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Updated Southwest Virginia Entrepreneurial Ecosystem Analysis

In 2020, Chapman and Company was hired to provide an economic development analysis that included a report to improve the local startup ecosystem in Southwest Virginia, GO Virginia Region One. This paper is an update to that report. The update is intended to look at the evolution of the ecosystem - reviewing updated data and doing interviews.

Executive Summary

Three years is not a long time in the context of ecosystem building. In his seminal book on the topic, Startup Communities, Brad Feld describes the time horizon as twenty years. And, this may be too short. Thus, in the first couple of years, the growth of institutions, events, and companies is slow. Like most economic measurements, ecosystem measurements tend to be non-linear with slow growth leading to bursts of activity followed by slower growth. These ecosystem cycles tend to last approximately seven years and are tied to many factors - including available capital and people.

Southwest Virginia has seen the clear improvement in institutions. The University of Virginia - Wise has a full time ecosystem builder. There are activities across the region that did not exist pre-COVID - including meetups and startup specific activities. There have been both company

and job creation in Travel, Accommodations, and Food Services (NAICS 71 & 72).

But, to the dismay of the region's leadership, there has not been a boom of blossoming technology companies. This is not unusual - even typical - technology companies need fertile ground. What is more concerning for our team is the number of industries where there has been limited growth. It is expected for mining and the timber industries to be slowly decreasing, but across many service industries, there are also decreases in employment, if not always in startups. This suggests that Southwest Virginia's economy continues to change but is slowly shedding its previous structure without clear growth into a new one.

The original plan called for a number of foundational "plays", and many of these recommendations were followed. For the most part, following these recommendations has put Southwest Virginia in a better place regarding startups despite the lukewarm data. The foundation is now set, and Southwest Virginia can use the next chunk of this cycle to expand its startup ecosystem.

Entrepreneurial Ecosystem Review

An entrepreneurial ecosystem is an interlocking set of activities, people, and structure that help startups succeed. They provide training and services. But, they also provide infrastructure and connections. In 2020-21, when Chapman and Company reviewed Southwest Virginia for the first time, many ecosystem components were disjointed. And, while some of this remains, the interconnections appear to be strengthening.

A **Knowledgeable Community** is one that understands entrepreneurship. This is less definable with data and more identifiable by attitude and the ability to share information. One key question that was asked in interviews is “Which company is your favorite startup?” Previously, few interviewees were able to name many startups. During this review, most were able to name a handful, and a couple of the interviewees could name multiple interesting companies - requiring some deliberation regarding which was their favorite. This type of shift is a good sign. One major point of improvement remains telling the region’s stories. Where would a person in the general population go to hear and understand what is happening?

However, the progress in knowledge illustrates that **Connecting Activities** have clearly increased. This is at least in part because the initial study was done during COVID. But, it also represents a clear shift to more technology focused businesses and technology-enabled ones. These meet-ups and startup activities are coordinated across the region and piggy-back on bordering regions programs. For example, Bristol benefits from user

grounds forming and operating on the Tennessee side of the border. However, the region still seems to be under-connected to young, talented technical personnel and potential co-founders. Limited programming with and for Virginia Tech students and potential technologists from surrounding regions is being done. This is a critical gap for long-term technology business growth. A Startup Weekend or technologist retreat would be helpful to attract key types of talent to the region.

It would also be useful to organize more **Financial Capital**. In the reports from as far back as fifteen years, the lack of angel and investment capital was noted. Pre-seed and Seed rounds must be started by local investors. These earliest stage risk capital dollars will not flow into the region without local diligence and credibility. Thus, starting an angel group is a must for the next step of growth. Additional non-dilutive capital - such as SBIR grants and potentially even local grants (similar to Launch LNK program in Lincoln, Nebraska) are also advised.

One place where clear progress has been made is the **Structure** of the ecosystem. UVA Wise has clearly marked this as a priority. Between hiring a full-time ecosystem builder and establishing (and attending) programming across the region, the structural components are stronger than three years ago. Moreover, good internet, multiple interesting and diverse communities, and a relatively strong connection between a very wide geographical region has shown some clear improvement in collaboration and vision.

These elements have helped increase entrepreneurial fertility but not necessarily seen a rapid expansion of new company creation. The overall number of establishments (about 10% in the counties and 4% in the towns/cities of the region) fell in the period from 2019 to 2023 according to the Bureau of Labor Statistics. This is probably a continuation of economic trends in mining and timber along with the catastrophic economic hit tied to the COVID outbreak.

That being said, the economic trends tend to be slightly different across the region. Wise County, for example, has seen an increase of over 100 new establishments in the last five years. These establishments run the gamut of industry but include NAICS 54 - technical and professional services. In fact, Wise's growth mirrors the region which has seen growth of over 45%. This is a good signal NAICS code as it illustrates that there are some consulting companies growing around more technical endeavors. While more software startups are desired, NAICS 54 growth tends to be a leading indicator of foundational people in a region.

The Data

This type of update is challenging because economic indicators and data do not generally change rapidly. These are gradual changes much like the coming of spring. Looking at any moment makes it hard to see the changes to the trees, flowers, or ecology, however, the difference between months is very obvious. The COVID pandemic represents a significant data disruption that is clearly seen in Southwest Virginia's overall economic data. As a researcher, our team tends to think of this figuratively as delaying spring longer than expected.

Southwest Virginia is starting to reveal progress, but it is muted because the expectations of those involved are an instant blossoming spring. Nonetheless, the correct actions are being taken and more companies will continue to emerge.

Jobs

According to the Bureau of Labor Statistics, jobs in the region have decreased since 2019 by about 4%, but increased since 2021 by 2.7%. This is consistent with a region that has seen decline in industrial production in key industries over the last couple of decades - particularly mining and timber.

That data is mirrored by what has happened in Cool Jobs. Cool Jobs is defined as three major categories within the data: Math + IT (15-0000), Architecture + Engineering (17-0000), Social and Other Sciences (19-0000). These categories make up unique job types that often reflect a

region's comparative advantages and their pathway to new technology startups. Overall, Southwest Virginia's employment in these three areas is 3100. This makes up about 2.5% of total employment in the region. The largest number of employees is Math + IT - with a large number of database administrators (15-1242).

However, the noteworthy element of the Cool Jobs data is the depth that the region has in 17-2151 - Mining and Geological Engineers, including Mining Safety Engineers. Here the location quotient (a common measurement of density) places Southwest Virginia at eleven times more dense than the rest of the United States. So, while Southwest Virginia is losing its mining industry, many of the personnel that are critical to this industry remain in Southwest Virginia. This may open a path for new startup companies that are able to either use the existing technical skills or retrain those technical skills into something that is useful for an alternative type of company.

Looking more broadly at the jobs data, Southwest Virginia has some comparative advantages in some other key areas. Timber, mining, and furniture making skilled labor appear to be key comparative advantages. Most people reading this will likely roll their eyes because this is what the region is known for. [But, it suggests an opportunity akin to Huit Jeans in Wales](#). There are many stories of companies starting out of the ashes of industries that have closed locations. And with deep technical expertise, there could be a number of opportunities to build new manufacturing and technical capabilities on top of an e-commerce or direct to consumer frame.

Customization and high quality products may be an opportunity to build back up high paying jobs (likely fewer) in some key industries. But, this requires capital.

Capital

Simply put, Southwest Virginia does not have many investors. It is rare that I do research in a place that is so completely devoid of capital institutions. Thus, the next stage of ecosystem development is three-fold.

First, the banks and micro-lenders need to be inventoried for willingness to lend to early stage companies. One good way to look at the last five years of data is the SBA 7(a) loan program. This is an incomplete data set, but it provides insight into which banks are active in the region working with small businesses. It also signals what types of projects are being financed.

Overall, there have been more than one hundred and ten loans in the region in the last four years - totaling \$71m of investment. The First Bank and Trust has done more than sixty of these small business loans. Most of these recipient companies are not new starts, but they are expanding businesses. These are bedrock loans - including main street loans in Abingdon, Bristol, Galax, and Norton. It is suggestive of a key ecosystem capital player.

These entities, the banks and the business owners, are the first line of future equity and risk capital. Entrepreneurs are more likely to invest in other entrepreneurs, so understanding how these main street businesses are growing is important to keep a pulse on current small growing

businesses, but also as a means to build relationships for future growth businesses.

This leads into the second type of capital that is critical for an ecosystem - risk capital. Simply put, there is limited evidence in the publicly available data sources that there is much happening regarding risk capital. Usually, this would be captured in Crunchbase or Pitchbook, but there is also SEC filings (we use a site called formds.com). There are zero investments over the period of time under review that filed an SEC exemption. There is one company that received capital in Crunchbase - Solar Biotech out of Norton. They raised money from Ingredion Corporation.

This is a critical area that needs attention for Region 1 to increase its attractiveness to early stage high growth businesses. But, it does not require huge investments by a single person. Instead, it is about building institutional knowledge and structure. We would recommend starting with an angel group or investment club that has a minimum buy-in of \$3000. The goal would be to get 10-20 initial members. \$500 of the buy-in is used for meetings and \$2500 is set aside for instruments. With 10 members, the club could do one investment of \$25k and with 20, the club could do two. This would be a massive increase for the region. It also establishes some governance - formal and informal for potential startups to find and check out.

If the group grew to 50 members and \$5000 buy-in, the organization would have \$250,000 to invest every year. That could be 10 \$25k investments.

And, that is not unreasonable if you can get your first ten people. These people will bring others. The point is that it has to start.

It is also an important way to help with the third type of early stage capital - non-dilutive grants. In the previous report, we detailed Launch LNK (Lincoln, Nebraska) which is based on the Arch grants program in St. Louis. This is non-profit or government money, a little of each in both cases, that is used to provide non-dilutive funds to startups. Almost always it is matching a private investment.

One promising program is the VCEDA Seed Capital Matching Fund. This program provides \$10,000 to new companies. It does require a matching investment. While good in nature, this is too little to act as a catalytic investment that will jumpstart a high-growth company. Bumping the \$10,000 to \$25,000 would be a good next step, particularly for companies in targeted industries such as software development or computer engineering. As the region continues to focus on high growth and exportable opportunities, finding targeted ways to provide additional capital to these organizations at an early stage - particularly in non-dilutive ways - will continue to be important.

The region could establish some pools of money that could be utilized in this way. Specifically, it becomes a set aside to get into the hands of actual businesses not support organizations. Moreover, it can be piggy-backed with venture competitions, startup weekends for students, and other activities that may also provide a grant through an award.

For example, many universities have business plan competitions where the winning group receives an award. Rice University in Houston has the most famous because the award is \$1 million. [The University of Virginia's is called the Entrepreneurship Cup.] But, a reasonable plan would be to find donors that could make the award \$5000 to \$25,000. Focus attention on programming a startup weekend type program about two months prior to the competition - recruit teams from Virginia Tech and other nearby universities. And offer them money plus real estate plus other useful services (legal, accounting, etc.). Together this type of activity can jumpstart some excitement in the community and potentially unlock capital for pre-seed and seed stage companies.

Establishments

An ecosystem evaluation should evaluate the number of companies in the region. Using the Quarterly Census of Employment and Wages (QCEW), we reviewed the number of establishments in each area. This information can be broken down by county and city.

Since our evaluation in 2020, certain counties have seen growth in new establishments - particularly Wise (43%), Bland (34%) and Carroll (17%). But, most counties have seen a decrease in the number of establishments - Russell (34%), Dickenson (31%), Scott (30%), and Lee (21%) being the hardest hit. Collectively, the rural parts of the region have seen a reduction of establishments since 2019 of about 5.5%. This is consistent with rural parts of America.

The cities have all lost companies. This is not consistent with the economic growth seen in other similarly situated places in America. Galax is down 24.57%; Norton is down 15.8%; Bristol is down 4.7%. However, one noteworthy element is that despite losing companies, Bristol's employment has increased by almost 20%. According to local sources, this appears linked to the development of the casino in the area. Finding ways to leverage these types of projects include food services companies, janitorial companies and other service based businesses that naturally increase in the shadow of gambling and casinos.

This data is sobering. Despite the efforts of GO Virginia and the local economic development efforts, there have been continued business closures and employment losses. It is critical in these times to add programming to transition those who have lost their jobs to potential new starts. Many rural areas, for example Sydney, Nebraska after the loss of Cabela's, have seen significant job losses that ultimately rebound with new entity and job creation because of existing skills and talents. What types of opportunities do job losses present to the region? Chapman and Company maintains that many "lost" American skills can be transitioned into new American companies - such as electricians, contractors, cooks, and household service providers. The key is how to create scale so that these businesses can grow to include opportunities that import payments for those services. Thus, training around etsy, Jobber, and similar personal startup-friendly platforms may be a good option.

However, not all of the data is bad. Some of the data is suggestive of some new opportunities. First, employment and establishments in professional services and tourism are up. They have not increased in every location, but in general NAICS 54 and NAICS 71-72 have increased in many of the measured regions. This does suggest that there is some opportunity for the region to expand its efforts.

Activities and Programming

This is a difficult comparison to the COVID era research. Simply put, there were only online activities, and many of those were launched after a period of time where no activity had occurred. This lack of gathering and activities has a chilling effect. It is not the fault of the organizers or ecosystem builders. The reality is that COVID punched a lot of regions, including Southwest Virginia, in the gut - making gathering and building difficult.

However, the last couple of years have seen new activities begin to emerge - such as Co.Starters, CreatorCon, and Side Hustle Market. Blake Salyer has done a good job of building activities and relationships with activities in surrounding regions. The importance of Salyer, in his role as regional ecosystem builder, cannot be overstated. Having a person thinking about and acting on behalf of the ecosystem reveals opportunities to build systems, programs, capital access, and other essential elements of a well-functioning ecosystem. Particularly, in places where the ecosystem is nascent, it is particularly useful to have a designated individual who can also act as a front door and community champion. Salyer fulfills all of these

responsibilities and, as an entrepreneur himself, he understands the plight of those looking to start businesses in Southwest Virginia intimately.

Having physical space (the Nest and the co-working space at the Oxbow Center) also creates a means to schedule and control regular activities. [These would be good locations for building digital personal services knowledge around platforms like etsy, Fiverr, and Jobber.] More collaboration is necessary. In addition, a map of similar organizations with co-working space, a combined regional calendar for events, and a regular newsletter that identifies new or small businesses would help increase awareness and potential activity.

In particular, we would recommend activities targeted at nearby student populations (including those in the region) and those that double down on tourist activity in the region. So, for example, running a startup event during the fall when the leaves and mountains are pretty - attracting tourists from the broader region. This may act as a means to get some tourists to buy/build second homes or more. But, more importantly, it allows the region to recruit certain needed people to attend events that are not currently available in high numbers in the region.

For example, in our experience, having a venture capitalist visit and speak at a meeting is very likely to pull technology companies out of the woodwork. They will come to talk with the VC about a fundraise. It also can be a good opportunity to get information into the general population. Thus, as the region looks to build an angel group, it makes sense to create a

speaker series with regional investors. These investors can talk about specific parts of investing, but they also will act as a lure for potential startup companies seeking capital.

Communications

Our firm is not based in Southwest Virginia. Thus, we can only evaluate certain aspects of the digital communication effort. However, it is noteworthy that there are limited ways to hear about startups in the region. From the outside, key areas of communication are not apparent. For example, the Nest's Facebook page has event listings rarely. And the Hatch page does not include a community calendar.

Collectively, we looked through Facebook, Instagram, and Google searches seeking clear information about what is happening and when. We also looked for startup stories that would give us a feel for the region. At best, these stories are on companies' own websites. There is not a regular cadence and focus on bringing out the stories of the existing entrepreneurs.

Clusters and Opportunities

In the original paper, the local team asked Chapman and Company to identify potential industrial opportunities. This is a brief update of that information.

Construction

The construction industry is a key bellwether as it provides insight into building and business expansion. There was an uptick in loans to construction projects and construction companies. Additional programming to help transition experts in trades to business ownership would continue to be valuable.

Energy + Coal

This represents the area with the biggest opportunity for technological growth and innovation. Across the metrics, the technical expertise is clear. There are limited companies starting in this space in the region. But, focusing on bringing in experts and targeting potential companies that might create relationships and catalyze ideas continues to seem like a good idea. A good example of an emerging opportunity is the Delta Energy Lab. This type of opportunity should be partnered with external capital and corporate partners seeking a testbed - such as American Electric Power (parent of Appalachian Power) - that have stakes in the region but aren't vested exclusively in the region.

Timber

Many areas in the country have unique expertise, such as timber. These areas can produce niche highly paid crafts people. Furniture and specialty woodworking continues to be an opportunity for e-commerce and reputational improvement. This could be a way to also increase tourism.

Food

This feels like an opportunity for the region - particularly some of the agricultural areas. Developing the canning resources and unique agricultural products, such as berries and mushrooms, continues to be an opportunity. This is embodied by the non-profit Appalachian Sustainable Development's continued expansion. Transitioning some of these programs into for-profit ventures that are leveraging the underlying ecology of the region could be uniquely valuable over time - particularly with improved networks into food centers and with food distribution companies seeking new sources of regional food staples. One opportunity may be in growing specific types of herbs which are often semi-locally sourced.

Software + Computers

The region continues to have relatively few technologists, but the strategy is starting to take shape. Focusing on college students, existing engineering talent, and recruitment from surrounding areas is smart. Using this as a means to also jumpstart potential technology companies makes sense - particularly in energy, e-commerce, and tourism. We would also recommend a little more focus on hardware, particularly integrated hardware with wood or non-plastic components.

Tourism

The area that remains the most likely high growth industry for the region is tourism. The growth in the NAICs codes 71 and 72 suggest that this continues to be an area where new companies will be created. Finding better ways to share stories about the relatively low cost, great natural experiences, and accessible activities is really important.

Update on Metrics

- I. Entrepreneurial Count - Declined. Fewer establishments by about 4%. The actual metric does not yet have an update. [Women's ownership statistics have not yet been updated.]
- II. Capital Availability - Increased.
 - A. 7a Loans are up. In 2023 there were 17 loans approved. This is ahead of schedule in original plan.
 - B. Angel Investment - zero. Goal was 1 in 2023.
 - C. VCEDA Seed Capital Matching Fund is a viable opportunity to create and leverage more non-dilutive capital into new companies.
- III. Communications - No change. There has not been a meaningful change in communications availability or information about the ecosystem online. While there is more small business communication within localities, these tend to be closed networks that do not provide reach online.
- IV. Connectivity - Clear improvement. But the specific recommendations were not followed - so not specific evaluation.
- V. Structure - Clear improvement. An ecosystem builder has been hired. There are multiple programs and connectivity mechanisms.

Recommendations

Chapman and Company has evaluated the changes in the region over the last three years. There is a lot to be excited about. There are also some things that still create concern.

1. Hiring an ecosystem builder is smart. Focusing the person on finding startups and building out communications and programming is important. Thus, we applaud the Hatch partnership with Co.Starters, and we like the availability of the Nest. We would focus on building out frameworks for others - communications, activities, and efforts to get more storytelling going (think a blog once a month to eventually become once a week). This type of newsletter/blog is a great way to get engagement but also build a list of those that care.
2. Capital is a major hurdle. The increase in local lending is a major improvement over the last four years! Build alongside some non-dilutive and investment programs. Specifically, by the end of the 2024-25 school year, stand up an angel group even if it is small. Get ten people to commit to \$3000 investment over the course of the last seven months of 2025. Have at least two meetings - Q3 & Q4. This will focus a lot of attention on technology startups or potential startups. Try to find a community willing to set up some form of non-dilutive grant. The cities, Wise, and St. Paul seem the most likely targets because of size or existing institutional support.

3. Use targeted events to lure surrounding technologists and entrepreneurs into the region. Focus on tourists too. This will allow you to show off during the best times of year. You can likely find people willing to visit and speak for the cost of travel or for free. Focus on getting the event going for a year and then start using your reach with the help of the State of Virginia to get people that will draw - like venture capitalists or successful entrepreneurs.
4. Build from areas of strength. There is a strong desire to build out technology based businesses in the region. That's great to have that vision. Focus on building technology around areas where you have unique knowledge - remote e-commerce, high end furniture e-commerce, mining technology, etc. The total number of computer scientists is low, but many engineers have existing skills that can be leveraged to build software. Focus on finding good ideas that scale and then partner with talent in the region and the surrounding regions to build it. Delta Energy Lab represents a real opportunity to use new energy technologies, including software and digital technology.