Recently, there has been an increasing interest in the concept of the "entrepreneurial community." What is it? Are there models? Can these models be replicated? Most of this interest has focused solely on business entrepreneurship, with a focus on how to best assist entrepreneurs and their businesses to foster local and/or regional economic development. The majority of the models identified and analyzed have been urban, including the Silicon Valley, Route 128 in Boston, and North Carolina's Research Triangle; however, entrepreneurship has application beyond the business arena, and "entrepreneurial communities" can be rural as well as urban.

This report examines the "entrepreneurial community" from a rural perspective of being a "complete entrepreneurial community." That is, as a community being entrepreneurial as a whole where the public and nonprofit sectors must be just as entrepreneurial as the private sector (Lichtenstein, Lyons, and Kutzhanova 2004). The report pursues this argument by first defining entrepreneurship, from both a business and a social perspective. An exploration of the literature provides a perspective on the characteristics required of entrepreneurial communities. The report presents a five-point strategy for building entrepreneurial communities. Using this strategy as a baseline, two case studies are examined to assess efforts underway in rural regions to create complete holistic entrepreneurial communities.

There are two major types of entrepreneurs that can be found in any complete entrepreneurial community: (1) business entrepreneurs and (2) social, or civic, entrepreneurs. Both must be present and operating in a complementary fashion.

Entrepreneurship is most commonly defined in terms of its business manifestation. There are numerous definitions of business entrepreneurs from which to choose; however, one of the more understandable and useful is that of Klein (1977), who states that an entrepreneur is . . .

A marriage broker between what is desirable from an economic point of view and what is possible from a technological (i.e., operational) point of view. (9)

In essence, an entrepreneur is someone who helps us realize our economic dreams. He or she recognizes economic opportunities and capitalizes on them through innovation. An entrepreneur is a creator and a doer, very much in line with the way Americans like to think of themselves.

"Social entrepreneurs create social enterprises. They are reformers and revolutionaries of our society today... They seek out opportunities to improve society and they take action" (Dees, Emerson, and Economy 2001, 5). While there are certainly differences between business and social entrepreneurs, this definition points to the fact that they both operate in very similar ways as they pursue different missions. Both are crucial to a complete entrepreneurial community because for business entrepreneurship to thrive, it must take place in a supportive environment with an attractive quality of life.
Much has been said and written about the characteristics of an entrepreneurial community, either directly or indirectly. There are so many prescriptions, in fact, that it is easy to become confused. For the purposes of clarification, however, it is possible to condense all of this knowledge into three major schools of thought:

1. The Social Capital Building School
2. The Human Capital Development School
3. The Innovative Infrastructure School

### Social Capital Building School

Advocates of the Social Capital Building School believe in the power of networking. An entrepreneurial community is one that has strong internal linkages between individuals and organizations and strong connections between the community and its larger region that yield resources, support, and access for the community’s entrepreneurs, both business and social. Such a community not only has networks but a culture of networking as well: people behave as “network entrepreneurs,” looking for and acting upon new networking opportunities. As part of its emphasis on networking, this school of thought champions intersectoral partnerships (Hamlin and Lyons 1996); partnerships among public, private, and nonprofit organizations. Advocates of this school of thought include Robert Putnam (1993), who has explored the power of social capital building on multiple levels, including in manufacturing networks in Italy; Michael Porter (1998), whose industry clusters are examples of social capital building along the supply chain; and Vaughn Grisham, Jr. (1999), whose book *Tupelo: The Evolution of a Community* describes how that community raised its economic and social quality of life through intersectoral partnerships.

### Human Capital Development School

The Human Capital Development School bases its argument on the recognition that the current economy is a knowledge economy in which communities with a superior knowledge base hold competitive advantage. This school of thought maintains that economic development will come from the knowledge industries (e.g., high technology, education, etc.), and these industries are attracted to places that are diverse, have highly skilled workforces, and are open to risk taking and new ways of thinking. Innovation and entrepreneurship are believed to thrive in such communities, and entrepreneurs attract still other entrepreneurs, yielding a critical mass of this type of entrepreneurial development. One champion of this school of thought is Richard Florida (2002), whose book *The Rise of the Creative Class* has become very influential in the economic development arena. Another advocate of human capital building in support of entrepreneurship is Ernesto Sirolli (1999), whose concept of the enterprise facilitator reflects the belief that entrepreneurs can be coached, and thereby developed, to success.

### Innovative Infrastructure School

The name of the Innovative Infrastructure School is derived from the work of Maryann Feldman. Feldman was interested in the bit of conventional wisdom that held that communities with major research universities were more likely to be entrepreneurial. She wondered why, if this is true, Baltimore is no more entrepreneurial than it is, despite the fact that it is home to Johns Hopkins University, arguably the leading research university in the United States. She concluded that having a research university, alone, is not enough. If a community is to be entrepreneurial, it must have a complete “innovative infrastructure” (Feldman 1994). Such an infrastructure should include, among other elements, a capable and well-organized collection of entrepreneurship assistance service providers, access to transportation and communication networks, an entrepreneurial and supportive government, and colleges or universities that
both develop human capital and generate new ideas for potential commercialization (Feldman 1994; National Commission on Entrepreneurship 2002).

The ideas and insights generated by these schools of thought are invaluable, but as they currently stand, they metaphorically are like ingredients for a cake for which a recipe has yet to be developed to mix them in just the right measure and bake them at just the right temperature to get the desired result: a complete entrepreneurial community. To put it more succintly, how should a community formulate and bring together the components necessary to achieve a holistic entrepreneurial community outcome?

### A Strategy for Building an Entrepreneurial Community

Over the past 16 years, my colleague Dr. Gregg Lichtenstein and I have engaged in action research, or action science, in an effort to create a strategy for creating entrepreneurial communities. We have worked with hundreds of entrepreneurs and entrepreneurship assistance provider organizations in an effort to derive information that can be used to understand the way entrepreneurship assistance currently works, develop hypotheses as to how it might be improved upon, and test these hypotheses in the field (Argyris, Putnam, and Smith 1985; Reason and Torbert 2001; Schon 1987).

Based on this research, we have developed a five-point strategy for building an entrepreneurial community (Lichtenstein, Lyons, and Kutzhanova 2004):

1. Take a systems approach.
2. Customize the system for the community in question.
3. Focus on the development of entrepreneurs.
4. Develop new roles, skills, and tools.
5. Operate the system as a “transformation business.”

The community must be connected into a system of business entrepreneurs and those individuals and organizations (public, private, and nonprofit) that seek to assist and support them. Typical fragmented approaches to fostering entrepreneurship will not transform a community into becoming a complete entrepreneurial community. This system must be tailored to the specific community because each community is different and poses its own unique challenges to the achievement of successful entrepreneurship.

The focus of the system should be on the development of entrepreneurs. This is a departure from most entrepreneurship assistance efforts, which target the business and its stage in a business life cycle. Businesses, however, do not run themselves. Only entrepreneurs can drive their businesses through the stages of development, and these entrepreneurs can do this only when they have the capability to overcome the challenges they face at each stage. A business that drives its entrepreneur is a business in serious trouble (Gerber 1995).

As with any new systemic and collaborative endeavor, there will be a need for new roles, skills, and tools not found anywhere else. For example, when it comes to entrepreneurship assistance, typical communities either have no one who is responsible for developing entrepreneurs in a sustainable fashion, or they have several individuals or organizations who are responsible but who do not work together. Either scenario is problematic. This suggests the need for a new role: an organization or collaboration that is responsible for the ongoing development of entrepreneurs in the community.

Finally, if it is to be effective, the enabling system must be operated as a business that creates transformations as its economic offering (Pine and Gilmore 1999). A transformation is a leap to a higher level of performance. A complete entrepreneurial community transforms its entrepreneurs (business and social) so that they can, in turn, transform their businesses and civic organizations. These latter entities then transform the community on a continuous basis; however, transformations are not created and sustained by arm-length transactions (the typical form in which entrepreneurship assistance is presently offered). These transactional relationships must be connected in a systemic way, which brings us to the first element of this strategy.
The following is a description and examination of two examples of how rural regional communities can be organized as complete entrepreneurial communities. Each approach reflects all, or most, of the elements in the strategy outlined in the preceding section.

It is worthy of note that both of these examples manifest a regional approach. This is particularly important in rural locales, which tend to lack economic critical mass on their own. Such communities are better served by joining forces with surrounding communities (rural and urban) in order to pool resources and risk and expand markets (Lyons 2003). Thus, in rural areas, a complete entrepreneurial community will most likely be a complete entrepreneurial region.

Example 1: Appalachian Ohio Regional Investment Coalition (AORIC). The Appalachian Ohio Regional Investment Coalition (AORIC) is the product of almost 20 years of multi-level collaboration among various individuals and organizations for the development of a 29-county region located in southeastern Ohio. Thus, AORIC’s efforts to create an entrepreneurial region are founded on a firmly established culture of networking that was already in place but required years to build.

This region not only had substantial social capital at the time of AORIC’s inception, but it had a collection of very well established organizations that provided support to entrepreneurs and to the community as a whole. The environment was ripe, in a number of ways, for an effort to create an entrepreneurial region; however, the region was not without its challenges to such an endeavor. The culture was not supportive to entrepreneurship. As a result, there was a low rate of entrepreneurship, and the number of growth companies in the region was below the national average. Economic development activities in Appalachian Ohio were still principally focused on business attraction strategies.

Within this context, AORIC, with financial assistance from the National Rural Funders Collaborative, sought to build on the region’s strengths by connecting the strong service organizations located there into a partnership. This founding partnership included six organizations:

1. The Appalachian Center for Economic Networks (ACENet), a nonprofit community and economic development organization that has operated in the region for many years whose efforts contributed substantially to the development of the strong social capital enjoyed there; operates business incubators, training programs, and capital provision programs, among other initiatives, in support of business entrepreneurship
2. The Corporation for Ohio Appalachian Development, which fosters community and economic development through a collection of 17 community action agencies
3. The Foundation for Appalachian Ohio, which is a community foundation that assists youth and fosters angel capital networks
4. The Nature Conservancy, an environmental conservation group that seeks to encourage development that is compatible with the region’s environment
5. The Ohio Arts Council’s Appalachian Arts Program, which supports the arts and culture in the region
6. Rural Action, a nonprofit group that supports economic, environmental, and social justice

As demonstrated by the partners’ individual missions, AORIC is focused on both business and social entrepreneurship. Together, the AORIC partnership has identified a two-fold mission:

1. To create a vital region that is both sustainable and equitable
2. To seek to create more, and more successful, entrepreneurs, thereby generating wealth

AORIC has identified three key industry sectors upon which to focus: (1) food and technology, (2) forest products, and (3) arts and tourism. These sectors represent the economic strengths of the region as well as the economic activities that are most compatible with its natural environment.

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In order to achieve its mission and foster entrepreneurship in the three identified sectors, AORIC has adopted three core strategies:

1. The building of entrepreneurial capacity
2. The building of civic capacity
3. Pursuit of a broader policy agenda that is supportive of entrepreneurship

In its efforts to build entrepreneurial capacity, AORIC utilizes a model that is based on Sirolli’s enterprise facilitator. Coaches are trained to go out into the countryside to find prospective entrepreneurs and work with them one-on-one to enhance their skills and pursue needed resources. This is very much in keeping with the element of the strategy for creating an entrepreneurial community, delineated above, which calls for the development of entrepreneurs. In addition, AORIC has actively identified an entrepreneur support organization, which is a collection of individuals and organizations in the region that provide resources and other forms of support.

AORIC builds regional civic capacity by searching for and identifying prospective civic entrepreneurs. These individuals are provided with leadership training and then sent into the community to bring public and private leaders and volunteers into the entrepreneur support organization noted above. This provides the essential connection between business and civic entrepreneurship.

AORIC actively works with policy makers to champion policy approaches that address public issues in ways that also support entrepreneurship. Emery, Fisher, and Macke (2002) offer the example of a workforce development policy. Traditionally, policy makers in this area have focused on preparing individuals to work for existing or prospective employers in the given community. AORIC championed the idea of also focusing on preparing properly motivated individuals to start and operate their own businesses.

The AORIC model reflects most of the elements of the strategy for creating a complete entrepreneurial community, as discussed in this report. It is systemic, in that it attempts to link entrepreneurs, assistance provider organizations, and civic leaders throughout the region. Its system is tailored to the economic realities of Appalachian Ohio. One of AORIC’s major strategies is to develop entrepreneurial capability. While AORIC relies heavily on existing roles, skills, and tools—drawing on established models—it could be argued that these are assembled in a way that is unique to the community. While AORIC does not explicitly view itself to be a transformation business, it does appear to be offering transformations as an economic offering.

Thus, AORIC stands as a potentially replicable model for entrepreneurial community building.

AORIC did have a major advantage not enjoyed by most rural communities, however: 20 years of social capital building that has created a culture of networking. This begs the question, “How does a rural community/region that does not have an existing base of social capital go about fashioning itself into a complete entrepreneurial community?” The second example sheds some light on this question.

**Example 2: The Entrepreneurial Development System (EDS).** The Entrepreneurial Development System (EDS) is a framework for creating entrepreneurial communities developed specifically for that purpose, using the strategy outlined in this report. It is currently being demonstrated in two rural regions in North Carolina and West Virginia and one urban area in Kentucky.

The EDS is designed to operate as a transformation business and has a mission that reflects the following:

“To develop a supply of highly skilled entrepreneurs who are capable of building successful companies in sufficient numbers to transform the economy of the region.”

Two ideas embedded in this mission statement are of particular note:

- The idea of the creation of a “flow” of skilled entrepreneurs
- The concept of scale

If a community or region is truly intent upon transforming its economy via entrepreneurship, it must abandon the fragmented approaches to entrepreneurship assistance of the past and adopt a systemic approach that accomplishes two major tasks: (1) developing entrepreneurs in a consistent and systematic fashion and (2) doing so in numbers that have a clear impact. That is, the system’s final product is economic transformation.

With this mission firmly in mind, the EDS operates on three major premises (Lyons 2003):

1. Success in entrepreneurship hinges upon the mastery of a set of skills.
2. Skills can be developed.
3. Entrepreneurs come to entrepreneurship at different skill levels.
The first premise reinforces the emerging realization that entrepreneurs are made and not born (Shefsky 1994). Success in entrepreneurship becomes skills-based as opposed to being contingent upon innate individual traits. Because there is little or nothing that can be done about innate characteristics, an approach that focuses on developing skills stands to be considerably more productive.

Lichtenstein and Lyons (2001) have identified four major dimensions of skill that a successful entrepreneur must master:

1. Technical skills, which are specific to the business or industry in which the entrepreneur is operating (e.g., If his or her business designs web pages, an entrepreneur must possess the necessary skills to do so.)
2. Managerial skills, which are those skills required to conduct the daily operations of the business
3. Entrepreneurial skills, which permit the recognition and capture of business opportunities as well as the creative solution of challenges
4. Personal maturity skills, which ensure self-awareness, accountability, and emotional stability

There are a number of specific skills within each of these major categories, all of which can be developed over time, as the second EDS premise suggests.

The third premise points out the fact that, when it comes to the possession of skills, not all entrepreneurs are the same; therefore, “one size fits all” approaches to assisting entrepreneurs are unlikely to succeed. This can readily be understood when one considers the differences between nascent and serial entrepreneurs. A nascent entrepreneur is one who is starting a business for the first time and is undoubtedly coming to entrepreneurship with very few skills. A serial entrepreneur is one who has started several businesses (some successes and some failures) and has learned a lot along the way. Treating these two types of entrepreneurs as though they are the same would be counterproductive.

The EDS utilizes these premises as organizing principles for its two major activities: (1) developing individual entrepreneurs and (2) organizing entrepreneurship assistance providers to better serve the community’s entrepreneurs in their development. It does this by categorizing entrepreneurs by their individual skill levels, using the professional baseball league system as a metaphor. Entrepreneurs with very few skills are placed in the Rookie League. Those with more skills are classified as Single A, Double A and Triple A entrepreneurs have still higher levels of skill. The idea is to develop each entrepreneur into a Major Leaguer—an exceptionally skilled entrepreneur (Lichtenstein and Lyons 2001). Table 1 depicts this hierarchy of skill development. The system uses a face-to-face clinical interview instrument to measure entrepreneurial skills and place quantitative parameters on league levels. In this way, the entrepreneur can be initially assigned to an appropriate league for assistance, and his or her progress can be tracked within and between league levels. A single point of entry to the system is established wherein a diagnostican assesses the skill levels of incoming entrepreneurs as well as ascertains the obstacles they are facing to obtaining and using the resources they require for success. Using this information, the diagnostican prepares an individual game plan for each entrepreneur that clearly lays out the work the entrepreneur needs to do to improve his or her skills and where to go to get appropriate help.

Table 1. The Leagues of Entrepreneurial Skill

<table>
<thead>
<tr>
<th>League</th>
<th>Technical</th>
<th>Managerial</th>
<th>Entrepreneurial</th>
<th>Personal Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>Outstanding</td>
<td>Outstanding</td>
<td>Outstanding</td>
<td>Outstanding</td>
</tr>
<tr>
<td>AAA</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>AA</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>A</td>
<td>High/Med.</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Rookie</td>
<td>Low</td>
<td>Low/No</td>
<td>Low/No</td>
<td>Low/No</td>
</tr>
</tbody>
</table>


Each entrepreneur is then placed into a success team at their league level. A success team manager provides one-on-one coaching to the entrepreneurs in the success team and facilitates interaction among the entrepreneurs on the team for moral support, information sharing, and business collaboration purposes. Those entrepreneurs who need help in developing their personal maturity skills can work individually with a performance coach. An alliance broker works across league levels (i.e., among success teams) to identify opportunities for collaboration between companies and for mentoring of less skilled entrepreneurs by more highly skilled ones.

Because entrepreneurs served by the EDS require assistance in developing technical and managerial skills beyond what can be provided by the success teams, the system also organizes entrepreneurship assistance providers by the entrepreneurial skill level(s) at which they work best (Table 2). In this way, the entrepreneur can be sent to the right assistance provider at the right time in his or her skill development. In order to ensure that assistance providers in the community are working together efficiently and effectively to serve client entrepreneurs, the EDS organizes them into a community-wide Service Providers Network (SPN). The SPN meets on a regular basis to first overcome obstacles to cooperation, understand what each member organization does and how they do it, and identify and fill gaps in service provision within the community. In the Louisville, Kentucky
demonstration site, the SPN articulated the services each member offers and the skill level at which each service is provided and put that into a matrix that can be used by the diagnostician for preparing game plans. The Louisville SPN also recognized gaps in the assistance to entrepreneurs provided in the community and created task forces to work on filling those gaps through creative means.

Table 2. Classifying Entrepreneurship Assistance Providers by Leagues

<table>
<thead>
<tr>
<th>League</th>
<th>Type of Assistance Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>Venture capitalists, professional consulting practices, investment bankers, etc.</td>
</tr>
<tr>
<td>AAA</td>
<td>Angel investors, emerging business consulting practices, university tech transfer offices, etc.</td>
</tr>
<tr>
<td>AA</td>
<td>Manufacturing extension programs, small business development centers, small specialized venture funds, high technology incubation programs, etc.</td>
</tr>
<tr>
<td>A</td>
<td>Microenterprise programs, small business development centers, business incubation programs, etc.</td>
</tr>
<tr>
<td>Rookie</td>
<td>Microenterprise programs, youth entrepreneurship programs, etc.</td>
</tr>
</tbody>
</table>

Note: This is a general typology. The assistance providers that operate at each league level will vary from community to community.

A general manager coordinates the activities of the EDS. This individual is also largely responsible for raising funds to keep the system operating. In the West Virginia site, the general manager is a successful entrepreneur and possesses the skills necessary to manage such a complex undertaking. The West Virginia site also has a steering committee, whose responsibility is to set policy for the EDS and make important connections to other entities in the region. The make-up of the steering committee is diverse and represents a cross-section of the economic, political, and social leadership of the rural region. A similar steering committee is being organized at the North Carolina EDS demonstration site.

Building entrepreneurial communities can be a viable strategy for fostering rural community and economic development. Merely advertising one's community as being “entrepreneurial,” hyping entrepreneurship, or assembling loose confederations of entrepreneurship assistance providers, however, will not accomplish this entrepreneurial reality. There must be a clear method to such an endeavor; a method that ensures that the necessary social capital is built, that human capital is developed, and that an infrastructure for fostering innovation is in place.

The entrepreneurial community-building methodology must be systemic and inclusive of the entire community and its economy. It must provide for the customization of the system to fit the specific community in question, in recognition of the fact that the challenges to successful entrepreneurship are context specific. It must be dedicated to the development of entrepreneurs, so that they can, in turn, develop their businesses. It cannot rely exclusively upon the roles, skills, and tools of past and present entrepreneurship assistance endeavors because it must fulfill a mission of producing economic and social transformation, something that is not currently being accomplished in most communities. AORIC and the EDS provide two viable models for organizing a rural community in a holistic way if a community chooses to become completely entrepreneurial.

Conclusions
References


