Entrepreneurial Ecosystem Maturity and Momentum

The Important Role of Entrepreneur Development Organizations and Their Activities

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Overview:

Entrepreneurial ecosystems are becoming recognized as a way to stimulate economic growth, innovation and social change[1]. The implementation of them is gaining momentum across the United States and other parts of the world as their benefits are recognized. Nations, cities, regions, universities and others are collaborating to put in place entrepreneurial ecosystems as a critical component of their innovation strategies seeking to improve economies, societies, and institutions. Innovation Districts[2] and Smart City Infrastructures[3] are examples of economic development investments that are being made by many, yet it is well recognized that much of the value comes from the personal collisions and relationships that are possible because of the physical proximity, information exchange, and density that they create.

This paper uses a framework that was first explained in, **Is Your Ecosystem Scaling?** An Approach to Inventorying and Measuring a Region's Ecosystem Momentum[4]. This framework resulted from my life reflections as a serial entrepreneur and my role in the St. Louis ecosystem's formation and evolution from 2001 to today.

This paper focuses on the Entrepreneur Development area of that framework. Entrepreneur Development a highly important part of entrepreneurial ecosystems and needs to be recognized. This paper delves into Entrepreneur Development to better understand the organizations, activities, and people that are involved in this part of the ecosystem.

Two Midwestern cities (Kansas City and St. Louis) were chosen for the research. These were selected because of my proximity and familiarity with their evolution. Additionally, the Ewing Marion Kauffman Foundation offered introductions and resources that supported the effort in Kansas City. Section I provides an overview of the two selected ecosystems.

Goal:

Defining, recognizing, and measuring Entrepreneur Development will lead to more vibrant, faster maturing, high momentum entrepreneurial ecosystems. This paper will use real world information about Entrepreneur Development and put it into an inventory framework and apply a set of measurements. This will lead to a deeper understanding about Entrepreneur Development and show why it underpins an entrepreneurial ecosystem's vibrancy and momentum. It will answer questions that leaders and practitioners frequently ponder. Questions like:

For economic development professionals, civic leaders and policy influencer these questions are: 1) What do you mean by Entrepreneur Development? 2) How do I understanding it and what is happening? 3) How is my entrepreneurial ecosystem doing and who is leading or coordinating it? 4) What should my role be in supporting the ecosystem? 5) How do I respond to requests for ecosystem support and funding? 6) How should we measure success? 7) Should I use my leadership position to actively support entrepreneurial ecosystems?

For ecosystem practitioners, the questions are: 1) What is my role in the overall ecosystem? 2) How do I measure success and momentum? 3) How do I get funding and resources to support and expand what I do? 4) How do I communicate the importance of my efforts to civic leaders? 5) What other ecosystem players should I collaborate with and why? 6) What other activities need to be delivered to increase the vibrancy of the ecosystem? 7) What things can I do to be more effective?

Purpose:

- To provide insights by applying a framework and measurement that helps leaders and practitioners better understand Entrepreneur Development and its importance to economic outcomes
- To stimulate top down and grass root collaborations that lead to higher momentum entrepreneurial ecosystems
- To influence funders, economic development professionals, policy makers, and civic leaders to support Entrepreneur Development
- To create economic value and high-impact social change

I. Overview of Kansas City and St. Louis Entrepreneurial Ecosystems

1. Kansas City Metropolitan Area

The **Kansas City metropolitan area** is a 14-county metropolitan area anchored by Kansas City, Missouri. It straddles the border between the states of Missouri and Kansas. With a population of about 2,340,000, it ranks as the second largest metropolitan Missouri MSA after the greater St. Louis area.[5]

Kansas City's entrepreneurial ecosystem began around 2000 although it was not characterized as an ecosystem at that time. The Kansas City ecosystem has steadily gained momentum since its founding.

In 2011, Google Fiber chose Kansas City as their first gigabit city. Mayors Sly James (Missouri) and Joe Reardon (Kansas) appointed the Mayors' Bi-state Innovation Team and charged it with developing a playbook of creative ways the community could use Google Fiber to spark economic development, advance opportunities, and improve daily life in Kansas City.[6] In 2014, Kansas City's civic leaders, economic development organizations, and ecosystems players upped the ante with a bold vision: *To make Kansas City America's most entrepreneurial city*.[7] The Ewing Marion Kauffman Foundation is headquartered in Kansas City and is a major source of leadership, resources, research, and thinking that support entrepreneurial activity in the region and worldwide.[8]

The University of Missouri-Kansas City (UMKC) Innovation Center, is a major player in the ecosystem.[9] The Innovation Center is much more than a university organization and serves the region and beyond. Given all that it does it could be characterized as the region's ecosystem developer. It is the home of KC SourceLink as well as a number of Entrepreneur Development organizations that deliver an array of activities.[10] KC SourceLink which was created in 2003 with support from Kauffman, is a major source of information that informs prospective entrepreneurs, enhances collaboration across the ecosystem, and improves strategic perspective. The KCSource Link website lists over 200 not-for-profit, economic development, and entrepreneur related support groups that underpin the region's ecosystem. These are creating innovation momentum across a broad front, including technology, art, food, education, women, animal science, bioscience, not-for-profits, and others. SourceLink is being replicated in more than 20 states and cities.

Kansas City is home for sixteen post-secondary educational institutions. The largest is the University of Missouri-Kansas City (UMKC).[11] The Kansas City Art Institute[12] is involved in the ecosystem supporting artists as entrepreneurs. Community colleges have some ecosystem

activities while the other secondary educational institutions have little involvement in the ecosystem.

2. Saint Louis Metropolitan Area

Greater St. Louis is the metropolitan area that surrounds and includes St. Louis City which has a population of 315,000.[13] The MSA spans Missouri and Illinois divided by the Mississippi River and has a population of 2,811,588. The St. Louis ecosystem has steadily gained momentum since it began in the late 1990s. It has benefited from both top down and grass root efforts and progressed through three states of evolution including: (1) the early years (2) the period when the ecosystem gained momentum (3) when the ecosystem began to scale. These are described in my paper **Is Your Ecosystem Scaling?**[14]

St. Louis has a rich mix of Entrepreneur Development, Venture Development and Economic Development activities. There are over 20 coworking spaces with the three largest, CIC@4240, CIC@CET, and T-REX, containing nearly 400 companies.[15] [16] The CIC coworking spaces are subsidiaries of the Cambridge Innovation Center (CIC) and are located in CORTEX, a fast-growing innovation district that was started in 2002 and is now being recognized globally. [17] [18]

Like Kansas City, St. Louis has put in place an impressive number of ecosystem elements across a diverse mix of interest areas. The Accelerate St. Louis website lists 64 entrepreneur support organizations.[19] Life and Plant Sciences is one interest area that has solid momentum. It has received large investments and support and is an ecosystem in its own right. Around 2008, a grass root effort began in the technology entrepreneurship area. This has now grown to become a second, high momentum ecosystem within the ecosystem. Other evolving ecosystem areas include game development, women entrepreneurs, manufacturing, youth entrepreneurship, social innovation, and others.

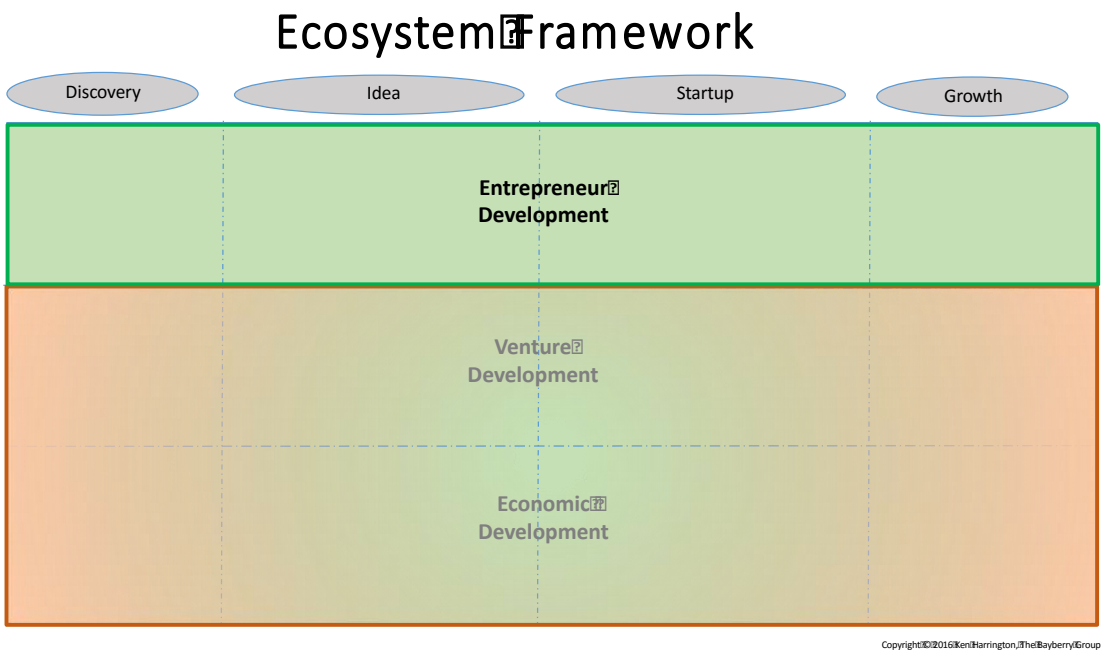
St. Louis is home for twenty post-secondary educational institutions. Washington University in St. Louis and St. Louis University are deeply involved with and strong influencers of the entrepreneurial ecosystem.[20] [21] Seven others, Lindenwood University, the University of Missouri-St. Louis (UMSL), Webster University, Harris-Stowe State University, Maryville University, and the two Community College systems are active in the ecosystem while the other secondary educational institutions have little involvement.[22] [23] [24] [25] [26] [27]

II. What is Entrepreneur Development?

Figure 1 shows the ecosystem inventory framework that is used for this research. It is a generic map that presents 12 intersecting sectors that are based on the phase of evolution (from left to right across the top of the matrix) and the type of development (from top to bottom). The phases of evolution include (1) discovery, (2) idea, (3) startup, and (4) growth, while the types of development represent the various undertakings related to (1) entrepreneur, (2) venture, and (3) economic development. As Figure 1 highlights the Entrepreneur Development area of the inventory framework illustrating that it is the focus for this research.

Figure 1

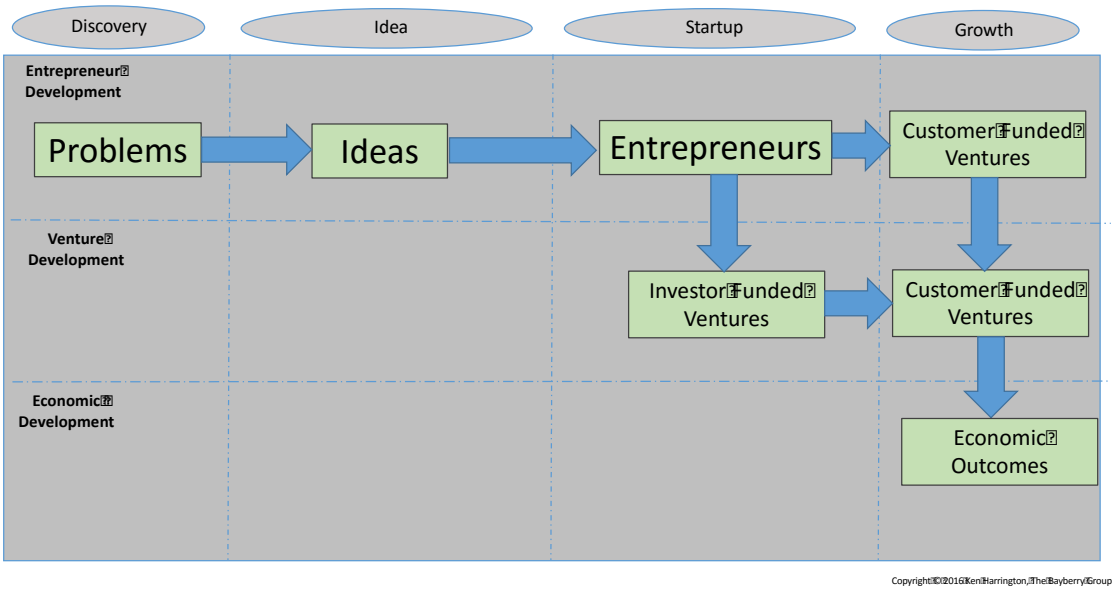
Ecosystem Inventory Framework



Venture Development and Economic Development are defined ecosystem areas that are well recognized. They have measurement approaches that are understood and reported upon usually in the form of economic outcomes (ventures started, funding obtained, revenue developed, jobs created). Entrepreneur Development deserves the same status and recognition. The research shows that there are a large number of community (mostly not for profits) and university organizations that delivery an array of Entrepreneur Development services. Figure 2 illustrates how these Entrepreneur Development organizations feed and strengthen Venture and Economic Development to achieve economic outcomes.

Figure 2

Entrepreneur Development Leads to Economic Outcomes



Entrepreneur Development is where inventions and ideas start and where they either blossom or die. It is also where entrepreneurs are created and improved so they can move forward to create viable ventures. Entrepreneur Development is where those often talked about serendipitous collisions occur. This part of the ecosystem is where connections, relationships and entrepreneurial learning occur. It underpins and is where a region's entrepreneurial culture comes from. It how a region increases its entrepreneurial IQ.

Entrepreneur Development is where prospective entrepreneurs choose to enter the ecosystem and then continue their efforts in forming ventures. Entrepreneur Development activities and organizations are the determinant for the number, quality and success of entrepreneurs. Entrepreneur Development organizations create more and better entrepreneurs and that influences the amount and type of investment capital that comes into an ecosystem. Eventually successful ventures add to ecosystem momentum as exits create "starburst" events spinning off more talent and capital in a region.

1. Definition of Entrepreneur, Venture and Economic Development

Entrepreneur Development organizations focus on the individual. Their primary motivation is to create more and better entrepreneurs.

Entrepreneur Development organizations provide services that are offered free or for a minimal charge. No equity or compensation is exchanged. Entrepreneur Development organizations are mostly not for profits but also include educational institutions and public sector delivered programs. Activities include such things as education programs, speaker/panelist events, meetups, mentoring services, free Entrepreneur in Residence (EIR) support, grant funding, competitions (funding given but no equity taken), internships, startup weekends, hackathons, idea exchange sessions, social events, and other activities. Entrepreneur

Development, as defined here, excludes university curricular for academic credit courses unless they support community entrepreneurs.

Venture Development's primary role is to select and fund successful companies so they produce wealth, economic outcomes and contribute to society. Angel investors, accelerators, public co-investment funds, venture capitalists, private equity groups, and banks are examples of Venture Development players. Investors want winners; thus, the selection process is competitive, the goal being to pick not just good deals but the best deals. Entrepreneurs and investors share wealth in the form of equity and debt that offer returns appropriate to the level of risk.

Service providers fall into the Venture Development area. Their primary motivation is cash or equity compensation. Law firms, accounting firms, PR/marketing companies, insurance brokers, and many others are examples.

Venture Development investors and service providers support Entrepreneur Development by volunteering or participating in Entrepreneur Development activities and events. However, their primary goal is wealth creation, reliable interest payments, or billability.

Economic Development is the third type of entrepreneurial ecosystem development. The primary focus here is to put in place the assets and infrastructure needed to cultivate, support, and mature companies. Economic development agencies usually lead these efforts. Their motivations are to create strong regional or local economies and their activities span many areas. This includes connecting the public and private sectors, influencing public policy, attracting companies, developing infrastructure, conceiving regional economic strategies, communicating the image of the region, and many other things.

Entrepreneurial ecosystems are only one part, sometimes a small portion, of their activities. Ecosystem areas that they most often help with include:

- Developing strategies that identify preferred industry or technology sectors
- Creating infrastructure such as facilities, scientific research initiatives, and digital networks.
- Capital formation, workforce development, and similar areas
- Occasionally directly delivering Entrepreneur Development activities or funding other organizations to engage in Entrepreneur Development

2. Definitions for the Phases of Evolution

The phases of evolution illustrate where an entrepreneur or venture is in its progression. There are four phases of evolution: (1) discovery, (2) idea, (3) startup, and (4) growth.

The ***Discover Phase*** is where people recognize a problem but haven't come up with a possible solution. It includes basic scientific research, hackathons, problem days, startup weekends, and other activities. People move into the Idea Phase when they come up with ideas that might fix the problem.

The ***Idea Phase*** is when a prospective entrepreneur starts to act on their idea. People in the idea phase are trying to figure out if their idea(s) have potential. Idea phase activities include idea pitch sessions, entrepreneur meet up events, resource fairs, short education classes, mentoring, office hours, social events, and just asking about. It also includes searching entrepreneurial websites and event calendars to sort out where to start.

The ***Startup Phase*** is the next phase in an entrepreneurial ecosystem. At this stage, prospective entrepreneurs commit to founding a venture; allocate time and resources to pursuing it; and work on refining their ideas and turning them into a company. Activities in the startup phase include selecting a legal entity and structure; forming a team; developing a proof of concept; refining a business model; crystalizing a value proposition and customer pitch; implementing intellectual property strategies; fundraising; and myriad other activities. Investors are interested in the best ventures that come out of the Startup Phase.

The ***Growth Phase*** is when customers validate a company. First customer revenue (not grant revenue) determines when a venture moves into this phase. The growth phase includes activities such as market launch, revenue growth, positive cash flow, competing, additional funding, scaling, and exit.

3. Measurements

In 2015 Stangler and Bell-Masterson defined a set of ecosystem measurements.[28] I have selected these for use in this research because they are good yardsticks for the social and people factors that happen in the Entrepreneur Development area. These measurements can help us understand and gauge the dynamics of personal motivations, relationships, and learning that occur in the Entrepreneur Development area.

Stangler and Bell-Masterson definitions are summarized below. I use their language to explain Connectivity, Fluidity, Density and Diversity. I have placed their measurements in this sequence because I feel this is how they relate to each other. In my opinion, Connectivity leads to greater Fluidity; Fluidity impacts Diversity; and all three result in Density.

1) ***Connectivity*** examines program connectivity, spinoff rates, and dealmaker networks. In a vibrant (high momentum) ecosystem the connections between the elements matter as much as the elements themselves.

2) ***Fluidity*** measures the fluctuation in population and labor market reallocation that is flowing into and out of a region as well as within a region. It also measures the number of high-growth firms, e.g. those that add the most jobs.

3) ***Diversity*** looks at economic diversification, immigration, and income mobility.

4) ***Density*** tracks the number of new and young firms, the percentage of total employment in new and young firms, especially in any sectors that are identified as preferred in a given region.

4. Stage of Maturity and Momentum

Maturity is the current state of a region's entrepreneurial ecosystem. It is a baseline that can be used to measure momentum. Maturity is not based on how many years a region has been working on its ecosystem, but the scale and substance that it has achieved. This research creates maturity baselines for the Kansas City and St. Louis Entrepreneur Development ecosystem areas.

Kansas City and St. Louis are at a healthy, middle stage of maturity. Table 1 shows the evolution since 2000. The quantity of Entrepreneur Development activities confirms the mid stage of mature. Both regions have achieved a critical mass of activity and are advancing their entrepreneurial culture.

Table 1

Kansas City and St. Louis Ecosystem Maturity and Momentum

	Kansas City	St. Louis
Before 2006	16	15
2006-2010	18	13
2011-2015	51	67
2016	13	14
Total	98	109

Momentum is the velocity of an ecosystem. It is the relative improvement. Table 1 shows that the momentum is increasing as more Entrepreneur Development activities are offered. Table 1 also illustrates that it can take a number of years to create an ecosystem. Culture and entrepreneurial IQ are based on people and relationships and this can take time.

Another point is that younger ecosystems have little density and a small baseline when they start. When the baseline is small, relative momentum can be high but accomplishment seems tiny. Scaling occurs when the maturity baseline (density) and momentum (velocity) get large enough that momentum becomes apparent. In St. Louis, we experienced inflection points where people began to comment that things were noticeable different. Based upon the research, Kansas City and St. Louis have had these inflection or tipping points.

I have tailored the Stangler and Bell-Masterson measures to be specific to Entrepreneur Development. The definitions appear below.

- ***Connectivity*** is determined by the number of participants in Entrepreneur Development activities. More participants imply more connectivity. It can also be used to measure relationships between Entrepreneur Development organizations. More collaboration results in higher connectivity.
- ***Fluidity*** is based upon the number people entering and leaving the Entrepreneur Development part of the ecosystem. It tracks the movement of entrepreneurs or ventures between the phases of evolution or type of development using the inventory framework. Fluidity could also be measured by number of new entrants into the ecosystem.
- ***Diversity*** looks at the number of new Entrepreneur Development interest areas that are created and the different types of people that are participating. An increase in the number and maturity of sub ecosystems within the ecosystem shows an increase in diversity.
- ***Density*** tracks the number of Entrepreneur Development organizations and activities. More organizations and activities result in more and better entrepreneurs and this in turn causes more ventures.

5. Approach and Findings

Research Approach:

As described above, data came from two regions whose ecosystem are at a mid-life stage of maturity. The first step in the research process was to identify all organizations that might fit the Entrepreneur Development definition. Once the list of organizations was complete, information on the organizations was gathered using public sources, mostly the internet and organization websites. In Kansas City, KC SourceLink[29] was a major contributor to the process.

The public information was organized and put into a standard research format suitable for sharing with each Entrepreneur Development organization's leader. Those leaders were then contacted asking for their agreement to support the research. The public information was then emailed to leaders along with a definition of Entrepreneur Development and the Four Phases of Evolution. Leaders were asked to review of the information and agree to a face-to-face or telephone interview. During the interview, they were invited to ask questions, particularly clarifying their understanding of terms and the research approach. They were also asked to revise any information that was incorrect. The revised information was emailed back to the leaders who were asked to make one last check to ensure the information was correct.

Information that was requested included:

- Organization information
  - ✓ Affiliation of the organization
  - ✓ Background of the founder
  - ✓ Founding year for the organization
- Activity information
  - ✓ Number of activities delivered
  - ✓ Number of participants for the activities
  - ✓ Origin of the idea for starting the activity
  - ✓ Purpose of the activities
  - ✓ Method and approach used for delivering the activities
- The phase of evolution for the activities
  - ✓ Activities
  - ✓ Participants
- Founder information
  - ✓ Background of the founder
  - ✓ Current role of the founder
- Funding sources

1) Number and Types of Entrepreneur Development Organizations and Activities

Table 2 shows the number of Entrepreneur Development organization that are operating in the Kansas City and St. Louis regions. It also shows the number of activities they deliver. Activity count is for a twelve-month period. An organization might deliver the same program a number of times over the year. For example, some organizations held regular monthly events and the count for those types of activities would be from ten to twelve times for the year.

Organizations were grouped based upon their affiliation. The three categories that evolved were community led, economic development led and university led.

Community Led

Community led organizations are organizations that are not part of an economic development entity or university. Most community led organizations are not for profits. Some were funded or may have been inspired by economic development or universities but were included in community led if they had their own leadership and were operating autonomously outside of the economic development organization or university. Community led organizations are responsible for about two thirds of the two region's Entrepreneur Development organizations and activities.

Economic Development Led

A little over 10% of Entrepreneur Development organizations and activities were directly delivered by Economic Development organizations. For St. Louis, this included Entrepreneur Development activities that were offered by the St. Louis Economic Development Partnership, the St. Louis Regional Chamber, and the East St. Louis Small Business Development Center.[30] [31] [32] In Kansas City it included the Economic Development Corporation of Kansas City and the Enterprise Center in Johnson County.[33] [34]

Table 2

Entrepreneur Development Organizations and Activities

Kansas City & St. Louis	Organization	%	Activity	%
Community Led	42	65%	125	60%
Economic Development Led	7	11%	22	11%
University Led	16	25%	60	29%
Total	65	100%	207	100%

University Led

Universities were both public and private institutions. Universities were responsible for about 25% of the two region's Entrepreneur Development activities indicating the importance of engaging them as part of an ecosystem. For Kansas City and St. Louis nearly all of the university led Entrepreneur Development activities were delivered by three universities. One public and two private.

The university organization number was determined by how many entities within the university delivered Entrepreneur Development activities that were open to the community. For example, Washington University in St. Louis had four organizations, including the campus wide Skandalaris Center for Interdisciplinary Innovation and Entrepreneurship, the law school entrepreneurship legal clinic, the engineering school Discovery Competition, and the BioEntreprneeruship Core student organization. Those four organizations had eight activities that invited community involvement.[35] [36] [37] [38]

Most university activities were co-curricular, no academic credit programs that invited community entrepreneurs to participate for no or a nominal charge. A few curricular, for academic credit activities, were included provided their primary purpose was to support community entrepreneurs. This included law clinics, entrepreneurial internships, and courses where students worked with entrepreneurs on their ventures. Curricular for academic credit courses that might fit the Entrepreneur Development definition were excluded.

The UMKC Innovation Center activities deserve special note since it is classified as university led but is delivering a large number of Entrepreneur Development activities to the community. It houses eight organizations that delivered 62 activities. Examples of organizations in the Innovation Center are KC SourceLink, ArtistINC, Digital Sandbox, Whiteboard 2 Boardroom, Ice House Entrepreneurship, and the Missouri Small Business and Technology Development Center. [39] [40] [41] [42] [43] [44] [45]

Measurements and Implications

Connectivity can be measured by the number of activities and if they increase. Fluidity (collaboration) between community, economic development, and university is implied by the research but needs more specific measurement. Density is measured by the number of organizations and as show is increasing.

2) Individual and Organization Initiated Activity Ideas

The source of the ideas for activities were either individual or organization initiated. Individual ideas were created by a person or small group. Many of the community ideas were grass roots or bottom up initiated. Economic development and university ideas were more organization initiated. These ideas seemed to be more planned and top down in origin. Individual and organization initiated ideas seem to have two different approaches for developing their ideas. Table 3 shows that both types of ideas are important to the ecosystem.

Community led organizations account for about 80% of the individual initiated activities. Individual initiated activities seem to develop using an entrepreneurial approach. A founder, usually with an entrepreneurial background, conceives of an idea and then tests it as a small proof of concept. This often requires that the founder recruit others to help for no compensation. Sometimes the founder uses personal funds. Some ideas fail or are changed. Ideas survive if value is proven. The leaders then continue to fund raise and scale their activities.

Table 3

Individuals and Organizations as the Source of Activity Ideas

Kansas City & St. Louis	Individual Initiated	Organization Initiated	Total
Community Led	71	54	125
Economic Development Led	4	18	22
University Led	10	50	60
Total	85	122	207
	41%	59%	100%

About 80% of economic development and university activities were organization initiated. Organization initiated ideas seem to be more planned and deliberate. They may be a response to a need for an activity that is an identified gap in the ecosystem. A plan is developed and leads to funding before an activity is started. The plan guides the implementation. Funding is provided by the organization based upon a long-term commitment to the activity.

Measurements and Implications

Regions that wish to create high momentum ecosystems need to support ideas coming from both individuals and organizations. The approach for implementing ideas is quite different for

individuals and organizations implying that funders and policy makers need to consider this when designing Entrepreneur Development incentives. The entrepreneurial approach used for individual ideas provides a low cost, quick to act model that has high connectivity. This approach may be particularly useful to young ecosystems or new interest areas that are just beginning and need to prove their value. Strategic areas of interest may engage in more deliberate and thoughtful planning. Both can benefit by using the maturity, momentum, and modified Stangler and Bell-Masterson measures to understand their efforts and outcomes, including how they collaborate across the ecosystem.

3) Original and Replicated Activity Ideas

Ideas were classified as original or replicated. Original ideas were created in the region. Replicated Ideas were developed elsewhere and then copied in Kansas City or St. Louis. Replicated ideas were often national programs being offered across the country. One example of a replicated Entrepreneur Development activity is the Kauffman 1 Million Cups program. It is replicated in over 100 cities.[46] For the research is was counted as an original idea in Kansas City but a replicated idea in St. Louis. Other examples of replicated ideas were StartUp Weekend, SCORE, SBA funded Women's Business Centers, Veterans Business Resource Centers, Venture Café, Master Mind, and Ice House Entrepreneurship.[47] [48] [49] [50] [51] [52] [53]

Table 4

Types of Ideas

Kansas City & St. Louis	Original	Replicated	Total
Community Led	83	42	125
Economic Development Led	13	9	22
University Led	47	13	60
Total	143	64	207
	69%	31%	100%

Table 4 shows that more than two thirds of activities were original. This ratio of original to replicated was about the same for community, economic development, and university led organizations.

Interestingly, Kansas City and St. Louis have created nine replicated Entrepreneur Development programs. In Kansas City, the Ewing Marion Kauffman Foundation funded pilots that, once proven, were replicated elsewhere. Replicated programs in St. Louis were funded by Washington University in St. Louis or civic leadership.

Kansas City replicated programs included:

1. 1 Million Cups[54]
2. SourceLink[55]
3. Global Entrepreneurship Week (GEW)[56]
4. FastTrac[57]
5. Pipeline[58]
6. ArtistINC[59]

St. Louis replicated programs were:

1. Idea Labs[60]
2. The BALSA Group[61]
3. Arch Grants[62]

Measurements and Implications

A region's stage of maturity may be implied by the region creating replicated programs. Replication also may impact fluidity as it requires forming relationships with ecosystems and people outside the region.

4) Phase of Evolution for Activities

Table 5 shows the affiliation of the organization and phase of evolution for the activities that they deliver. The research showed that nearly 50% of Entrepreneur Development activities occur in the idea and startup phases indicating that those early Entrepreneur Development are important for creating more and better entrepreneurs. The research also showed that 24% of Entrepreneur Development organizations support revenue producing companies in the growth phase. These activities are supporting entrepreneurs who are running companies that produce measurable economic outcomes including jobs.

Table 5

Phase of Evolution for Activities

Kansas City & St. Louis	Discovery	Idea	Startup	Growth	Total
Activities					
Community Led	10	33	47	36	125
Economic Development Led	1	2	4	16	22
University Led	4	17	24	16	60
Total	14	52	74	68	207
	7%	25%	36%	33%	100%

Measurements and Implications

Fluidity can be measured by tracking the movement of entrepreneurs and ventures between the phases of evolution and types of development. For example, fluidity is favorable if the number of ventures moving from startup to growth and startup to Venture Development increases from one year to the next. Fluidity is also implied by the mix of activities across the phases of evolution. For example, Fluidity is invited because an entrepreneur aspires to move forward and participate in activities at later stages of evolution or development.

5) Participation

Table 6 counts participation in Entrepreneur Development activities. 85% of the Entrepreneur Development participation was delivered by community led organizations. The research estimates that entrepreneurs in Kansas City and St. Louis participated nearly 75,000 times in Entrepreneur Development activities over the last year. Participation is not the number of individuals that are in the Entrepreneur Development part of the ecosystem since one individual could participate many times and with many organizations.

Over 50% of participation occurred in the idea and start up phases of community led activities. This is an important finding since it shows that this is the hot bed of connectivity in Entrepreneur Development. It is where a large number of new relationships, learning, and energy happen.

Table 6

Participation at Activities

Kansas City & St. Louis	Discovery	Idea	Startup	Growth	Total
Community Led	2,000	13,432	28,243	18,092	61,766
Economic Development Led	40	83	888	4,482	5,493
University Led	256	1,386	3,411	1,962	7,014
Total	2,295	14,901	32,542	24,536	74,273
	3%	20%	44%	33%	100%

Measurements and Implications

Connectivity is implied by the amount of participation. The opportunity for new relationships increases with more participation. Density is also measured by participation.

Better connectivity measures need to be developed. Participation measures the quantity but not the quality of connections. Does participation lead to introductions, new thinking, information, learning, or other things that accelerate an entrepreneur's development? Is the participation creating more and better entrepreneurs who can reduce the it takes to become investor or customer funded?

Another quality measurement is how many new substantive relationships occur with participation. Do people (1) just meet one time and move on or (2) do they meet someone with a common interest or motivation that causes them to collaborate and work together in the future? Connectivity quality could be understood if a measurement approach for new relationships is uncovered.

6) Founder Backgrounds

LinkedIn was used to determine the background of the founders for the Entrepreneur Development organizations. Background was then discussed and confirmed during interviews. Six categories were created based upon the types of experience that appeared most frequently. These were:

1) *Entrepreneur*-Individuals who had at some time in their life been a founder or team member for an early stage venture. Some founders that were labeled "entrepreneur" were currently employed by an entrepreneur development organization, economic development organization, or university.

2) *Ecosystem Person*-Professionals who held paid positions in the ecosystem but who had not been an entrepreneur

3) *Educator*-Professors, administrators or people that were currently employed by a university but had not been an entrepreneur

4) *Student*-Individuals that were enrolled in a university when they started the activity but had not been an entrepreneur

5) *Economic Development Person*- Professionals who held paid positions with an Economic Development organization but who had not been an entrepreneur

6) Other

Table 7 shows that the most frequent founder type was Entrepreneur accounting for nearly half of the founders. Ecosystem Person and Educator made up about one third. Students and Economic Development Person were the remainder.

Table 7

Founder Backgrounds

Kansas City and St. Louis	Entrepreneur	Ecosystem Person	Educator	Student	Economic Development Person	Other	Total
Community Led	55	34	7	16	4	9	125
Economic Development Led	15	1	0	0	5	1	22
University Led	21	5	21	2	10	1	60
Total	91	40	28	18	19	11	207
	44%	19%	14%	9%	9%	5%	100%

This indicates that individuals that have an entrepreneurial background are more likely to self-select to become engaged in Entrepreneur Development. As I did interviews I made two observations.

- Some entrepreneur founders were finishing unsuccessful ventures and seemed to want to try to make the environment better for others. Other entrepreneur founders were retired and wanted to continue to be engaged with startups and entrepreneurs but did not want to start another venture.
- Entrepreneur founders had a high level of passion and were motivated by a desire to improve the ecosystem or cause change. Survival levels of compensation were needed but money was not the driving factor for participation. They repeatedly said that they wanted to have impact by contributing to the ecosystem.

Measurements and Implications

Fluidity is implied by entrepreneurs choosing to stay involved with the ecosystem after they finish ventures. The implication for younger ecosystems and new interest area sub ecosystems may be material. Is it possible to stimulate low cost, quick momentum activities that are entrepreneur founded? If the answer is yes, it may have implications for how to create relationship momentum and ecosystem velocity.

7) *Purpose and Method*

Purpose is defined as the reason for an activity. To determine purpose Entrepreneur Development organization leaders were asked, "What does your Entrepreneur Development organization hope to accomplish with the activity?". Table 8 shows the terms what were most

often mentioned during the interviews. Connect accounted for one third. Educate was nearly as frequent and was followed closely by Do.

Table 8

Purpose of Entrepreneur Development Activities

Kansas City & St. Louis	Connect	Educate	Do	Inform	Fund	Other	Total
Community Led	68	42	42	20	11	18	201
Economic Development Led	12	14	1	6	2	3	38
University Led	31	44	20	2	10	5	112
	111	100	63	28	23	26	351
	32%	28%	18%	8%	7%	7%	100%

Measurements and Implications

Different purposes show that Entrepreneur Development happens in many different ways. Some are relationship and peer to peer based (Connect, Do, Fund). Others are more structured (Educate, Inform). More study could increase the understanding about the effectiveness of the different approaches and when they should be used. For example, what is the financial cost, time commitment, and outcomes for the different approaches?

Method is defined as the way an activity is delivered. To determine method, leaders to discuss how they delivered activities. Twelve methods were identified and then grouped into four categories.

- **Competitive Interaction** included pitch events, hackathons and competitions.
- **One to Many** were classes, presentations, speaker events, panel presentations, and discussions.
- **Social Events** included things like happy hours, film screenings, breakfast meetings, and cook outs.
- **Actively Doing** was where mentoring, internships, and hands on events were grouped.

Table 9 shows that nearly 40% of activities were One to Many. Actively Doing and Competition or Pitch accounted for over 50%.

Table 9

Delivery Method for Activities

Kansas City & St. Louis	One to Many	Actively Doing	Competition or Pitch	Social Event	Total
Community Led	43	37	31	14	125
Economic Development Led	12	6	2	2	22
University Led	20	23	16	1	60
Total	76	65	49	17	207
	37%	31%	24%	8%	100%

Measurements and Implications

The method of delivery can affect connectivity. One to many activities, such as panel discussions, have fewer connectivity opportunities than competitive interaction activities like hackathons. This needs further investigation, but it may imply that the Kansas City and St. Louis ecosystems have a large opportunity for increasing connectivity by more intentionally designing events to increase connectivity.

8) *Resource Models*

How are Entrepreneur Development organizations funded and sustained? The research provided some insights that serve as a starting point for understanding this critical issue. During interviews the organization leaders were asked, "What percentage of your funding comes from the following sources?". The choices for community and economic development organizations were grants, economic development organizations, private donations, earned revenue, sponsorships, mature ecosystem organizations, member dues, corporate contributions, and other. Choices for universities were grants, university funding, entrepreneurship center funding, school funding, earned revenue, sponsorships, community partner, economic development, and donor specified gift.

Economic development organizations and universities funded their Entrepreneur Development activities with internal resources. Entrepreneur Development was one of many activities of a broader multi-faceted mission. Entrepreneur Development was a larger portion of university Entrepreneurship Centers' missions but they also had other responsibilities. The UMKC Innovation Center delivered many Entrepreneur Development activities but it also had other responsibilities in its mission.

Community organizations were more likely to have Entrepreneur Development as a primary mission although this was not always the case. More importantly the resource models for how they funded their activities was very different from economic development and universities. Table 10 shows the funding sources for Community organizations and implies that Community Entrepreneur Development leaders cobble together resources from many places. As stated earlier, interviews indicated that they act entrepreneurially to accomplish this. They are persuasive, creative fund raisers that pursue government grants, foundations, philanthropists, corporations, civic leaders, sponsorships, and many other sources. Some have earned revenue streams that support what they do.

Table 10

Funding Sources for Community Led Organizations

Grants	Sponsorships	Earned Revenue	Private Donations	Corporate Contributions	Economic Development	Mature Ecosystem Organization	Member Dues	Other	Total
35%	15%	14%	13%	8%	5%	3%	3%	6%	100%

Community organization's entrepreneurial, grass roots mode of starting and funding their activities is both an opportunity and a threat. They sometimes self-fund or begin an activity with no compensation. As they bootstrap, they work on convincing funders about the value of their work and then ask for more funding. Survival is often an issue for community led organizations.

Measurements and Implications

Funders and policy makers can use the inventory framework and measurements to orchestrate ecosystem collaboration and

Understanding and creating intentional and coordinated funding strategies for community led organizations may have implications for how an ecosystem matures. Community led organizations are responsible for the majority of idea and startup phase connectivity. This connectivity is critical to any ecosystems momentum, energy and maturity. This needs to be understood and supported.

6. Conclusions

Entrepreneur Development is critical to the health of entrepreneurial ecosystems. It is where most entrepreneurs start, develop and then move forward to create economic outcomes. It is where connectivity happens. It is the source of more and better entrepreneurs in a region. Understanding the people and relationship aspects of an ecosystem is critical to the momentum that follow.

Entrepreneur Development needs to be recognized and given the same status as Venture Development and Economic Development. Policy makers and local leaders have the ability to make this happen. Entrepreneur Development needs specific strategies, approaches, and funding that supports and rewards individual and organization initiated ideas and activities. Both top down (planned) and bottom up (entrepreneurial) approaches are needed to sustain and scale an ecosystem.

Inventorying and measuring Entrepreneur Development will help the orchestration of the many organizations, players, activities, and motivations that interact in an entrepreneurial ecosystem, especially in the Entrepreneur Development area. Orchestration is a delicate task. Funders often comment that there are too many activities and organizations. They feel that duplication needs to be eliminated to achieve efficiency. Entrepreneur Development leaders state that it is hard to communicate what they do and why they are different. The framework, especially the Stangler and Bell-Masterson measures, can help with this by creating a common language. This will lead to better understanding and collaboration. Focusing on an ecosystem's collective momentum is a noble goal that can be embraced by the many different players.

Over controlling the environment of an entrepreneurial ecosystem can be harmful. Care needs to be taken to preserve the entrepreneurial energy and vibrancy that comes from the many

entrepreneurs who are responsible for Entrepreneur Development activities. A balance between chaos and organization needs to be found to achieve vibrancy and momentum.

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