

Entrepreneurial Ecosystem
Building in
in Athens, Alabama

Andrew Dollar
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Dr. Chris Quinn Trank, Capstone Advisor
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Executive Summary

Located in north Alabama, Athens is a traditionally quiet town that prides itself on the small town feel and local southern charm. Serving as the county seat for Limestone County, both Athens and Limestone County are two of the fastest growing areas in Alabama. This is in part due to the influx of people and jobs locating within the north Alabama corridor. The increase in population and economic activity has generated interest among local policymakers as to how to best position Athens for future activity.

In fall 2020, the city of Athens put together a task force around the idea of building an incubator to spur innovation, create new jobs, and retain local talent in the area. Several task force members were quick to decide not only that an incubator was needed in Athens, but they went as far as suggesting a specific location and advocating on the task force for particular types of companies to locate in the incubator. Absent from the ongoing discussion about the incubator was the voice of local entrepreneurs who, most likely, are the ideal tenants for such space.

This capstone project seeks to highlight local entrepreneurial needs by exploring the history of entrepreneurship as an economic development strategy, introducing the concept of an entrepreneurial ecosystem, and providing insight into the needs of local entrepreneurs. The project uses the following research questions to guide the inquiry, uncover findings, and develop recommendations:

- 1. How do entrepreneurs view Athens' current ecosystem?**
- 2. What support mechanisms are valued by local entrepreneurs?**
- 3. How do local entrepreneurs envision a stronger ecosystem in Athens?**

The project leans on Daniel Isenberg's (2010) article "How to Start an Entrepreneurial Revolution" and Brad Feld's (2012) Boulder Thesis as conceptual frameworks. Isenberg laid out six domains—policy, finance, culture, supports, human capital, and markets, that are critical

to developing an entrepreneurial ecosystem and Feld argues the ecosystems must be led by entrepreneurs, not the government. To that end, a total of five semi-structured interviews were conducted with local entrepreneurs to determine how they view the local ecosystem, assess their needs, and highlight their perceptions on building a stronger ecosystem in Athens.

Based on their responses, the project produced the following findings:

- There is an environment of entrepreneurship in Athens.
- Entrepreneurs do not feel Athens has infrastructure or community investment supporting entrepreneurship.
- Entrepreneurs strongly identify with all five mechanisms investigated.
- Entrepreneurs seek streamlined business processes and a culture of yes when it comes to innovation and entrepreneurship.
- Entrepreneurs repeatedly call for a space to collaborate, meet, and learn.

Over the past year, the city has expressed interest in developing a downtown incubator to serve entrepreneurs and small businesses. However, before this research, the needs of local entrepreneurs had not been explored by local policymakers. Thus, the incubator concept may be a solution in search of a question. What follows is a series of recommendations for the city to consider before moving forward on a project that may not meet the needs of the audience it hopes to serve.

1. The city needs to develop a conceptual ecosystem framework and map the existing ecosystem.
2. Athens must discover its niche within the larger northern Alabama ecosystem.
3. The city should streamline business policies and provide organized support for entrepreneurs.
4. The city should adopt broad entrepreneurial growth strategies.
5. The city should make a long-term investment into an entrepreneurial center.
6. Cultivate civic and social entrepreneurial opportunities.

Each of the recommendations are based on the review of the literature, aligned with the conceptual framework, and developed from the interview findings. They are aimed at highlighting the voice of local entrepreneurs as the city of Athens explores developing a downtown incubator, which is dependent on local entrepreneurs. An incubator may or may not

be the answer for Athens, but building around the needs of local entrepreneurs provides the opportunity to develop and support a local ecosystem. This network has the potential to influence and enhance Athens' standing in the north Alabama environment while promoting economic growth in one of the state's fastest growing cities.

Introduction

“It is one thing to propose entrepreneurship as a solution to rural economic development programs; it is quite another to alter local conditions and individual mind sets in a way that makes entrepreneurship more attractive and feasible” (Ring, Peredo, Chisman 2010, p. 174). Leading up to the 2020 mayoral election, the concept of starting a local business incubator in Athens, Alabama emerged as an idea to generate economic growth in the area. Like many municipalities, local leaders want to retain area talent while creating opportunities to attract new development to the area. The business incubator emerged as a novel idea to provide an initial spark toward long-term, sustainable growth in the city and county.

However, economic development, especially entrepreneurship, is not that simple. Minnitti and Bygrave (1999) contend that the foundations of entrepreneurship are often self-reinforcing. The presence of successful entrepreneurs in an area often encourages and influences others to follow in their footsteps. Yet, activity alone is not enough of a predictor to guarantee community success. Instead, dynamic and emerging social characteristics within a community such as entrepreneurial history, local culture, and social infrastructure combine to produce an ecosystem that largely influences activity and success (Stam 2015). In fact, public efforts to boost entrepreneurship often fail because replicating success strategies prove too difficult (Feldman and Zoller, 2012). As Athens considers investing in a business incubator, larger questions remain about the local ecosystem, which may ultimately determine the success or failure of the venture.

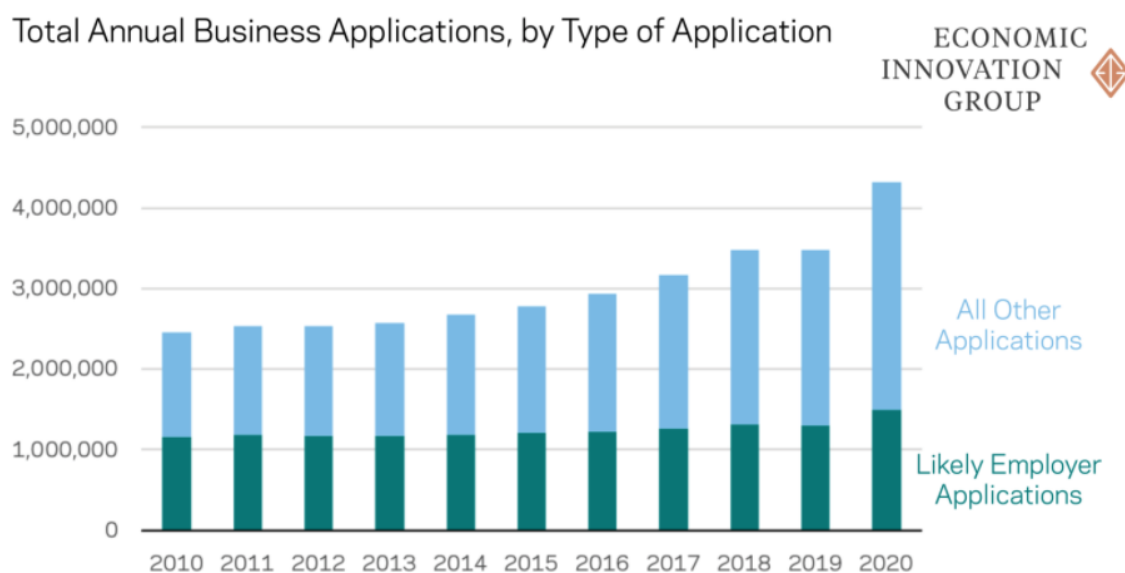
The prospect of building a stronger and more resilient business environment continues to surface as small and rural areas recover from the pandemic and look for new ways to

stimulate growth. This potential in Athens is the focus of this capstone project. As described in the following pages, the robust expansion of industry and population in the region will help fuel Athens' growth for decades to come. With the growth come new opportunities in the form of jobs, startups and innovation. This project aims to establish a foundational understanding of entrepreneurial ecosystems, how local policy can stimulate and incentivize activity, and then highlight the voice of local entrepreneurs to assist the development of a vibrant ecosystem in Athens. The findings provide a framework to help guide decision making in Athens as the city experiences the challenges associated with rapid regional growth and pursuit of creative and innovative solutions to generate economic growth.

Organizational Context

Surprisingly, entrepreneurship is booming across the United States. Possibly driven by underlying optimism, sudden changes in employment statuses, or the rapidly advancing integration of technology in society and business, the number of business applications powerfully surged nationwide in 2020 (Census Bureau, Business Formation Statistics).

Figure 1: History of Business Applications by Year



Source: U.S. Census Bureau's Business Formation Statistics

Growing by an astounding 24% over the previous year, this proliferation occurred despite an ongoing health pandemic and economic crisis. These figures largely support the clamor from organizations such as Brookings, Inc and Bloomberg that argue entrepreneurship is the road to long-term economic recovery (Hwang, 2020).

One of the more peculiar findings in the Census data was the surge of “high-propensity” business applications among several southern states. The Census defines these applications as having a high likelihood of turning into a business, as opposed to other applications which may simply represent self-employment (O’Donnell, Newman and Fikri, 2021). Within this grouping, Alabama experienced a 30.9% increase in business applications over 2019 totals. While the data fails to provide significant industry or geographic specificity, the figures are an encouraging sign that entrepreneurship is growing in the state.

Athens is a modest, nostalgically attractive, historic city in north Alabama. One of the oldest incorporated cities of the state, Athens produced the state’s first two governors and is home to one of the state’s oldest institutions of higher education, Athens State University. Serving as the county seat for Limestone County, the small, rural community is home to approximately 27,000 residents. The traditionally quiet area is changing as north Alabama continues to rapidly expand due to growth of the greater Huntsville market.

Huntsville, located approximately 20 miles east, is customarily dubbed as Rocket City due to the long-established headquarters of the U.S. Space and Rocket Center, NASA’s Marshall Space Flight Center and the U.S. Army Aviation and Missile Command. Also home to Cummings Research Park, the second largest research park in the nation, and a highly educated workforce, the area is an economic hub for advanced manufacturing, aerospace, biotechnology and cybersecurity industries. (Huntsville Chamber Report, 2019).

While Huntsville serves as the economic engine for north Alabama, the availability of land and synergy with the metro region continue to bolster the region as a whole. A testament to north Alabama’s strong economic vitality, the area recently secured significant economic development investments such as the \$1.6 billion Mazda Toyota manufacturing facility, \$1.3 billion new FBI headquarters and \$750 million dollar Facebook data center (Gattis, 2019). Nearly every fabric of north Alabama’s economy will be impacted by the growth.

The growth in north Alabama goes beyond economic development announcements and new jobs. In 2018, Huntsville surpassed Montgomery to become the state’s second largest city and is projected to pass Birmingham in the next few years (Gattis, 2019). While Huntsville will continue to garner most of the headlines, the tremendous growth in population, business development and housing needs are not isolated to the Rocket City. Neighboring Limestone County was the fastest growing county in the entire state for both 2019 and 2020 (Archibald, 2021).

Dating back over the past decade, Limestone County has grown by an amazing 19.4% including a growth of 25.4% in real GDP (Bureau of Economic Analysis, 2021). The population

Overall Population Growth (2010-2020)	
Alabama	2.5%
Huntsville	11.4%
Limestone County	19.4%
Madison (City)	20.2%
Athens	25.1%
Source: Census Bureau	

growth of Athens outpaced north Alabama at an astounding rate of 25.1%. Speaking on the city’s growth, Athens Mayor Ronnie Marks frequently responds with the need to be creative and progressive in addressing the challenges of rapid growth (enewscourier, 2017). For Athens, schools, affordable housing and jobs top the wish list. In late 2020, Mayor Marks formed an

“incubator task force” comprised of local officials, business community representatives, education partners, and other Athens area stakeholders. Over the past year, the task force has met a number of times to explore the options of a downtown incubator, often suggesting a specific location, services to provide, and type of desired tenants.

According to the taskforce, a business incubator represents an innovative opportunity to develop and retain new jobs while promoting economic growth within the Athens community.

Area of Inquiry

A business incubator most often consists of a physical location that provides small businesses, startups, and similar ventures with affordable space, shared office resources and programs to support business development (Gillotti and Ziegelbauer, 2006). Incubators exist, in part, to bridge the gap between young, vulnerable startups and financial, human and social capital. Foord (2008) demonstrated that advice, skills, and enterprise training were the most common services provided. With the help of targeted assistance, mentoring and network exposure, participants are better prepared to turn ideas into successful ventures. The ultimate goal of any incubator is to produce successful, financially viable firms capable of existing outside the incubator. In Athens, there is significant desire from policymakers that the incubator will spur additional development and encourage local innovation. Or as Lukes et al. (2019, p. 26) found, “new innovative firms are often considered to be key drivers of innovation and the creation of new jobs.”

While incubators often create value (Li et al., 2020), support job creation (Mahmood, 2016), and provide entrepreneurs low cost business services (Adkins, 1996), government led incubators often fall short of the anticipated success in part due to lack of market exposure and interactions between the primary actors: entrepreneurs, organizations, and government (Mason & Brown 2014). This disconnect, among other assessment concerns, leaves the research a bit fractured on how to properly evaluate the efficacy of incubators. What is not unclear is that incubator success is often related to three themes: access to funding, social networks, and availability of resources (Apa et al., 2016; Matlay and Gimmon, 2014). As discussed in the following pages, these themes play a central role in this project.

In the case of Athens, the incubator is an example of a specific solution intended to address a larger issue-how to increase entrepreneurial activity and economic growth within the growing city. As this project will outline, the literature is clear that developing a local ecosystem of innovation and entrepreneurship should be driven from the bottom-up. The bottom being entrepreneurs, not the government. As Mason and Brown (p. 17, 2014) state, "it is difficult to point to any entrepreneurial ecosystem that has arisen through direct government intervention. At best, government might be able to contribute to the pre-conditions for the emergence of an entrepreneurial ecosystem." An incubator has the potential to play an important role in the ecosystem, but the emergence and sustainability of entrepreneurial activity is much more dependent on other factors--several of which are within the local government's control. By investigating the needs of entrepreneurs at the grassroots level, the research aims to provide local support to improve entrepreneurship in Athens and then, maybe, explore the idea of building an incubator.

Literature Review

What follows in the next few pages is an arc of how entrepreneur theory, economic development strategy, and the quest for innovation all intersect to help form what recent literature refers to as entrepreneurial ecosystems. What is not clear is exactly how these ecosystems emerge or the proper steps policymakers should or should not take in order to advance similar innovations. This tension is explored as the literature review suggests areas of commonality.

History of Entrepreneurial Theory

The history of entrepreneurial theory dates back nearly a century. Joseph Schumpeter (1934) introduced the entrepreneur as a leader of "creative destruction." From his perspective, the entrepreneur was an innovator who directed economic change through the introduction of

new goods, services and methods of production. As such, these forces served as a disruptor in the market. This disruption often forced existing firms to respond in order to remain relevant. From Schumpeter's perspective the goal was economic progress through disrupting the status quo (Autio et al., 2014). The entrepreneur, thus, was an innovator.

In contrast to Schumpeter, Israel Kirzner (1974) focused more narrowly on the entrepreneur and the discovery process. Kirzner heavily emphasized the entrepreneurs' quest for profit opportunities where gaps or errors exist in the market. Rather than serving as a disruptive force and creating new opportunities, the entrepreneur is an equilibrating factor acting on the unnoticed opportunity until competition eliminates profit opportunity. The goal for the Kirzner is to bring "into mutual adjustment those discordant elements which resulted from prior market ignorance" (p. 73). Kirzner saw the entrepreneur as an opportunist.

These two primary thought leaders largely influenced entrepreneurial theory through the fields of management and economics for the better part of the past century. As such, academic research largely responded with management fields developing multiple personality-driven theories of entrepreneurship (Steyaret and Katz, 2004) while economic fields, interested in firm success, often led to the development of economic development strategy and government policy to create a competitive advantage from environmental factors such as geography (Baumol 2002).

Influences on Entrepreneurial Ecosystems

Stemming from the field of economics, one of the early influences dates back to Alfred Marshall's work in 1920's Britain. Marshall (1920) produced significant empirical and theoretical findings on the localization of industrial activities in different geographic settings. He found that cooperation, similar business goals, and sharing knowledge within close geographic proximity encouraged business creativity and innovation. The atmosphere, or environment, around the

sharing of productive methods and ideas gave rise to an entrepreneurial spirit. This environment then contributed to the economic and social culture in specific locations. As such, industrial districts became popular sources of economic growth, innovation and developmental strategy.

Regional Development Literature

The concept of proximal innovative environments continued to build on emerging regional development strategies that dominated economic development efforts near the turn of the century. At its core, regional development theory focused the locus of value creation on firms in related industries or geographic regions (Acs et al., 2017), the interrelationships and interdependencies between the actors (Stam, 2015). This in turn led to the creation of products, services, wealth and competitiveness for specific regions.

The underlying idea is that firms do not just compete with each other through stand-alone strategies. Instead, strategic and competitive advantages emerge due to shared resources, networks, knowledge spillovers and government support (Porter, 1990). The close proximity of different actors, like suppliers, research universities, and financial resources, help to enrich an area's competitive advantage. This approach, as seen in Silicon Valley and Boston's technology corridor, led to economic development strategies around industrial clustering and regional innovation systems.

Industrial Clustering

Clustering consists of geographically concentrated, interconnected companies and a set of suppliers, providers and related firms (Porter, 1998). Porter argued in *The Competitive Advantage of Nations* that the government needs to recognize and facilitate this growth of innovative industry clusters. In an effort to create a competitive advantage, many state and local governments are often the source of investment and stewardship for clustering

activity. For instance, Mazda Toyota's decision to locate to north Alabama was related to the manufacturing and logistics clustering hub of the region. In addition to available land and talent, local officials were able to court the company based on the synergy and success of other firms. Clusters help increase area competitiveness by helping attract and train a specialized and skilled workforce (Glaeser and Kerr, 2009). Clusters of suppliers serving similar industries also create knowledge spillover from the number of similar firms acting as an impetus for entrepreneurial activity. Entrepreneurs then benefit from anchor firms' production, highly skilled labor pools, existing customer base and market knowledge (Spigel and Harrison, 2015).

Regional Innovation Systems

Sharing significant overlap with clustering, regional innovation systems (RIS) focuses on the regional coordination and supply of network and institutional knowledge to innovative firms (Cooke et al., 1997). With RIS, the goal is to increase regional competitiveness and innovative capacity by supporting knowledge producers such as universities and public research labs (Spigel and Harrison, 2015). With RIS, the focus is not industry specific or even bound to specific locations. Instead, the RIS, such as Silicon Valley, may embrace numerous clusters such as technology, manufacturing, and robotics (De Propris & Lazzeretti, 2007). Not restricted to research parks or specific locations, RIS often spans multiple cities, encompasses large geographic areas, and relies on the dense network to promote innovation. This network and supportive collaboration allow entrepreneurs to leverage existing assets for economic opportunities.

Overlaps with Entrepreneurial Ecosystems

While both clustering and RIS prove to be effective economic growth strategies, the focus on regional competitive advantages and value creation of firms shifted the focus away from the entrepreneur. Instead, large anchor firms, like a company headquarters or

manufacturing facility, along with research universities and public agencies were the primary actors working to catalyze innovation (Sprigel and Harrison, 2015).

Regional development literature and emerging literature on entrepreneurial ecosystems do share overlapping goals. Both are interested in enhancing the entrepreneurial process from the local and social networking perspective. This, in effect, supports knowledge spillover and accessing market resources to enhance existing industry. Additionally, all three share a focus on interconnected networks, sharing resources and dissemination of knowledge to enhance entrepreneurial activity (Spigel and Harrison 2015). Most importantly, they all recognize the way environmental conditions (political, social and cultural) shape the behavior and ultimately outcomes of an area.

Entrepreneurial ecosystems, however, differ from clustering and regional innovations systems on a number of counts. First, clustering and RIS are driven by the network of resources contained within them. For instance, a research park may leverage existing biotechnology companies to attract venture capital or funding opportunities for emerging research. Existing anchor firms are found to more easily tap into the resources than the local entrepreneur or start-up ventures. (Spigel and Harrison 2015). The synergy between existing high-growth firms is often the focus of government policy as a means to spur additional entrepreneurial activity through the use of incentives and local economic development strategy.

Ecosystems are organized by the resources available to entrepreneurs, often using technology to transcend industry sectors to foster collaboration (Spigel and Harrison, 2015). Built from the entrepreneur perspective, ecosystems are not dominated by larger firms, government or geographic boundaries. In fact, as digital platforms continue to grow, entrepreneurial ecosystems can sometimes even lack physical locations. As such, the access to resources such as capital, knowledge spillover and university innovation exist within an

ecosystem but at the same time serve as barriers due to entrepreneurs' lack of social capital in an area (McAdam et. al, 2019).

Rise of Entrepreneurial Ecosystem Literature

When the research honed in on both the context for innovation and the central role of large firms, the individual entrepreneur began to disappear as a focal point (Autio et al., 2014). Entrepreneurship was simply the by-product of regional success and high-growth firms. For example, Van de Ven (1993) analyzed the infrastructure and events surrounding particular industries such as existing industrial commerce that may facilitate increased entrepreneurship and commercialization. Similarly, Dubini (1989) and Spilling (1996) also explored a macro view of entrepreneurship looking at the role of regional factors that influence entrepreneurship. It is here that a wider lens toward entrepreneurship and innovation began viewing the interdependence between actors and factors such as cultural, spatial and market dimensions (Zahra, 2007). This interaction sits at the heart of entrepreneurial ecosystems.

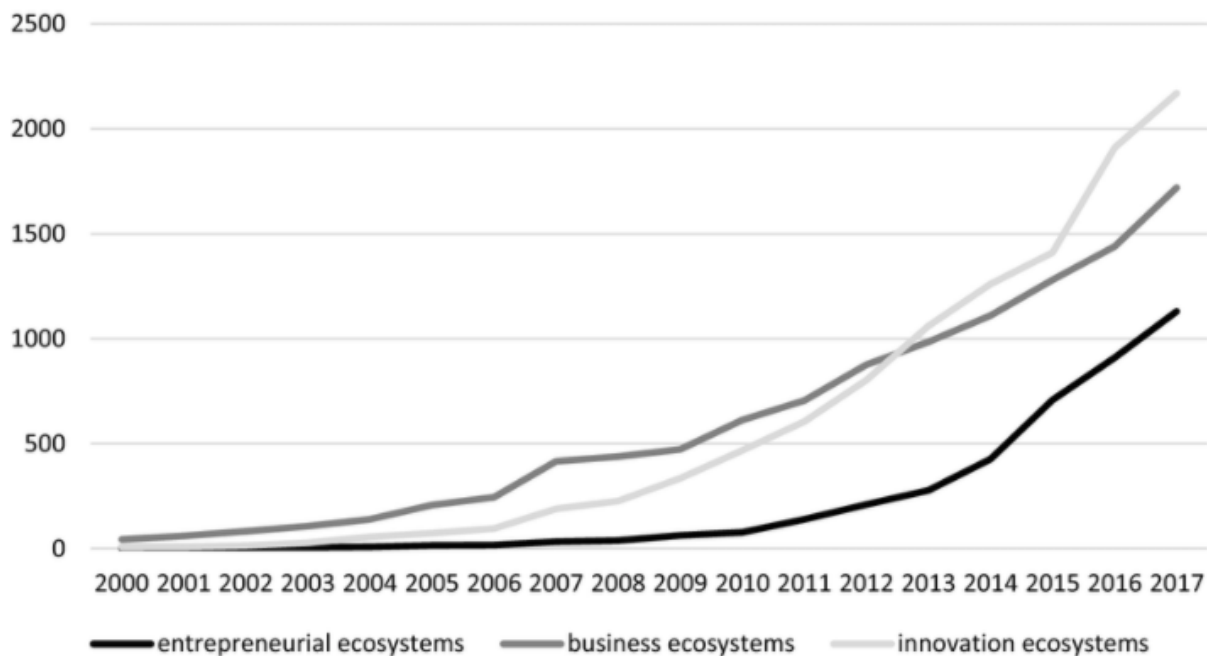
The term entrepreneurial ecosystem has its roots in both the fields of biology and business. The term ecosystem was first used by Moore (1993) when he emphasized that businesses would create more value through interaction with suppliers, customers and financiers than on their own. Prior to this usage, the term was relegated to the social sciences, particularly biology. An ecosystem, or ecological system, has been defined as a biotic or living community and the integration of the living and nonliving components into the physical environment (Tansley 1935). This synergy or interaction is apparent in the previously mentioned economic development strategies and even more apparent in entrepreneurship. Entrepreneurs are dependent on the symbiotic relationship between actors, institutions, networks and technology available to them.

Entrepreneurial Ecosystem Has Its Day

Mack and Qian (2016) contend that entrepreneurship has not been a prominent research subject in the United States until recently. Emerging in the early 2000s and securing its place in the literature around 2016, the term entrepreneurial ecosystem has quickly gained popularity with researchers and practitioners (Spigel and Harrison, 2017). The term gained significant interest after the publication of two important works, Daniel Isenberg's (2010) article "How to Start an Entrepreneurial Revolution" and Brad Feld's (2012) book *Startup Communities*, both of which provided increased attention on the importance of organic creation in supportive environments based around the needs of local entrepreneurs. As discussed above in the regional development literature, this marked a shift to a more local entrepreneur-centric perspective rather than a concentration on the ways that the government can increase the overall creation of more firms.

Feld and Isenberg both argue that building an ecosystem based on local conditions and engaging entrepreneurs to lead the effort are critical steps. Local conditions, in this sense, refers to the different actors, organizations and characteristics that support the entrepreneurial process and growth. For Isenberg, the government plays the role of a facilitator, working to cultivate relationships locally with multiple stakeholders (Isenberg, 2010). The government does not play the role of planner, picking winners or promoting innovation through mechanisms like incentives. Stated more eloquently, "Government and its agencies can create the environment in which entrepreneurs will prosper, but they cannot make the decision to invest, to innovate, to start or to expand. Only the entrepreneur does this" (Sweeney 1987, p. 239). This entrepreneur-centric shift in economic development has earned the commendation of the World Economic Forum (WEF), Kaufman Foundation, and Organization for Economic Co-operation and Development (OECD).

Figure 2: Rise of the Term “Entrepreneurial Ecosystem”



Studies focusing on 'Ecosystems' Source: Google Scholar

Tensions in the Literature

While Feld and Isenberg's contributions provided a catalyst for research to revisit entrepreneurial theory, scholars continue to struggle with nailing down the ingredients, recipe and even desired outcomes of ecosystems. Stam (2015, p. 1761) wrote "There is not yet a widely shared definition" of entrepreneurial ecosystems. This is in part due to the fact that ecosystems work differently, at different scales, with different inputs for different actors in different locations. Spigel (2017, p 49) suggests that entrepreneurial ecosystems are more of a "conceptual umbrella" for elements within a region that promote growth rather than a defined theory. Less generous researchers refer to the entrepreneurial ecosystem literature as chaotic at best (Brown and Mason, 2017; Stam 2015). Kuckertz (2019) describes the metaphor for entrepreneurial ecosystems as vague and with blurry boundaries.

Naturally, the lack of cohesive agreement about ecosystems lends itself to larger tensions in the literature about how to best study the environments. Conceptually, the argument revolves around whether research should study the importance of key components that make up an ecosystem or the interaction of elements by entrepreneurs. Said differently, the divide encompasses what entrepreneurs actually do versus should do for growth and sustainability.

Several researchers (Acs, Autio, & Szerb, 2014; Colombelli, Paolucci & Ughetto, 2017; Qian and Miao, 2016; Spigel, 2017; Stam, 2015; Stam & Spigel, 2016) took the approach of analyzing the structure of ecosystems with the mission to identify the necessary conditions that support entrepreneurial growth. The limitation to this approach revolves around two key ingredients. First, the lack of systematic data on ecosystems. Given the private nature of startups and high-growth firms, revenue and employment data are not commonly accessible. As such, it is difficult to differentiate the success of one firm from another (Stam, 2018). Secondly, most research involves sustainable and already successful ecosystems such as Silicon Valley or efforts in counties with advanced economies. It is unclear from the research if emerging economies, even rural areas, which may lack social networks, advanced support structures or access to economic resources, share the same underlying factors or attributes (Spigel & Harrison, 2018). This perspective from the top-down makes generalizable recommendations difficult to develop.

On the other hand, recent research looks at the activities of the entrepreneur and how they benefit from within the ecosystem (Auerswald & Dani, 2017; Goswami, Mitchell & Bhagavatula, 2017; McAdam, Harrison & Leitch, 2018; Roundy, 2016; Thompson et al., 2018). This entrepreneur-centric focus pursues the questions of how individuals interact with each other, the different actors in the ecosystem, and the support they need to grow their firms. In contrast to the approach outlined above, the bottom-up perspective starts with the entrepreneur and uses them as the focal point to better understand their practices and actions

on the road to growth. This approach has the opportunity to shed light on how ecosystems form, operate, govern themselves, and the policies needed to ensure inclusive, growth-minded and supported environments.

Defining Entrepreneurial Ecosystems

As the term continues to find its position in the academic world, part of the struggle revolves around the lack of well defined concepts. Malecki (2017) provides a comprehensive view of the literature and concepts surrounding the rise of entrepreneurial ecosystems. His bibliometric research demonstrates the shift in the literature from the terms entrepreneurial environments to entrepreneurial ecosystems and its significant rise starting in 2010 with Isenberg's publication. As the popularity of the term took hold, researchers continued to grapple with common definitions and terms. In the 2017 publication, he offers fourteen different definitions of entrepreneurial ecosystems. The following are just a few:

- Isenberg (p.6, 2011): A dozen or so elements that, although they are idiosyncratic because they interact in very complex ways, are always present if entrepreneurship is self-sustaining. In order for there to be self-sustaining entrepreneurship, you need conducive policy, markets, capital, human skills, culture and support.
- Mason and Brown (p. 9, 2014): A set of interconnected entrepreneurial actors, entrepreneurial organizations, institutions, and entrepreneurial processes which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment.
- Roundy, Brockman, and Bradshaw (p. 99, 2017) Communities of agency, social structures, institutions, and cultural values that produce entrepreneurial activity.

For purposes of this research, entrepreneurial ecosystems should be thought of as the means to create, maintain and promote the process or climate of entrepreneurship. More formally, this research adopts Spigel's (2017, p. 50) definition that an entrepreneurial ecosystem is the *"combinations of social, political, economic, and cultural elements within a region that support the development and growth of innovative start-ups and encourage nascent*

entrepreneurs and other actors to take the risks of starting, funding, and otherwise assign high-risk ventures.”

Common Components of Entrepreneurial Ecosystems

While researchers and theorists continue to debate the formalities and constructs of entrepreneurial ecosystems, scholars have found agreement on a number of character features. Kenney and Patton (2005), Neck et al. (2004), Spigel (2017), Colombelli et al. (2019) all argue that a supportive entrepreneurial culture, strong business infrastructure, support services/facilities, access to investment capital, spin-off generators and public policy that drives venture creation are all critical components of a thriving ecosystem.

Additional researchers have proposed different frameworks to identify or construct ecosystems. The World Economic Forum suggests eight pillars: accessible markets; human capital workforce; funding and finance; mentors, advisors, support systems; regulatory framework and infrastructure; education and training; major universities as catalyst; and cultural support (Appendix A). Stam and van de Ven (2019) argue for an integrative model that includes ten elements constructed on a foundation of formal institutions, culture, and networks (Appendix B).

While scholars continue to debate the framework, the commonalities between the theories continue to be the presence of and interdependence between different actors and organizations. The literature also makes clear that the interplay between all these components generate entrepreneurial activity via an ecosystem. Second, the literature stresses access to resources as a key component and the strength of networking as another vital entity. An entrepreneur’s ability to connect with investors, advisors and other key actors allows the ecosystem to properly function.

Lastly, the ecosystem is driven by the entrepreneur, not the government. The government plays a facilitative role instead of driving policy from the top-down. “Many of the important characteristics of a strong, well-functioning ecosystem--its culture, its network of successful entrepreneurs and mentors, and its stores of entrepreneurial knowledge--emerge from the entrepreneurs themselves” (Spigel and Harrison, 2017, p. 174). This approach allows entrepreneurs to focus on their unique needs and trajectories of innovation. Rather than focusing on specific niches, ecosystem theory is more focused on cooperation than competition and initial research has found that start-up firms are more likely to share technology rather than clients (Mack & Mayer, 2016).

How Government Can Support Entrepreneurial Ecosystems

One of the key divergences from regional development literature is the role of government. In both industrial clustering and RIS, the government often plays a central coordinating role. In either of these cases, the intervention of the government suggests a market failure of sorts. The government, identifying a market shortcoming (or opportunity), intervenes via incentives, positive externalities or investment of public goods into an underperforming area.

On the local level, this market failure may exist as a lack of networks or systems to support business innovation or growth. For example, start-ups in a rural setting may lack the access to angel investors or venture capitalists. This market shortcoming may drive government intervention such as the creation of publicly funded investment initiatives to help leverage capital. Possibly stemming from the lack of a formal definition, Isenberg (2016) believes that policymakers often misunderstand the needs of entrepreneurs. Instead, policymakers seek to implement strategies to create value in an area. He argues that many policymakers see ecosystems as something you can simply create through the right

recipe. This leads to a policy landscape that often consists of a top-down, “scattergun and untargetted approach” (Brown and Mawson, 2019, p. 14).

This disconnect highlights Sweeney’s (1987, p. 239) observation that “Government and its agencies can create the environment in which entrepreneurs will prosper, but they cannot make the decision to invest, to innovate, to start or to expand. Only the entrepreneur does this.” For example, the government, in an attempt to create an ecosystem, may make an investment into a government sponsored incubator or organized mentoring network. While the initiative may add value to the existing or emerging ecosystem, it might also be at odds with the entrepreneur-centric and driven ecosystem that Isenberg and others advocate.

Brown and Mawson (2019) acknowledge that the effectiveness of a policy solution to develop ecosystems must take into account the local interdependencies. That is to suggest, as stated earlier, that ecosystems will look different in each location due to a variety of factors. For instance, culture cannot simply be created. However, over time, the government may support entrepreneurial activity that encourages the development of culture and enhances its success (Audretsch et al., 2015). Thus, the role of the state is to help cultivate the entrepreneurial community and culture and use these opportunities to inform policy.

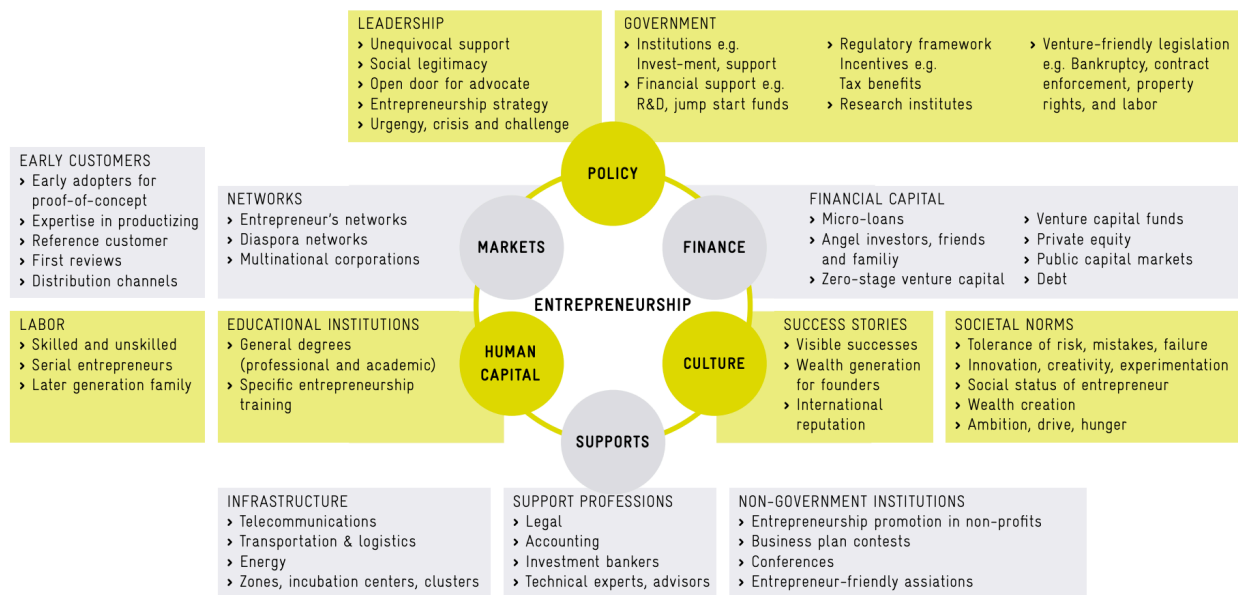
In fact, the literature is very sparse in highlighting effective government interventions. Brown and Mawson (2019) found positive results when the government developed initiatives to increase access to funding or mentoring. Their research found less success when the government attempted to promote networks and connections across the ecosystem. It is also critically important that policymakers do not simply try to replicate policy from other areas. The lack of concrete evidence of positive government intervention also aligns with Lerner’s (2009) argument that policy makers often lack knowledge about entrepreneurship when developing public policy initiatives. Feld takes a more direct oppositional tone and argues

that “when a start-up community starts relying on the government to be a leader, bad things happen” (p 63).

Conceptual Framework

Isenberg’s (2010) seminal article highlighted the key principles of an entrepreneurial ecosystem. These include supporting bottom-up processes, identifying enthusiastic entrepreneurs, building local culture, reducing bureaucracy, and shaping local conditions for entrepreneurs to thrive.

Figure 3: Isenberg’s Six Domain of the Entrepreneurship Ecosystem



Highlighted above, Isenberg argues for six domains of an entrepreneurial ecosystem: policy, finance, culture, supports, human capital, and markets. And within each of these domains, he unpacks dozens of different elements that interact with one another to produce a unique and distinguishing ecosystem. This research will explore five of the concepts within Isenberg’s model--bureaucracy, access to funding, local business culture, mentorship, and networking opportunities. Each of these themes represent an area in which local

government, organizations, and leaders can directly influence through concepts such as leadership, policy, and local support. For instance, the city council may develop a framework that encourages or discourages entrepreneurship through the development of small business fees, taxation, or incentives. Additionally, the local Chamber of Commerce has an opportunity to develop networking events to connect different actors with resources. Given that concepts such as referrals, product legitimacy, and strategy are predominantly in the hands of the entrepreneur, markets are not explored in this research.

This research will also use Feld's Boulder Thesis (2012) to guide how Athens should think about community building and economic development for entrepreneurs. Published in his book, *Startup Communities*, Feld argues for an entrepreneur-driven approach to community building around innovation and entrepreneurship. His primary tenets, outlined below, are a blueprint for best practices to drive innovation, job creation and growth in communities.

The Boulder Thesis:

1. Entrepreneurs must lead the entrepreneurial community, not professors, policymakers, or agency administrators.
2. The community must have a porous boundary by including the entire stack of entrepreneurs, from experienced serial entrepreneurs, to nascent entrepreneurs, to individuals thinking about startup companies.
3. The community must have organized activities that engage people in the entrepreneurial context. Cocktail parties and networking receptions will not build a vibrant entrepreneurial community.
4. Community leaders must commit for the long term, at least twenty years.

Most importantly, the Boulder Thesis supports a bottom-up approach which stands in contrast to the current initiative by the city of Athens to simply decide what is best for local entrepreneurs and small businesses through the implementation of an incubator. Briefly mentioned earlier, the bottom-up approach starts by investigating the entrepreneurial activities within an ecosystem (Spigel, 2019). This may include the decision to take on risk, participate in

social networks, access resources such as capital and mentors, and find skilled talent. For instance, an ecosystem may be rich in resources which could be apparent in a top-down perspective. However, if entrepreneurs are unable, knowingly or not, to access these opportunities, a vibrant, high-growth market may not emerge. Therefore, qualitative methods such as interviews with entrepreneurs, investors and other actors are an effective way to uncover insights and behavior within the ecosystem (Spigel 2019).

Much like the literature, the Boulder Thesis and bottom-up approaches are not without limitations. First, the adoption of a bottom-up approach is not at the exclusion of a top-down method. Both have their place in research with top-down perspective assisting in identifying patterns, trends and structural components of the ecosystem. Secondly, asking entrepreneurs, particularly those involved in high-growth start-ups, to coordinate efforts presents a time challenge. In essence, the same population needed to lead the building of the ecosystem are the ones with little time and resources due to building their own firms. Mason and Harrison (2006) suggests localities turn to retired or cashed-out entrepreneurs to lead the charge.

Research Design and Methodology

This project is an exploratory investigation into understanding and developing creative solutions to improve entrepreneurial activity in Athens. It aims to answer the central question-- what do entrepreneurs need to succeed? By uncovering local entrepreneurial insights and opinions on Isenberg's five themes, the framework and findings seek to provide local leaders a better understanding of what local entrepreneurs value and where opportunity may exist to address these needs. This bottom-up approach is supported by the Boulder Thesis which emphasizes that entrepreneurs need to be situated at the center of community endeavors. It is carefully balanced against the emerging debate of government's role and the level of top-down governance that fosters growth within the ecosystem.

This inquiry also challenges the role of government in establishing an entrepreneurial ecosystem and the steps taken by the city's incubator task force. In line with Isenberg and Feld's central tenet that the government should serve as a facilitator, this research highlights the voice of entrepreneurs on five commonly provided services and forms of support within an ecosystem. The components are government policy, access to funding, local culture, networking, and mentorship. While not exhaustive, these aspects are explored due to their prevalence in the literature. They also represent changes local leaders can make to influence area entrepreneurship.

This project uses the following research questions to guide the inquiry and assist the development of possible recommendations:

- 4. How do entrepreneurs view Athens' current ecosystem?**
- 5. What support mechanisms are valued by local entrepreneurs?**
- 6. How do local entrepreneurs envision a stronger ecosystem in Athens?**

The research design was based on an exploratory qualitative study. Qualitative research is described as an unfolding model occurring in a setting that enables the research to create a level of detail from high involvement in the actual experiences (Creswell 1994). Or stated differently, the ability to learn or understand from the participant's point of view. As such, the method of collecting data is through interviews to understand and interpret the perception of local entrepreneurs.

A total of five (5) semi-structured interviews were conducted with local entrepreneurs in Athens (Appendix C). The interviews consisted of three primary themes related to the research questions. First, using Macke, Markley, and Fulwider's Entrepreneurial Community Quick Assessment (2014), interviewees rated how strongly they agreed or disagreed with several statements regarding Athens' ecosystem and support structure. To address the second research question, participants rated Isenberg's five components in regard to importance for an

entrepreneur. Follow-up questions probed whether local support was available to entrepreneurs and where policymakers could make improvements. Lastly, two open-ended questions were asked to encourage participants to describe their vision of an ideal ecosystem and supportive structure in Athens. These responses were gathered to answer the third research question.

The participants for the research were selected using purposive and convenience sampling. This means that participants were chosen based on who will best provide answers to the research questions and the ability of the researcher to access them. Given the small sampling of entrepreneurs in Athens, selecting participants with rich experience and history within the city required this form of selection.

Data Sources:

The sample of interviews comprised three men and two women. The ages ranged from early 30s to mid-60s. Each participant represented a different industry or profession with a known presence in Athens. Additionally, each participant represented different stages of entrepreneurship ranging from a sole proprietor who opened a business only six months prior to an executive of a large, multi-million dollar firm. The participants also greatly varied in their need for capital (physical or venture) and staffing demands. One participant operated a home-based business while another hired the firm's first two employees and purchased a brick and mortar location in the past year. Athens is a very white-collar, retail, and restaurant-focused business environment. Every effort was made to interview entrepreneurs with experience extending beyond the traditional professions of the area.

I collected all the qualitative data through a semi-structured interview based on a list of themes and questions to be covered. The questions aimed to capture the entrepreneurs' perspective or opinion regarding the local entrepreneurship climate and how the area can promote more activity. Questions were crafted in a way to extract information about their views

on local culture, government policy, social networking, and access to resources based on Isenberg's domains. The semi-structured interview allowed me to probe answers and ask participants to explain, clarify, or build on responses which adds depth and significance to the data.

Each interview was conducted via zoom and lasted approximately one hour. Zoom enabled the interviews to be recorded and transcribed to ensure the accuracy of direct quotes and thematic analysis. Before the interview, I made direct contact with potential participants to discuss entrepreneurship in Athens. Based on the initial conversation, I gauged their interest in participating in the research project. All initial participants agreed to participate. Participants' anonymity and confidentiality were ensured before the start of the interview.

Data Analysis

The process of data analysis began by organizing the responses to the simple, Likert scale-based questions into a table to arrive at an average for each question. This information provided a foundation for quantitative analysis. Second, I listened to the interviews and read thoroughly to identify initial codes and themes in the study. All transcripts were imported into NVivo and the research utilized the Braun and Clarke (2006) approach for qualitative data analysis to identify initial codes and themes. Results from the analysis are presented below.

Quantitative Analysis

In an effort better gauge how entrepreneurs view the ecosystem in Athens (RQ1), participants were asked to rate a series of statements on how strongly they agree (5) or disagree (1). Table 1 presented below demonstrates the respondent's view how they view the local ecosystem.

Table 1: How Local Entrepreneurs View the Athens Ecosystem

Statements	Interviewee Responses					Average
We have many business entrepreneurs in our community.	4	3	3	3	3	3.2
Our community has an entrepreneurial infrastructure that promotes networking and peer support among entrepreneurs.	2	1	1	1	1	1.2
Our community provides cool spaces and informal places for entrepreneurs to connect with each other.	2	1	2	1	1	1.4
Our community invests in growing entrepreneurs and their talent.	1	1	1	1	1	1
Our community invests in helping existing business owners become more entrepreneurial in their venture.	2	1	1	3	2	1.8

The table provides an initial glance into how the participants view the local ecosystem. While not overwhelming, the entrepreneurs indicate a belief that other entrepreneurs exist in the community. Their answers also demonstrate that the community does not have the infrastructure or supports in place to aid in the development of entrepreneurs. This initial disconnect is explored in additional questions.

A second question inquired into the participants' views as it pertains to Isenberg's elements of an entrepreneurial ecosystem—navigating government policy, access to funding, local business culture, networking opportunities, mentoring and coaching. The data provides an initial analysis into what local support mechanism entrepreneurs value (RQ2). The participants were asked to rate each domain on two different dimensions. First, they rated how important each domain is for entrepreneurial success where 1 equates to Not Very Important and 5 represents Very Important. The second dimension asked participants to rate whether community supports exists to help entrepreneurs where 1 signifies Very Poor and 5 indicates Excellent. Table 2 below represents the findings.

Table 2: Importance and Support for Ecosystem Elements

Element of an Entrepreneurial Ecosystem		Interviewee Responses					Average
Navigating Government Policy	Importance to an Entrepreneur	5	5	5	5	5	5

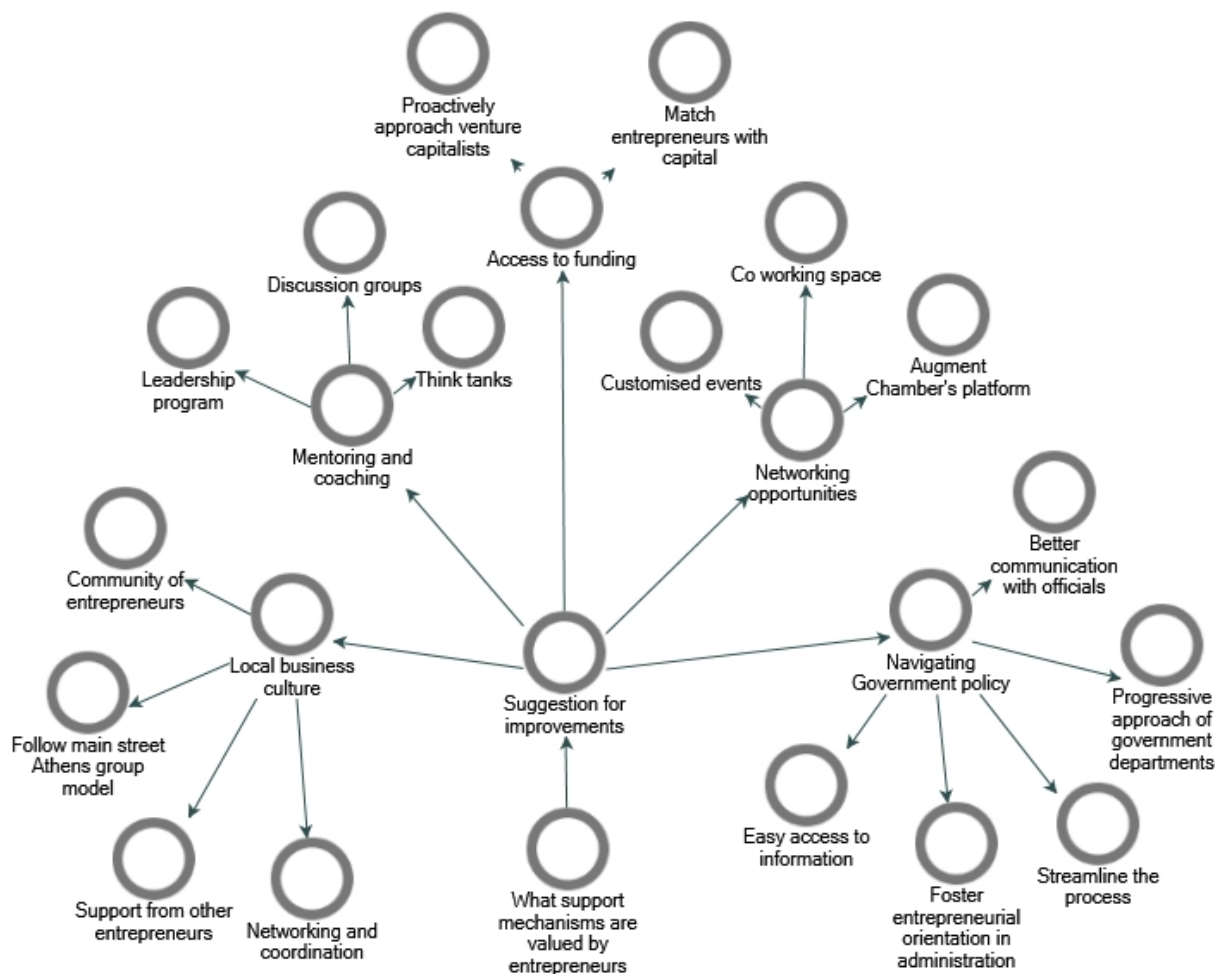
	Community Supports	2	2	3	2	2	2.2
	Importance to an Entrepreneur	4	5	4	5	4	4.4
Access to Funding (venture or capital)	Community Supports	2	1	1	1	1	1.2
	Importance to an Entrepreneur	3	5	4	5	4	4.2
Local Business Culture	Community Supports	2	2	3	2	2	2.2
	Importance to an Entrepreneur	4.5	5	4	5	5	4.7
Networking Opportunities	Community Supports	2	2	2	2	2	2
	Importance to an Entrepreneur	5	5	4	5	5	4.8
Mentoring and Coaching	Community Supports	2	1	1	1	1	1.2

The table demonstrates that each of the participants identify with the importance of Isenberg's domains. While participants were not asked to rank the elements against each other, the strength of their answers resulted in the following order—navigating government policy, mentoring and coaching, networking opportunities, access to funding, and local business culture. The table also highlights a disconnect between what entrepreneurs say is important and what the community provides in terms of support. The entrepreneurs overwhelmingly indicate a lack of support across all five domains. Follow up questions provided an opportunity to discover additional information regarding this data.

Qualitative Analysis

All five participants were asked a number of open ended questions related to their entrepreneurial journey, areas for improvement in Athens, and strategies to improve the current ecosystem. The responses were investigated for numerous themes and codes to provide deeper analysis. For example, Table 2 above, asked respondents to rate both the importance of Isenberg's domains as well as the availability of community supports. As a follow-up, interviewees were asked for ways to improve community support across each of the five domains. Figure 4 demonstrates the themes and initial codes related to improving the different elements within the existing ecosystem.

Figure 4: Entrepreneurial Views on Improving Ecosystem Domains



As noted above, each of the domains produced a number of codes related to how Athens can improve support mechanisms. The first theme 'navigating government policy' comprises five initial codes. Strong working relationships and good communication with the city makes the process less cumbersome and more efficient for entrepreneurs. Second, the entrepreneurs value and call for easier access to information regarding the business process. Third, in comparing the city processes to Huntsville, there is a desire for a more progressive and collaborative effort between the different departments one must work with in order to establish a

business. The fourth code indicated a desire for a more entrepreneurial position taken by the city to help early-stage entrepreneurs. Lastly, the final code recognized the importance to streamline the process to help everyone looking to start a business.

On Navigating Government Policy/Bureaucracy:

- *How do you work with the city? How do you work with Athens Utilities? I am fortunate that I have a business partner that gets all that.*
- *In Athens, you need to find someone that is able to help you navigate the bureaucracy.*
- *The logistics, the bureaucracy. Those kinds of things...are disheartening for a lot of people [wanting to start a business]. And, of course, ultimately, they [entrepreneurs] don't have the skillset sometimes to manage those things. They don't know where to go. There's not that one place where they can get a lot of answers.*

The second theme “access to funding” produced two initial codes. First, the theme of matching entrepreneurs with capital emerged to highlight the importance of access to funding. The second code mentions the notion of actively seeking out venture capitalists to support local efforts. Resting at the center of both these codes are relationships and opportunities, a theme explored later.

On Access to Funding:

- *You probably need to have a personal relationship with a banker in Athens [to receive funding]. Bankers need to do more than just sit in their office and wait for entrepreneurs to walk in the door.*
- *I think just as important is having the resources to help you find access to funding. I only learned after the fact that there were a number of things I could have applied for as a new, small business owner. But I had no knowledge about it all when I started my business. Athens needs more education on this topic.*

The third domain explored was the local business culture. The responses on improvements produce four different codes. The respondents share that organically connecting with other entrepreneurs was greatly valued by them. Second, following a pre-existing local business or blueprint model was a strategy that entrepreneurs believed could enhance the local environment. Third, while it appears as a separate domain, entrepreneurs believe a strong

networking environment may improve the local business culture. Next, building an environment of support among business owners that goes beyond the traditional avenues such as the Chamber of Commerce is sought by the participants.

On Local Business Culture

- *I think other business owners should support each other, but you know when somebody is a business owner and especially if they are a sole proprietor, then they don't really have the time.*
- *[In talking about Huntsville] They are so business friendly that I think they have a culture of if you think it's a good idea, you're passionate about it, and it's going to make a positive impact on the community, then we will help you do it.*
- *Entrepreneurship and innovation don't fit in a very neat box. And if you don't have someone placing things in the appropriate places and connecting them with the appropriate people, then entrepreneurship and innovation won't thrive here.*

Networking Opportunities was the fourth domain explored for improvement and produce three codes. The first suggested that the Chamber or another entity could enhance opportunities for people to connect. Currently, only the Chamber, as part of a membership drive, offers formal after hours networking events. The second theme that emerged was a call for a co-working space in Athens. A co-working space with an entrepreneurial mission would provide opportunities not currently available by offering entrepreneurs a creative and collaborative space to work. Third, following along with the co-working theme, the desire for customized events around entrepreneurship emerged. These events help develop a culture of entrepreneurship an opportunity for entrepreneurs, new and old, to convene and discuss matters important to them.

On Networking Opportunities

- *You have to have those opportunities for people to meet that may seemingly not be connected but can find ways to help one another.*
- *The Chamber has tried to begin to do a few of those after hours networking events. I appreciate that they are trying. But they are doing it to drive membership. This limits opportunities for people who are not members.*

- *I think there's a barrier here, especially in the city of Athens for something like that [networking program]. I just don't think that the city sees it as a priority.*
- *People need a place to go besides Starbucks. Somewhere that has classes or programs on entrepreneurial things. A place where people can meet, network and collaborate.*

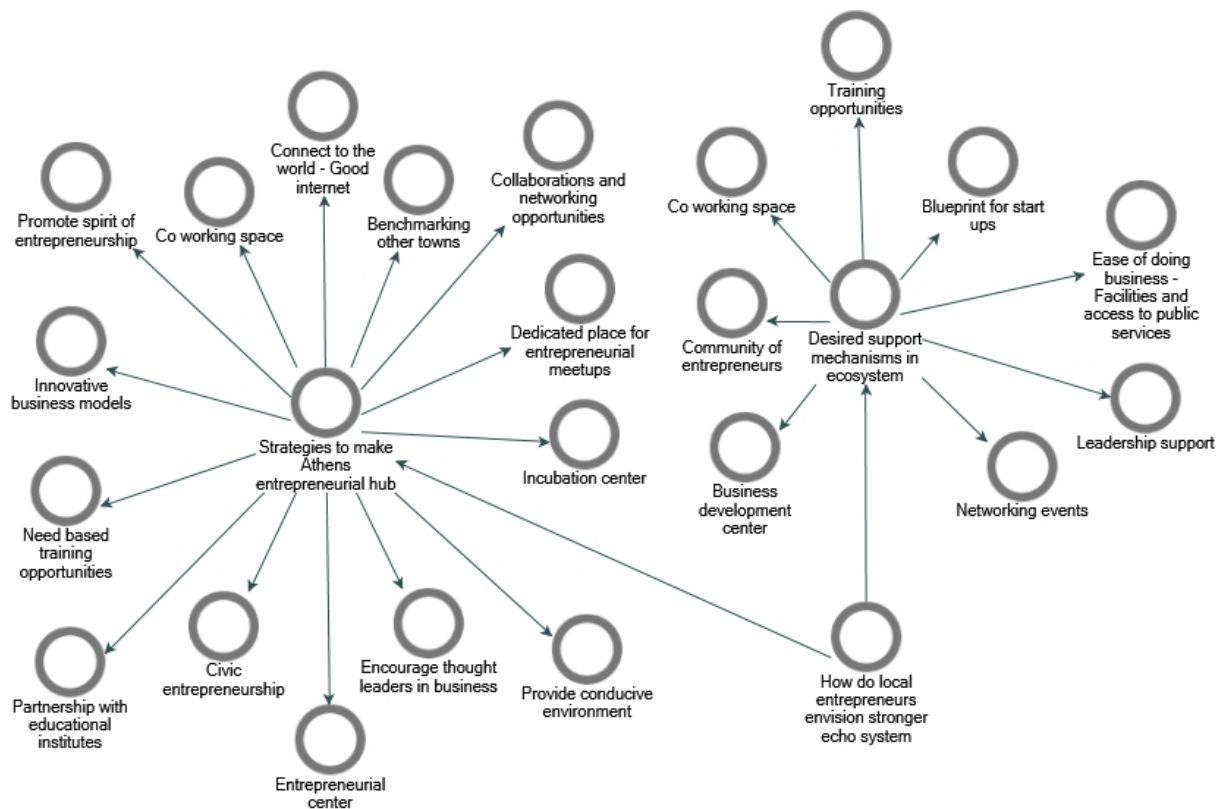
The final domain probed was mentoring and coaching. This domain produced three initial codes—leadership programs, discussion groups, and think tanks. Currently the Chamber of Commerce operates a leadership model that is aimed at exposing local leaders to different aspects of the community. No leadership program, mentoring or even mastermind groups exist in Athens. In part, the participants mentioned the lack of a space dedicated to such a venture. A desire to see an organization or group step up and host classes, lectures or discussions on entrepreneurship emerged as a needed improvement.

On Mentorship and Coaching

- *They can bounce those ideas off others that have been down that road. You're not reinventing the wheel. You're just getting good sound advice and experience. I can't imagine an innovative town that does not have this opportunity.*
- *I think you have to have a leadership program that cuts across the community with a mentoring component to it.*
- *We need to start getting groups together during lunch and after house to talk. There is plenty of business expertise in our community.*

Beyond exploring Isenberg's domain's, the participants were encouraged to share their thoughts on what a stronger Athens ecosystem could look like in the future. The aim of these open ended questions was to answer RQ3. The results produce two major themes with several attached codes. Similar to the discussion above regarding RQ2, the theme of desired support mechanisms emerged as a major need in response to the question. The codes largely overlap the previous analysis and highlight Isenberg's domains. As such, they will not be explored in-depth here. However, the second major theme to emerge were strategies to enhance the ecosystem.

Figure 5: Building a Stronger Entrepreneurial Ecosystem



The notion of building a stronger entrepreneurial ecosystem produced a total of fourteen themes, many which are recurring in the literature and previous analysis. For instance, the desire for collaborating and networking opportunities, again, emerged from the interviews. Along with these opportunities, providing a conducive business environment, entrepreneurial center, co-working space and training classes once again surfaced. Below is a full list of the fourteen themes that materialized through the interviews.

- Connect businesses to the world
- Benchmarking other towns
- Collaborating & networking opportunities
- Dedicated place for meetups
- Business development center
- Provide conducive environment
- Encourage business thought leaders
- Entrepreneurial center
- Civic entrepreneurship
- Partnership with educational institutes
- Need based training opportunities

- Innovative business models
- Promote spirit of entrepreneurship
- Co-working space

Findings

Research Question 1: How do entrepreneurs view Athens' current ecosystem?

Finding 1: There is an environment of entrepreneurship in Athens.

The first finding emerged from the quantitative data sought in the interview. As a group, the interviewees demonstrated a belief that business entrepreneurs are present in Athens by scoring the question 3.2/5. This finding is supported in the literature that finds entrepreneurship is a self-reinforcing phenomenon (Minniti and Bygrave, 1999). Entrepreneurs know other entrepreneurs.

One of the themes that emerged from the interviews was the belief that Athens has several entrepreneurs that are inactive or refuse to engage in local ventures. Two interviewees commented that there is no mechanism for them to get involved and the environment is not encouraging for their participation. One commented that several entrepreneurs found the city too difficult to work with and took their business to neighboring areas that are more innovative. Uncovering this theme presents both a challenge and an opportunity for Athens. First, there may be a larger undercurrent of entrepreneurship than is recognizable and known to policymakers. Second, as discussed later, the idea of a mechanism, physical location, or specific programming emerged as a very vocal theme.

Finding 2: Entrepreneurs do not feel Athens has infrastructure or community investment supporting entrepreneurship.

The data presented in Table 1 and 2 demonstrate a lack of community support felt by the participants. In Table 1, the respondents failed to score any of the statements regarding

community support above a 1.8/5. In fact, one of the statements scored strongly disagree for all five participants. This finding was also supported in Table 2 which demonstrated the disconnect between the mechanisms that entrepreneurs find important and the support available to help them. Many of these same themes emerged in asking the entrepreneurs to build a stronger ecosystem for Athens.

I think Athens has a very traditional business structure. It's a lot of white-collar type businesses...accountants, doctors, dentists. In a super traditional culture, ideation and innovation don't get celebrated or supported easily.

[On a soured experience with the city] It hurts relationships Especially when you consider what we put into the city...into the area....that's money the comes back in tax revenue. You would think they [the city] would be mutually supportive of our efforts.

There was a small business development Center available to me. It was nice to know that it was there. So, having a resource like that that could maybe teach you. You know how to set up your sales tax or how to do your bookkeeping. All of those little tasks that the average person like me it's probably never had to do before and has to do all of it on their own and figure all this stuff out be compliant.

This finding also largely underscores the importance of Feld's argument for an entrepreneur-centric approach to ecosystem building. Here, all five participants are abundantly clear that local policy and initiatives are not supporting their efforts. The literature highlighted that entrepreneurs often report that conventional business policies such as tax incentives, grants, and local regulations have little relevance to their success (Kaufmann, 2015). Instead, they highlight the importance of networking, access to talent, customers, and other intangibles (Morris et al., 2013). As noted in later findings, there is an opportunity for the government to focus on developing a dense network and support structure to benefit all levels of entrepreneurship.

Research Question 2: What support mechanisms are valued by local entrepreneurs?

Finding 3: Entrepreneurs strongly identify with all five mechanisms investigated.

Overwhelmingly, the participants believe that navigating the complexity of government policy and bureaucracy to be vital in starting a business in Athens. As discussed below, this complexity is sometimes a barrier and form of discouragement for entrepreneurs. Second, they identified the need for mentorship and coaching. All five participants indicated they utilized mentors at different stages of their journey. Third, they recognized the importance of networking opportunities as they start and scale their business. These findings largely mirror Colombelli et al.'s (2019) argument that supportive entrepreneurial culture, strong business infrastructure, and support services help drive value creation within a thriving ecosystem. Lastly, both access to funding and the local business climate also ranked in high consideration.

Finding 4: Entrepreneurs seek streamline business processes and a culture of yes when it comes to innovation and entrepreneurship.

Each interviewee mentioned the complexity and entanglement of city bureaucracy as a barrier to entry. As noted above, several mentioned that to get things processed promptly, you had to know someone either on the inside or a community member that could navigate permits through the process. And even then, sometimes entrepreneurs were left with questions and no answers.

- *The process needs to be streamlined. When you go in to apply for a business license, you hand them \$10 for the application fee. There is no one to ask you questions about your business. You walk out the door with no new knowledge. I think the process sets people up for failure.*
- *[The city process] is fractured. There is no culture of communication. No ability to fast-track projects. Go here, go there. You end up running all over town, just to try to make something as simple as turning your power on. Each entity only knows their domain and is not helpful outside of that box.*
- *It's not their fault [they fail or give up]. They run into things and people that say no, you can't do that, rather than a good ecosystem that says you can't do that but let's figure out a way to make something good happen.*

Two of the participants shared specific stories about working directly with the city on permit approval. In both cases, the city acted as a barrier when simple solutions were possible. In one case, the city held up final approval until the sidewalk in front of the business was fixed. The sidewalk, which the city owns, was damaged in an event unrelated to the business or permit in question. In another, the city required the business to put together a presentation on how much they spent in downtown Athens and taxes paid from salaries before the city fixed an issue that would benefit the company.

The city didn't want to do it because there was a cost involved, which is fine, but they're getting something out of it too [taxes]. We were going to have to fix the mistakes that were previously made by the city on the property before our permit was approved.

Lastly, two of the interviewees mentioned work conducted in other cities. In one instance, Huntsville was singled out as an area that has a culture of saying yes and working with entrepreneurs to start businesses.

Government and economic development leaders will find the people for you to help make it happen. They help set it in motion for you. This creates a positive and mutually beneficial business climate.

Athens, on the other hand, is a “*traditional city with traditional, outdated business models.*” This largely stems from the fact that many of the downtown small businesses were inherited or exist as multi-generational firms. These people may be categorized as entrepreneurs but they are not start-ups and thus the city does not have significant workings with new venture creation. As Athens continues to experience unprecedented growth, the city, much like the literature, may experience a shift from a focus on traditional firms to a more holistic perspective such as entrepreneurial ecosystems (Schafer and Henn, 2018). This may require the city to become creative and nimbler in their actions and direct in their intentions if they want to recruit, retain, and develop local economic opportunities.

Research Question 3: How do local entrepreneurs envision a stronger ecosystem in Athens?

Finding 5: Entrepreneurs repeatedly call for a space to collaborate, meet, and learn.

Asked different ways, entrepreneurs voiced their desire to see a collaborative workspace in Athens whereby they can meet and networking with others. The initial statement, *Our community provides cool spaces and informal places for entrepreneurs to connect with each other* returned a score of 1.4/5. Second, the idea of a location emerged within three of Isenberg's domains. Lastly, the desire for collaborative space overwhelmingly emerged as integral part of a stronger ecosystem.

What is not clear from the respondents is exactly what type of space they need. For instance, the desire to co-work, collaborate, network, and learn were the most common concepts mentioned. However, this may take a number of different shapes—entrepreneurial center, small business development center, shared workspace or even an incubator. One participant mentioned that the city could provide regular courses on how to do business, “[we could receive] presentations from the different departments-- how do you work with us.” Along the same lines, another respondent mentioned a class “on how to set up your taxes or do your bookkeeping...all of those little tasks that the average person probably never had to do before owning a business.”

On a location for entrepreneurs, one interviewee mentioned “I think an entrepreneurial center is going to be a catalyst to everything else. A place where dedicated education, networking, and mentoring can occur.” Said differently, “I think it would be really cool if Athens, as a city, really focused on building up the spirit of entrepreneurship by investing in a co-work or hybrid incubator type space. Somewhere business development can occur. I think this would help put Athens on the map.”

Outside the scope of the interviews is the notion of governance of such a space. It is not uncommon in thriving and vibrant ecosystems for certain organizations to serve as intermediaries. The groups may provide “brokerage mechanisms” (Brown et al., 2019) or play “matchmakers” (Clayton et al., 2018, p. 112) between the different community actors. In under-developed ecosystems, these bridging mechanisms are often missing or at best feeble (Brown and Mawson, 2019). The lack of mechanisms, as identified in the interviews, provides the city an easy opportunity to play the role of a facilitator, not choosing sides, by building a thicker network of people and resources. Rather than focusing on the creation of an ecosystem, the city may provide generic support measures and allow entrepreneurs to self-organize around the actors and actions they need most. As one interviewee stated, “In a city where people feel safe to have new ideas, then someone is just going to naturally rise to the top and then it may be formalized later but it’s an organic process to get people on the same page.”

Recommendations:

Over the past year, the city has expressed interest in developing a downtown incubator to serve entrepreneurs and small businesses. However, before this research, the needs of local entrepreneurs had not been explored by local policymakers. Thus, the incubator concept may be a solution in search of a question. What follows is a series of recommendations for the city to consider before moving forward on a project that may not meet the needs of the audience it hopes to serve.

Recommendation 1: The city needs to develop a conceptual ecosystem framework and map the existing ecosystem.

Just as this paper adopted a conceptual framework and definition for entrepreneurial ecosystems, so needs the city. The literature continues to remain chaotic (Brown and Mason, 2017) and adopting terms to act as an umbrella (Spigel, 2017) to define ecosystems. Without clarity and definitions, the city will continue to throw around this term without a deeper

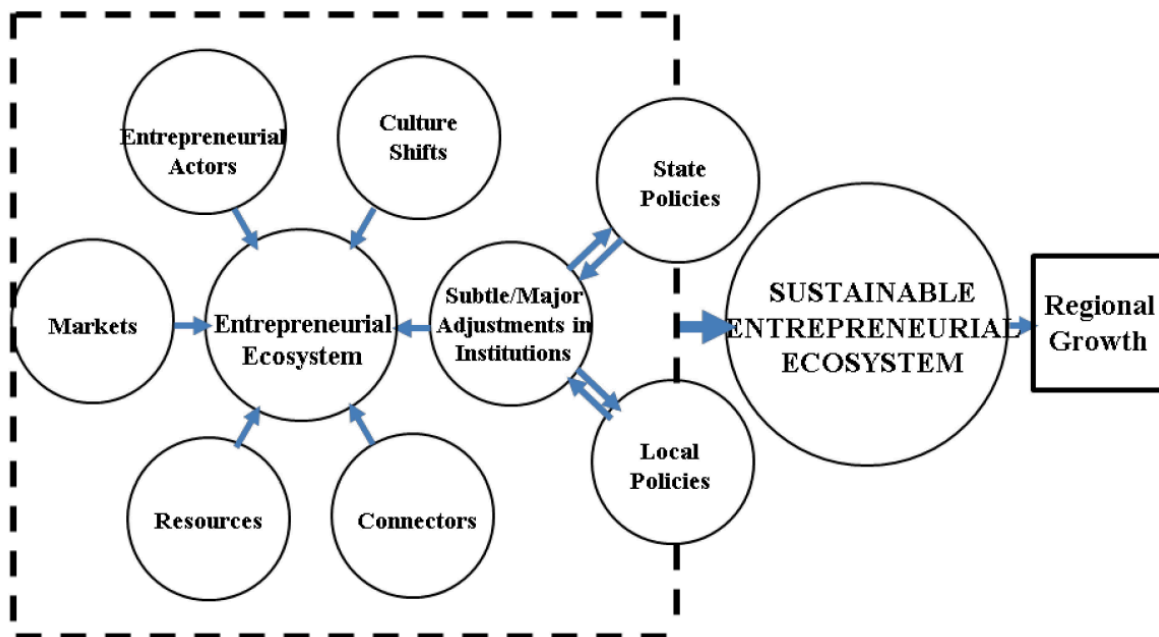
understanding of its meaning, and more importantly, how to support it. This framework does not need to be rigid, but instead, it should direct the city in terms of defining intentional pathways toward a successful and vibrant ecosystem. To date, the task force has not engaged in such an exercise.

This lack of knowledge or even common language only perpetuates misconceptions about entrepreneurial ecosystems (Brown and Mawson, 2019) and may support only developing singular aspects of the ecosystems instead of thinking about it holistically. For instance, new businesses and start-ups have a tangible and quantifiable aspect to them. They are physical and real. However, business culture and thriving ecosystems are a bit nebulous. Rather than focusing on specific firm creations, the city should heed Mason and Brown's (2014, p. 17) advice that "at best, the government might be able to contribute to the pre-conditions for the emergence of an entrepreneurial ecosystem."

This begins first with a community-wide mapping of the existing ecosystem. The city must first take stock in the existing assets, and more importantly, do so while encouraging the less visible entrepreneurs to step forward and participate. Mapping, similar to the chart below by Grigore & Dragan (2020), will allow Athens to identify central players, key relational structures, and opportunities for additional collaboration. To date, the city and the task force have not taken any actions to conduct a market analysis similar to what is described above. This exercise may also allow the city to benchmark against other cities that have taken similar actions to increase economic activity.

The entrepreneur must sit at the core of this exercise. It is imperative that their voice guide the city in identifying gaps, voids, and opportunities to consider. This approach can be accomplished through multiple focus groups or developing community events aimed at entrepreneurial engagement. Many of the partners on the task force (Chamber, University) could help facilitate this endeavor

Figure 4: Example of Entrepreneurial Mapping (Grigore and Dragan, 2020)



Recommendation 2: Athens must discover its niche within the larger northern Alabama ecosystem.

Building on the recommendation above, it is important that Athens not simply attempt to replicate other ecosystems in an attempt to accelerate efforts. In Isenberg’s (2010) instrumental paper, his first prescription for creating an entrepreneurship ecosystem is “Stop Emulating Silicon Valley.” While it is unlikely that Athens is looking to replicate the world’s most notable ecosystem, Isenberg’s point remains. Athens should not look to neighboring communities-- Florence, Decatur, Madison, and Huntsville, all of whom are experiencing entrepreneurial growth, as models to replicate.

Isenberg’s second prescription is to shape the ecosystem around local conditions. Each of the communities mentioned above has strong incubators. It stands to reason that policymakers' interest in an incubator may stem from what they see in those communities. However, what is unclear are all the steps taken by those communities before

investing in the incubator model. The ecosystem mapping and voices of entrepreneurs allow the city to consider the local perspective in designing solutions to meet Athens' specific need. This need may or may not include a call for business incubation.

Brown and Mason (2017) also support this notion by recommending against a one-size fits all approach. They argue that due to the uniqueness of each ecosystem, a broader, more normative policy approach will prove counterproductive. As stated in the literature review, local factors--business culture, entrepreneurial history, and social infrastructure fundamentally shape the ecosystem (Stam 2015). Policymakers must design and support strategic, economic interventions that are tailored to the local need. The mapping exercise should harness synergistic relational connections between the different actors throughout the community. "Building stronger networks can also build community logic, trust and ultimately resilience with an ecosystem" (Brown and Mawson, 2019, p. 361). This trust, particularly with entrepreneurs, will prove vital moving forward.

Recommendation 3: The city should streamline business policies and provide organized support for entrepreneurs.

In 2018, the city created a 'One-Stop Shop' office as a means to help the public with the business development process. Given its infancy and the scope of this project, there was no attempt to determine the efficiency or effectiveness of the office. The data from interviews make apparent that the process required by the city is complex and convoluted. The One Stop Shop is a step in the right direction; however, entrepreneurs need more than an online guide and a flow chart (Appendix D) to navigate through the local bureaucracy.

The city should engage the local Small Business Development Center (SBDC) and university to host recurring business development seminars. Both entities employ subject matter experts well versed in the ins and outs of starting a business, writing a business plan,

and much more. As stated in one of the interviews, “I would like to think the city wants to do this [educational programming] because they want to bring in new businesses and build around them.” Educational programming may include steps to starting a local business, a business luncheon series with local professionals (accountants, lawyers, etc), or a workshop with city officials to walk entrepreneurs through the application process and answering questions they have along the way. These opportunities should be highly publicized, sustainable, and a fabric of the business community.

Recommendation 4: The city should adopt broad entrepreneurial growth strategies.

Every community provides different and unique opportunities to cultivate and develop innovation and economic growth. This research highlights the need for an entrepreneurial development strategy to address the actual needs of local entrepreneurial talent. For example, the city should not confuse business-friendly policies with entrepreneur-friendly policies. Markley, Mack, and Luther (2005) outline eight different types of entrepreneurs (Appendix E). While overlap may occur between the two entrepreneurs, the needs are often contrasting. An individual at the nascent stage of start-ups has completely different needs than an entrepreneur looking to expand to a second location.

Existing businesses often need transactional support such as grants, tax incentives, or subsidies (Shane, 2009). Entrepreneurs, on the other hand, often seek relational support such as peer-based networks, mentoring, and advisement. Rather than setting policy based on markets or industry growth, Athens should recognize that in a healthy ecosystem, competition takes the form of collaboration, and rivalries are often replaced by networks. Brown and Mawson (2019) suggest that government policy should be laissez-faire and outwardly focused to foster connectivity between different actors in the community.

Lastly, entrepreneurship comes in all shapes and sizes. The key characteristics of an entrepreneurial business are innovation, growth, and a high degree of risk. But those terms mean different things to different people. A multi-generational retail store may not be interested in growth but instead focused on sustainability. A small at-home business may have anxiety about scaling up and making their first hire. The local policy and strategy must be inclusive and representative of entrepreneurs at all different levels and backgrounds.

Recommendation 5: The city should make a long-term investment into an entrepreneurial center.

Over the past twelve months, the incubator task force has met several times to discuss a collaboration that would serve entrepreneurs and small businesses in Athens. While several city officials have expressed a desire to locate an incubator downtown, some have gone as far as mentioning specific types of businesses they want the incubator to serve. However, this top-down approach is in conflict with both the literature and findings of this research.

The literature (Asheim, Coenen, and Vang, 2007; Isenberg 2014, and Sweeney 1987) makes clear that public investment does not drive innovation but can help create the conditions necessary for this innovation to occur. Only the entrepreneur decides to take risks and start a business. The findings of this research make clear that there is a disconnect between the needs of local entrepreneurs and the support provided by the city. The city has an opportunity to help shape the local conditions by investing into a medium that promotes the domains that entrepreneurs strongly identified.

Second, during this research, the idea of an incubator only emerged one time. And the term used by the interviewee was 'hybrid incubator.' None of the entrepreneurs interviewed, despite a working knowledge of the task force, mentioned the need for an incubator. Instead, terms such as co-working, entrepreneurial center, and business development were commonly

used in identifying their needs. While there is significant overlap between the different terms, the mapping exercise recommended earlier may help identify the appropriate medium to meet local needs.

Lastly, it is critical to the success of the ecosystem that entrepreneurs lead this endeavor. The city may play a role in subsidizing operations and recruiting programs at the location, but entrepreneurs should drive the governance, ecosystem design, and policy supports. This entrepreneur-centric approach to ecosystem building allows the city to play a supportive or even facilitating role while still supporting the basic tenet's of the Boulder Thesis of bottom-up ecosystem building.

Recommendation 6: Cultivate Civic and Social Entrepreneurial Opportunities

One of the growing hallmarks of 21st-century entrepreneurship is the notion of civic and social entrepreneurs. While absent from the overall data findings, one interviewee did speak at length about this opportunity in Athens. “[It] is huge in a small town like this. And so easy. If more groups and people spoke to each other about solving problems in the community, then we’d all be better off. Instead, everyone is off siloed working on their personal pet project.”

Social and civic entrepreneurship also continues to see growth in the literature. Sometimes taking the form of retired executives or concerned citizens, civic and social entrepreneurs are more interested in developing a better quality of life and overall business climate for the community. For example, in Kansas City, a group of volunteers and programmers meet regularly to solve social issues such as parking, housing, zoning, and energy usage (Sarma and Sunny, 2016). This approach promotes additional civic engagement through a non-traditional economic lens. As the city just completed a five-day comprehensive planning event, many of the ideas brought forth by the community fall into the civic and social entrepreneur concepts. The city should harness the local energy and interest to drive further community engagement.

Limitations and Opportunities

This research set out to ask the core question--what supports do entrepreneurs need in Athens, Alabama. The impetus of the project was in response to a desire by the city to develop a government-sponsored incubator to generate innovation and more entrepreneurial activity. The findings and subsequent recommendations are only the starting point for a much needed larger question--how does Athens create a vibrant and sustainable entrepreneurial culture.

Limitations

Since the project was designed to simply start a larger conversation regarding entrepreneurial needs, there are many limitations to the research. First, the sample size was small and limited in scope to only local entrepreneurs. While five entrepreneurs are representative of Athens' ecosystem, there are undoubtedly several opinions and ideas the research did not uncover. This is most notable in the interview that indicated knowledge of several entrepreneurs disinterested in working with the city. Second, the opinions were limited to the fields and projects in which the entrepreneurs had intimate knowledge. For instance, the needs of a potentially aspiring entrepreneur may differ greatly from a lifestyle entrepreneur who owns a retail shop. Using a wider lens may draw new or contrasting themes between actors.

Third, I acknowledge a level of confirmation bias in the research. As noted in the methodology section, purposive and convenience sampling were used to obtain the interviews. I attempted to acquire interviews from a diverse range of participants. Each interviewee represents a different profession and levels of entrepreneurship. This attempt does not mitigate the opinions and needs of other entrepreneurs in the community.

Lastly, the findings and recommendations are limited only to Athens. While the findings are generalizable, the literature makes clear that ecosystems are unique to the locale in which

they grow. Thus, it is imprudent to take the findings and recommendations and simply apply them to a similar town. The research should simply serve as a case study of the needs of one particular community.

Opportunities for Additional Research

As a result of this project, several opportunities present themselves immediately and into the future. The city just completed a five-day community planning event to build a twenty-year comprehensive growth plan. Sitting at the heart of the recommendations was entrepreneurship. Validation from an outside group (consultants) may provide an additional stamp of approval for the city to reconsider its approach to the incubator concept. Much like the interviewees, the consultants' initial recommendation made no use of the term incubator. Instead, they focused on an entrepreneurial center, co-work spaces, makerspaces, and other collaborative spaces to bring people together (TPUDC Presentation, In progress).

Second, this project has already spawned a larger research proposal. Commissioned by the university, a research will begin, this summer, collecting market statistics, analyzing findings, and identifying gaps and opportunities in the current ecosystem. The research will also produce an educational programming framework, budgetary costs, and best practices from similar initiatives in other communities.

Third, the task force should take on the challenge of surveying local policymakers and entrepreneurs to determine where disconnects or synergies may exist. While outside the scope of this project, the researcher is profoundly interested in understanding how local policymakers view the current ecosystem. Macke, Markley, and Fulwider's (2014) book *Energizing Entrepreneurial Communities: A Pathway to Prosperity* provides a simple ten-question survey (Appendix F) that could be administered to the Athens city council, Limestone County

commissioners, and a larger sample of local entrepreneurs. Deeper data analysis and focus groups may provide the pathway forward to a vibrant ecosystem.

Conclusion

This capstone project began with the city's desire to build an incubator in downtown Athens to spur innovation, create new jobs, and retain local talent in the area. While an incubator may be warranted, the target audience—entrepreneurs, have not been included in the process. This capstone project sought to bring the entrepreneurial voices to the discussion. The review of literature allowed the research to highlight and define the concept of entrepreneurial ecosystems which sometimes prove more influential than single solutions such as an incubator. Using Isenberg and Feld's work as a conceptual framework, interviews with the local entrepreneurs produced a number of findings for the city to consider. While limited in the sampling of data, these voices potentially provide a better understanding of the local needs and desires of the city's target audience. More importantly, by highlight the needs, local entrepreneurs are more present in the discussion on how to spur innovation in Athens—innovation which they will likely lead. The recommendations provide the city an opportunity to develop more entrepreneur-centric policies and supports to influence and enhance Athens' standing in the north Alabama ecosystem while promoting economic growth in one of the state's fastest growing cities.

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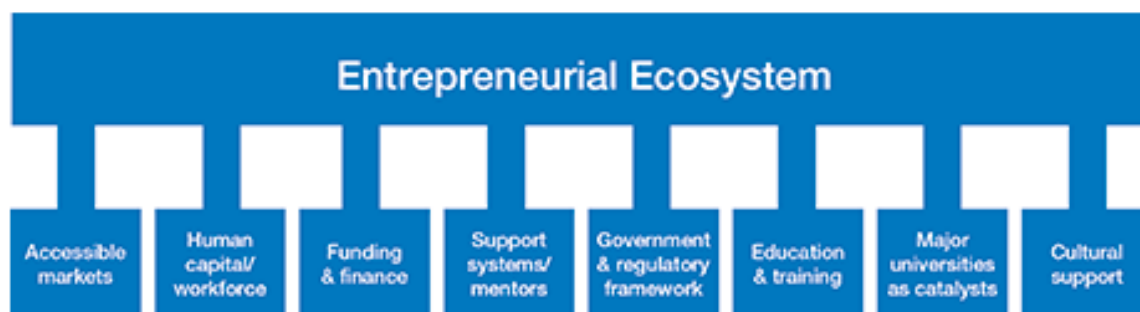
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Appendix A

World Economic Forum's Eight Pillars of an Entrepreneurial Ecosystem

Source: World Economic Forum Report: *Entrepreneurial Ecosystems Around the Globe and Early-Stage Company Growth Dynamics – the Entrepreneur's Perspective*, 2014.



Accessible markets

- Domestic market:
 - Large companies as customers
 - Small/medium-sized companies as customers
 - Governments as customers
- Foreign market:
 - Large companies as customers
 - Small/medium-sized companies as customers
 - Governments as customers

Funding & finance

- Friends and family
- Angel investors
- Private equity
- Venture capital
- Access to debt

Government & regulatory framework

- Ease of starting a business
- Tax incentives
- Business-friendly legislation/policies
- Access to basic infrastructure
- Access to telecommunications/broadband
- Access to transport

Major universities as catalysts

- Promoting a culture of respect for entrepreneurship
- Playing a key role in idea-formation for new companies
- Playing a key role in providing graduates for new companies

Human capital/workforce

- Management talent
- Technical talent
- Entrepreneurial company experience
- Outsourcing availability
- Access to immigrant workforce

Support systems/mentors

- Mentors/advisers
- Professional services
- Incubators/accelerators
- Network of entrepreneurial peers

Education & training

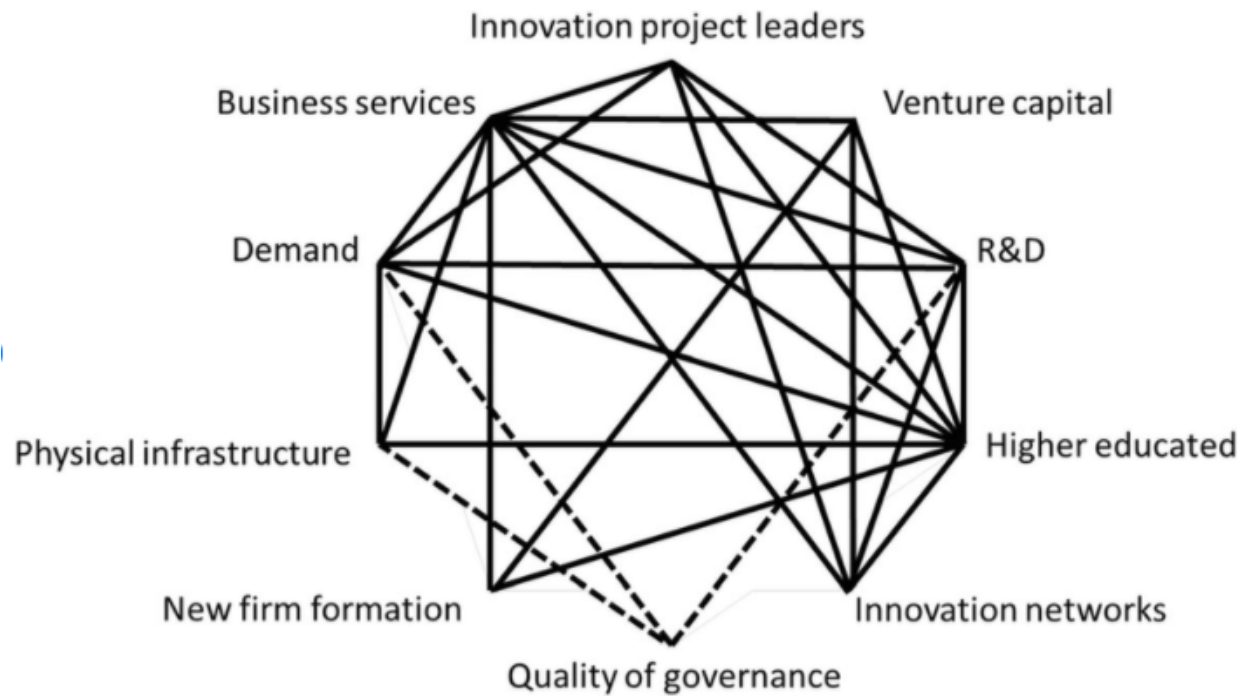
- Available workforce with pre-university education
- Available workforce with university education
- Entrepreneur-specific training

Cultural support

- Tolerance of risk and failure
- Preference for self-employment
- Success stories/role models
- Research culture
- Positive image of entrepreneurship
- Celebration of innovation

Appendix B

Erik Stam and Andrew van de Ven (2019) 10 Essential Entrepreneurial Ecosystem Elements



Appendix C

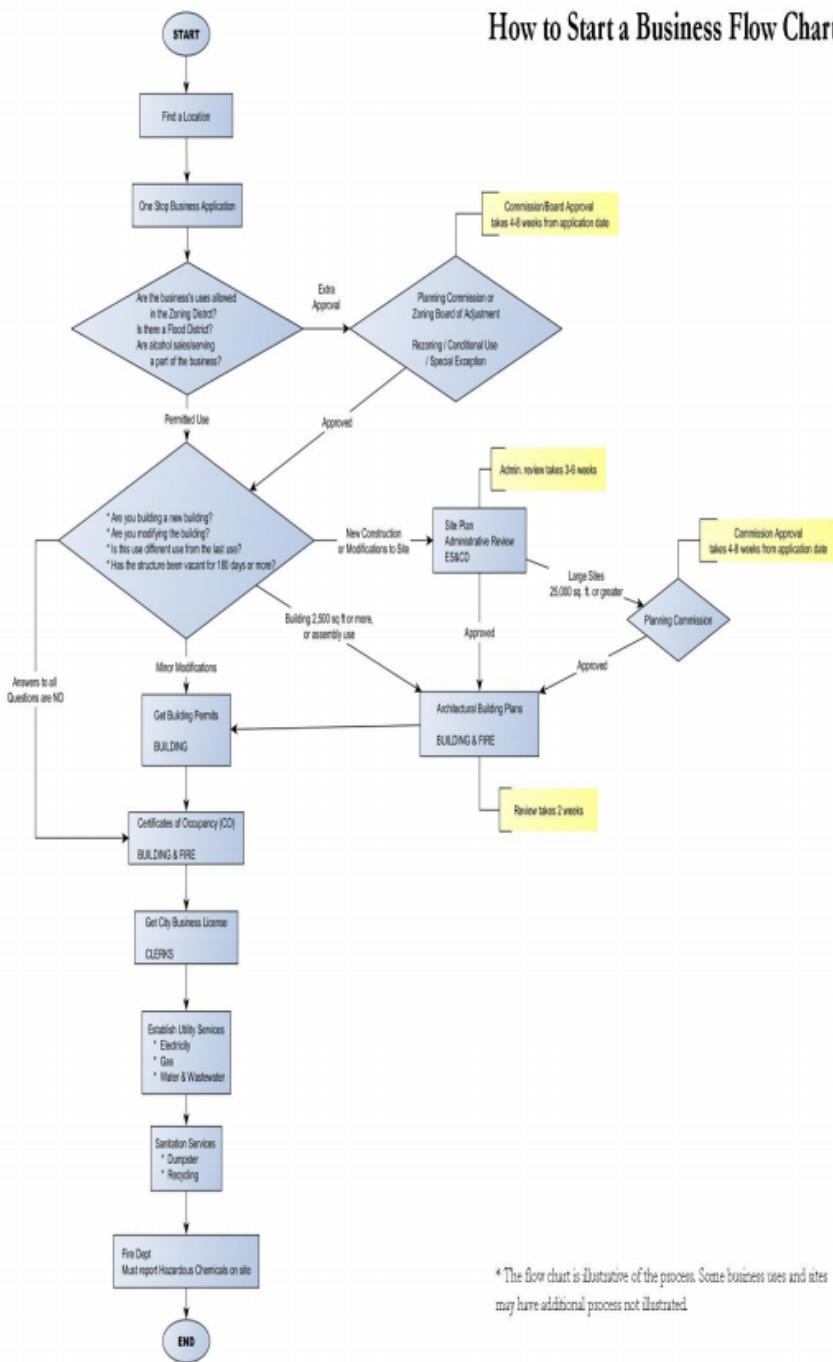
Interview Questions:

1. Tell me about how you started this business or in entrepreneurship?
2. What factors discouraged you from trying entrepreneurship? How did you overcome these roadblocks?
3. For the following statements, rate each statement based on how strongly you agree (5) or strongly disagree (1):
 - a) We have many business entrepreneurs in our community.
 - b) Our community has an entrepreneurial infrastructure that promotes networking and peer support among entrepreneurs.
 - c) Our community provides cool spaces and informal places for entrepreneurs to connect with each other.
 - d) Our community invests in growing entrepreneurs and their talent.
 - e) Our community invests in helping existing business owners become more entrepreneurial in their venture.
4. If you could design a support system for entrepreneurs in Athens, what would it be like?
5. Each of the following concepts is identified as an element of an entrepreneurial ecosystem--Navigating Government Policy, Access to Funding (venture or capital), Local Business Culture, Networking Opportunities, and Mentoring and Coaching. For each concept, please answer the following questions:
 - a) On a scale of Not Very Important (1) to Very Important (5), how important is it to an entrepreneur?
 - b) On a scale Very Poor (1) to Excellent (5), rate whether community supports exist to help entrepreneurs with this element?
 - c) How can Athens improve in this area?
6. In thinking about Athens becoming an entrepreneurial hub, what are some different concepts that come to mind?
7. If an incubator/entrepreneurial center was built in downtown Athens, how would you see being involved?
 - a) What type of information or training would have been useful for you?
 - b) Would you be willing to share your expertise?

Appendix D

City of Athens – One Stop Shop Guide to Starting a Business

How to Start a Business Flow Chart



* The flow chart is illustrative of the process. Some business uses and sites may have additional process not illustrated.

Appendix E
Eight Types of Entrepreneurs

TABLE 1 THE ENTREPRENEURIAL TALENT POOL	
TYPES	CHARACTERISTICS
Potential - Aspiring	Actively considering going in business Researching a business side Motivated toward a life change May include youth (under age 25), possibly still in school
Potential – Start-ups	In the process of starting a business May or may not have a good plan May or may not have the necessary skill
Business Owners – Survival	Struggling to make enough income Often feeling stressed and reluctant to seek help
	Don't have the time or energy to seek markets or opportunities
Business Owners – Lifestyle	Successful and well-established Not actively seeking to grow or change the business model
Business Owners – Re-Starts	Previously in business with limited success In the process of starting another business Determined to succeed this time Willing to seek outside help
Entrepreneurs – Growth-Oriented	Successful in business Have a growth orientation and drive Seeking to be more competitive, actively seeking new ideas Actively seeking new markets
Entrepreneurs – Serial	History of creating and growing more than one business Don't like to manage existing businesses, often sell business once its up and running Generally on the lookout for new ideas and opportunities
Entrepreneurs – Entrepreneurial Growth Companies	Experiencing rapid growth in employment or sales Reaching new markets, developing new products and services Innovative and dynamic leadership and workforce Sometimes referred to as “gazelles”

Appendix F

Community Survey on Entrepreneurship

Score each statement based on how strongly you agree or disagree with its accuracy relative to your community.

Statement	Strongly Agree	Agree	Neutral or Unsure	Disagree	Strongly Disagree
We have many business entrepreneurs in our community.	5	4	3	2	1
We have many civic entrepreneurs in our community.	5	4	3	2	1
We have many social entrepreneurs in our community.	5	4	3	2	1
We have a strong entrepreneurial culture in our community that accepts failure as part of being entrepreneurial.	5	4	3	2	1
We have a strong entrepreneurial culture in our community that celebrates rather than resents entrepreneurial success.	5	4	3	2	1
Our community has an entrepreneurial infrastructure that promotes strong networking and peer support among entrepreneurs.	5	4	3	2	1
Our community provides “cool spaces” and informal places for entrepreneurs to connect with each other.	5	4	3	2	1
Our community invests in growing entrepreneurs and their human talent, not just on growing their businesses.	5	4	3	2	1
Our community invests in helping existing business owners become more entrepreneurial in their ventures.	5	4	3	2	1
Our community—parents, educators, and business owners—believes that entrepreneurship is as viable a career option for our children and grandchildren as finding a great job.	5	4	3	2	1
TOTAL SCORE					