Study of Rural Australia at Marcus Oldham College, a higher education institution located in Geelong, focused on business and agriculture, and funded by the William Buckland Foundation. This effort is applying the elements of the Entrepreneurial Development System to assess entrepreneur skills, identify opportunities to apply coaching and mentoring, and develop innovative businesses to increase community and regional prosperity. More specifically, EntruBiz has established offices in the regional centers of two rural regions in Victoria: Shepparton in the Goulburn-Murray Region (an agricultural region specializing in fruit, livestock, and wine production) and Bairnsdale in the Gippsland Region (an agricultural and tourism region). Each of these offices houses a coach, known as a Rural Enterprise Developer (RED). The REDs provide four key services to the entrepreneurs of their region: (1) an assessment of the entrepreneur's skills; (2) help with developing the business concept; (3) one-on-one coaching for skill development; and (4) referral to appropriate local service providers for specialized knowledge and/or technical and financial assistance.

At the heart of EntruBiz's entrepreneur-focused approach is the Readiness Inventory for Successful Entrepreneurship (RISE) tool, developed by Drs. Thomas S. Lyons and John S. Lyons. This tool employs the communimetric model of psychological assessment, which is clinical as opposed to psychometric, permitting a current diagnosis of the entrepreneur's strengths and weaknesses and the ability to make an informed intervention that can leverage the strengths and address the weaknesses (Lyons, 2009; Lyons & Lyons, 2002). The RISE builds on Lichtenstein and Lyons's (2001) research on entrepreneurship skills (noted above) by identifying four new dimensions of skill, or management skill categories: (1) Transformation Management Skills – the skills needed for creativity and innovation; (2) Relationship Management Skills – the

skills required for building social capital; (3) Business Management Skills – the skills of day-to-day business administration; and (3) Organizational Process Management Skills – the skills needed to sustain an organization. The RISE is a web-based tool designed to identify an entrepreneur's skills at several levels, including an overall skills assessment that can be used by a coach to develop a support plan to grow the entrepreneur's skills over time. Given the importance of skill development to the success of the EDS, this type of field-based assessment offers the opportunity to better align an entrepreneur's need for skill development with the service providers best able to meet that need, improving the efficiency and the effectiveness of the EDS.

System for organizing and rationalizing support partners. Central to the skill building activities of the skill development system is access to the right type and level of support at the right time (Lyons, 2002a). The focus of the service provider system is not to create new resources but rather to organize and coordinate existing resources into a more effectively operating system of support. This process provides benefits to service providers by improving efficiency and reducing wasted effort when entrepreneurs are better matched with service providers; improving outcomes when service providers are connected with entrepreneurs before the crisis stage; and offering economies of scale when services are offered to entrepreneurs at a similar skill level (Lichtenstein & Lyons, 2001).

In Australia, the EntruBiz program operates in rural regions where formal service providers of the type discussed earlier in this paper are few. Thus, the REDs cast a wider net on behalf of their client entrepreneurs, identifying individuals who can act as role models and mentors and nontraditional sources of technical and financial assistance. The RISE assessment is used as the guide for determining the intervention required, and then the REDs become highly

innovative in scouring the context for sources of support. Subsequent RISE assessments can measure the entrepreneur's skill building progress and guide the RED in determining when a particular service provider is no longer appropriate and a new, more relevant, one must be found.

While EntruBiz was about one year old at this writing and still installing and refining its system, making meaningful measurement of its impact premature, the EDS model has proven effective in several pilot projects. In the Advantage Valley (an 11-county region spanning parts of Kentucky, Ohio and West Virginia), for example, over a 38-month period, the following outcomes were achieved (Kutzhanova, Lyons, & Lichtenstein, 2009, p. 206):

- \$33 of sales revenue generated by EDS clients for every dollar invested in the system;
- 13 % of the total sales revenue increase was generated by sales outside the region;
- 49 new direct jobs were generated, sans a multiplier effect;
- A cost per job created of \$34,344, which is substantially lower than that of the average business attraction strategy in the U.S.; and
- A strong correlation between sales revenue generated and the skill level of the entrepreneur, with each skill level generating multiples of the revenue produced by the skill level just below.

Connecting frameworks for ecosystem development

The entrepreneurial communities framework and the Entrepreneurial Development Systems approach recognize the inherent strengths in taking a more holistic approach to entrepreneur-focused economic development. They acknowledge the central role that the entrepreneur plays in driving enterprise development and the important role that coaching plays in building the skills of the entrepreneur. They recognize the value of coordination and collaboration among resource providers to create a more seamless and efficient system of

support for entrepreneurs. They are ultimately focused on community transformation as the outcome of the entrepreneur development process.

The two frameworks also offer the potential to create a more powerful place-based entrepreneurial development ecosystem and, in turn, more sustainable development impacts if viewed as interlocking components of a single system. Figure 2 proposes a model for such an integrated system. The Entrepreneurial Communities framework lays the groundwork through its readiness, investment and assessment approach designed to build the community's capacity (capitals). When the community is ready, critical investments can be made to put into place a strategy for rural enterprise development, using the Entrepreneurial Development System's pipeline and support partner systems. The expected result is a community transformed – economically, socially, culturally and politically. Such a connected approach would create advantages in several dimensions.

FIGURE 2 HERE

Advantages. First, the Entrepreneurial Development System requires an inflow of entrepreneurial talent into the pipeline in order to be transformational. An organized entrepreneurial community can provide that inflow by cultivating latent entrepreneurial talent, such as intentional efforts to expose youth to entrepreneurship through educational programming, summer camps, job shadowing, and internships. Second, an organized entrepreneurial community can provide the foundation for and help to strengthen the system of support providers critical to the successful functioning of the EDS. The organizing and assessment processes that are part of the entrepreneurial communities framework identify key resources and stakeholders, including service providers. The social capital built through this process creates the type of system critically important to an effective EDS.

A third advantage relates to the need to demonstrate impacts quickly in order to build momentum and sustain efforts to achieve transformational change. Through its assessment of entrepreneurial skills, the EDS can help identify and target particular interventions to entrepreneurs with the potential to create greater economic development returns. However, the EDS also requires that the community commit to the development of new talent and not use targeting as a way to skim entrepreneurial talent (Lichtenstein & Lyons, 2010). The tools and structure provided by the EDS become powerful tools in the hands of a community's business coach. Fourth, the EDS provides a proven framework for developing entrepreneurs in sufficient numbers to create impacts, at scale, over time. When applied strategically by an entrepreneurial community, the EDS can create the kinds of development outcomes that lead to transformation and prosperity.

Two additional advantages of this more powerful connected ecosystem approach relate to sustainability. Ultimately, the sustainability of an entrepreneurial ecosystem in any community will depend upon continued investment. Financial investment is important, as well as investment of time and talent via mentoring and community leadership. Successful place-based entrepreneurs have an important role to play in giving back to the community. They may give back by supporting community-based philanthropy, mentoring young entrepreneurs, becoming angel investors, or supporting youth entrepreneurship education. Entrepreneurs, developed through an EDS, become a vital component of the entrepreneurial community going forward.

A sustainable entrepreneurial ecosystem depends on quality of place investments that attract and retain entrepreneurial talent and their ventures. If entrepreneurs can start and grow a business anywhere, entrepreneurial communities must invest to create a place that has the assets that entrepreneurs are seeking. While business climate is important, the willingness of

entrepreneurs to cluster in high-cost locations (e.g., Silicon Valley, Boston) suggests that broader community amenities carry sway in the decision about where to start, grow, and sustain an entrepreneurial venture. An organized, committed entrepreneurial community can bring its social and political capital to bear on discussions about investing to create and maintain a quality of life that is attractive to a range of entrepreneurial talent.

Conditions and Requirements for Success. While there are clear advantages to the more holistic approach of bringing the entrepreneurial communities framework and the EDS approach into alignment, such an approach brings with it a set of conditions for success that must be addressed. First, systems building for transformational impact and community capacity building both require a long-term commitment. Key leaders and other stakeholders need to be dedicated to a long-term agenda. At the same time, building the capacity of the community to effectively engage in the process of entrepreneur-focused economic development in combination with the implementation of the key elements of an entrepreneur development system offers the opportunity to accelerate the impact and build continued support for entrepreneurship.

Second, these frameworks, alone or combined, require collaboration among partner organizations. While such collaboration is necessary and recognized as such, rarely is the cost of collaboration acknowledged or funded. Investment in building strong social capital may address this challenge, along with efforts to measure and communicate to key stakeholders the value that collaboration creates.

Third, entrepreneur development as described in this article requires a shift in focus from supporting the business to supporting the entrepreneur. This shift has been slow to come to conventional business support organizations and economic development entities. The EDS

articulation of the need for skill building to drive enterprise development may add some additional evidence to encourage this shift in smaller communities and regions.

Fourth, there is a need to shift policy along with practice toward supporting and encouraging more holistic solutions, such as those articulated here, versus creating new, programmatic interventions. The latter tend to be categorical and lead to fragmentation of effort and an inability to meet the entrepreneurs' true needs.

Fifth, if the goal of a more holistic approach to entrepreneur development is community prosperity, these efforts must result in a scale of impact that is measurable and transformational. Measurable impacts are necessary to continue support and investment in a systems approach. Transformation will occur when the capacity of the community to support entrepreneurs and the entrepreneurs' skills in starting and growing enterprises become positively reinforcing.

Conclusion

The aim of this article is to offer new insights through the intentional juxtaposition of two complementary frameworks. While the entrepreneurial communities framework is focused on building the *capacity of communities* to organize and build on their assets in support of entrepreneur-focused development, the Entrepreneurial Development System is focused on building the *capacity of entrepreneurs* to start and grow their enterprises. Together these frameworks provide a more holistic approach to undertaking the long-term, often generational work of creating community prosperity through entrepreneur development. This exercise raises several key research and policy questions that are worthy of future attention:

1. How can we best organize and fund field experiments that allow for the testing of the holistic approach to creating entrepreneurial communities discussed herein?

2. How can we better measure the impact of these systems approaches on development outcomes over time? To what extent can we attribute causality to these approaches?
3. What policy changes are necessary to better support more holistic approaches to entrepreneur development? What similar models exist in other countries that might inform the development of effective policy in the U.S.?
4. How must community economic development research adapt to document the impacts of long-term community change brought about through the application of frameworks such as those discussed in this article? What longitudinal research models would be most effective?

Notes

ⁱ Stage 2 businesses are defined by the Edward Lowe Foundation as those businesses with 10 – 99 employees (www.youreconomy.org).

ⁱⁱ These outcomes were achieved through a comprehensive approach to entrepreneurial support, involving multiple partners in both the public and private sectors. The Center's framework both contributed to and benefited from the action research and learning afforded in Kansas.

ⁱⁱⁱ This approach addresses the question of how communities can predict when a business reaches Stage 2 – they cannot. However, this is not necessary when you can assess where an entrepreneur's skill level currently lies and track her skill level advancement *and* trace the progression of her business through its life cycle stages.

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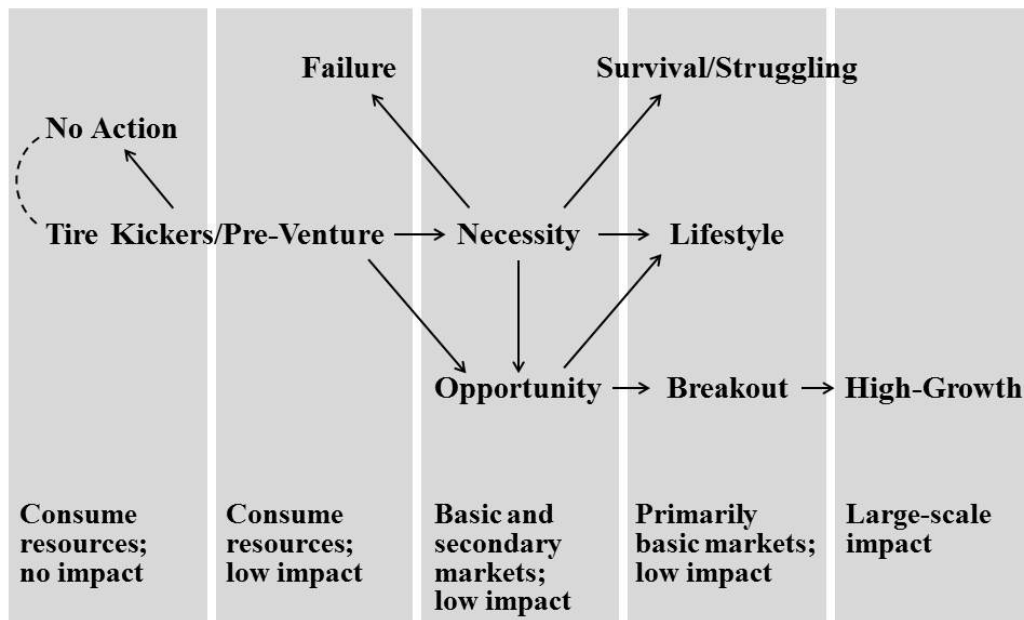
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Figure 1. Conception of the entrepreneurial pipeline

The Entrepreneurial Pipeline



Source: Center for Rural Entrepreneurship, 2014.

Table 1. Entrepreneurship skill levels

Skill Dimension/ Skill Level	Technical	Managerial	Entrepreneurial	Personal Maturity
Level 5	Superior	Superior	Superior	Superior
Level 4	High	High	High	High
Level 3	Moderate	Moderate	Moderate	Moderate
Level 2	Low	Low	Low	Low
Level 1	Low to no	Low to no	Low to no	Low to no

Source: Adapted from Lichtenstein, G.A., & Lyons, T.S. (2001). The entrepreneurial development system: Transforming business talent and community economies. *Economic Development Quarterly*, 15(1), 3-20.

Table 2. Conception of the entrepreneurial pipeline

Life Cycle/ Skill Level	Stage 0 Pre-venture	Stage 1 Existence	Stage 2 Early growth	Stage 3 Expansion	Stage 4 Maturity	Stage 5 Decline
Level 5			↑			
Level 4						
Level 3						
Level 2						
Level 1						

Source: Adapted from Lichtenstein, G.A., & Lyons, T.S. (2006). Managing the community's pipeline of entrepreneurs and enterprises: A new way of thinking about business assets. *Economic Development Quarterly*, 20(4), 377-386.

Figure 2. Place-based entrepreneurial development ecosystem

