1. **Assist the WV State Government** in its economic development activities

   **Tactic:** Create a dedicated economic development team at WVU to augment the resources of the State Development Office

2. Create and **strengthen entrepreneurship** in West Virginia
   - **Focus:** Accelerate the growth of Regionally-focused businesses & local communities

3. Commercialize **high-growth disruptive technologies**, especially those based on WVU innovations/IP
   - **Focus:** Accelerate the creation of startups from Inventors & entrepreneurs commercializing WVU IP

   **Tactic:** Create the **Startup Engine**, a campus hub with targeted acceleration programs to proactively accelerate the highest-potential startups and disruptive inventions
Create a Dedicated Economic Development Team at WVU

1. Assist the WV State Government in its economic development activities

   • **Common Challenges:**
     - Workforce development & talent pipeline
     - External perceptions about WV
     - Internal perceptions about WV
     - Site Readiness
     - State tax & investment incentives
     - Wholesale electric rates
     - Other legislative issues

   • **Current WVU Tools & Resources:**
     - WVU Center for Business & Economic Research (John Deskins)
     - WV Forward (Rocky Goodwin)
     - WV Brownfield Development Center (Patrick Kirby)
     - WVU Manufacturing Extension Program (Jerry Biser)
     - WV Legislative Summit & Public Education Collaborative (Donna Peduto)
Create a Dedicated Economic Development Team at WVU

1. Assist the WV State Government in its economic development activities

   • **StartupWV Activities:**
     - Embed a dedicated resource from B&E’s Bureau of Business & Economic Research in the WV Development Office to assist with:
       - Responding to quick-turnaround requests from the Development Office; and
       - Developing longer-term economic development strategy

   • **Desired Outcomes**
     - Improve connections between the WV Development Office and existing WVU tools and Resources

**Next Steps**
Begin to create a rapid-response team at WVU through coordination of mission and resources across centers/institutes in WVU
StartupWV Goals

1. Assist the WV State Government in its economic development activities

2. Create and strengthen entrepreneurship in West Virginia
   - **Focus:** Accelerate the growth of Regionally-focused businesses & local communities
   - **Tactic:** Create the Startup Engine in the Chambers College of Business and Economics, a campus hub with targeted acceleration programs to proactively accelerate the highest-potential startups and disruptive inventions

3. Commercialize high-growth disruptive technologies, especially those based on WVU innovations/IP
   - **Focus:** Accelerate the creation of startups from Inventors & entrepreneurs commercializing WVU IP
Startup Engine – Regionally-focused businesses

2. Create and **strengthen entrepreneurship in West Virginia**
   • Focus: Accelerate the growth of **Regionally-focused businesses & local communities**

- **Common Challenges:**
  - Creating & launching a product or service
  - Attracting & retaining customers
  - Adapting to shifting market dynamics
  - Obtaining debt or equity financing for startup & ongoing working capital, capital expenditures and project finance
  - Purchasing equipment
  - Hiring/training employees
  - Finding/renovating a physical location
  - Generational transfer of ownership

- **Current WVU Tools & Resources:**
  - LaunchLab (Carrie White)
  - Brickstreet Center (Steve Cutright)
  - Women’s Business Center (TBD)
  - SBDC (TBD)
  - Law School Entrepreneurship & Land Use Clinics (Priya Baskaran)
  - WV Brownfield Development Center (Patrick Kirby)
  - Reed College Local Media Ownership Program (Dana Coester)
2. Create and **strengthen entrepreneurship in West Virginia**
   - Focus: Accelerate the growth of Regionally-focused businesses & local communities

   - **Accelerator program** with two tracks: (1) local/regionally-focused businesses; and (2) higher-growth national/global businesses.
     - Coaching & mentoring to strengthen the entrepreneurial/business acumen of startup & small business management teams
     - Workspace at U-Place Garage
     - Direct investment and/or grants for the participating businesses
       - Including providing or facilitating funding for generational transfers of existing companies

   - Desired Outcomes:
     - Cohort of companies participating in the accelerator program next Fall
       - Will require cohort recruitment & selection by early Summer

**Next Steps**
1. Hire an Executive Director for the Startup Engine (who can also run the accelerator program)
2. Begin to build-out the space at the U-Place Garage
3. Define the investment vehicle(s) to support the accelerator program
3. Commercialize high-growth disruptive technologies, especially those based on WVU innovations/IP
   • Focus: Accelerate the creation of startups from Inventors & entrepreneurs commercializing WVU IP

   • WVU Tools & Resources:
     • Medical/Health Innovations:
       • Health Sciences Center (Giersch/Olesh/Fontes)
       • Rockefeller Neuroscience Institute (Ali Rezai)
     • Engineering Innovations:
       • Engineering Innovation Center (Giersch/Quinn)
       • Energy Institute (Jim Wood)
       • Smart Manufacturing (Thorsten Wuest)
       • WVU Tech Transfer (Bruce Sparks)
     • Student Innovations:
       • LaunchLab (Carrie White)
       • BrickStreet BPC (Steve Cutright / Tara St. Clair)
       • WVU Entrepreneurship & Innovation Law Clinic (Priya Baskaran)
       • Academic/non academic Entrepreneurship programs

   • Common Challenges:
     • Identification of the highest-potential commercial applications of WVU IP
     • Obtaining applied grant funding to further develop & validate the commercial applications of IP
     • Understanding the regulatory and commercial development pathways of the IP
     • Attraction of an experienced CEO & team
     • Attraction of pilot customers
     • Attraction of post-spinout private funding
Startup Engine – Disruptive Technologies

3. Commercialize **high-growth disruptive technologies**, especially those based on WVU innovations/IP
   - Focus: Accelerate the creation of startups from *Inventors & entrepreneurs* commercializing WVU IP

   - “**Phase 0 Incubator**” program to focus on the subset of WVU IP with the highest startup potential
     - Dedicated internal team to move the IP forward in the commercialization process
       - Performing market analysis
       - Creating the product development pathway
       - Identifying & pursuing applied grant funding
       - Recruiting a part-time interim CEO
       - Building strategic partnerships
     - Internal grants for the selected projects

   - Desired Outcomes:
     - 3 or 5 projects being incubated by May 2019

**Next Steps**
1. Hire a Director for the Phase 0 Incubator
2. Identify several patents to begin incubating
3. Create a pool of internal resources to be used (grants + expertise)
4. Identify and/or hire additional support positions necessary, incl. EIRs

*EIR = Entrepreneur-in-Residence
Current IP Process

1. Researcher makes a discovery

2. Tech Scout helps to write the invention disclosure

3. Invention Disclosure

4. TriMonti Consulting Assesses commercial value and competitive landscape

5. Commercial Assessment

6. TTAC reviews invention disclosure and commercial assessment

7. Outside Patent Counsel writes provisional patent application

8. Researcher Works to Validate Invention

9. TTAC reviews any intervening developments

10. Outside Patent Counsel writes non-provisional patent application

Yes

File Provisional Patent Application at U.S. PTO

Yes

File Full Patent Application at U.S. PTO

Data

Twelve-Month Provisional Window

File Final Patent Application at U.S. PTO
IP Process with Phase 0 Incubator

1. Researcher makes a discovery

2. Tech Scout helps to write the invention disclosure

3. Invention Disclosure

4. TriMonti Consulting Assesses commercial value and competitive landscape

5. Commercial Assessment

6. TTAC reviews invention disclosure and commercial assessment

7. Outside Patent Counsel writes provisional patent application

8. Researcher Works to Validate Invention

9. TTAC reviews any intervening developments

10. Outside Patent Counsel writes non-provisional patent application

Yes

File Provisional Patent Application at U.S. PTO

Yes

File Full Patent Application at U.S. PTO

Twelve-Month Provisional Window

Data

Phase 0 Incubator

Develop the commercial strategy and undertake next steps toward spinout
IP Process with Phase 0 Incubator

6. TTAC reviews invention disclosure and commercial assessment

- File provisional patent?
  - No: Begin proactive startup efforts?
    - Yes: Twelve-Month Provisional Window
      - Yes: File Full Patent?
        - No: TTAC reviews any intervening developments
          - Yes: Outside Patent Counsel writes non-provisional patent application
          - No: License the Patent to the Startup

- No: License the Patent to the Startup

- Next Step: Accelerator

- EIR* and Incubator team work to validate the startup potential (12 mos.)

*EIR = Entrepreneur-in-Residence
<table>
<thead>
<tr>
<th>Level</th>
<th>WVU Resources</th>
<th>Description</th>
<th>Team</th>
<th>Value Proposition</th>
<th>Product Development</th>
<th>Market</th>
<th>Business Model</th>
</tr>
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<tbody>
<tr>
<td>4</td>
<td>Startup Engine Accelerator</td>
<td>Validating an</td>
<td>Team has clear understanding of how their target market operates and has strong industry contacts in this market</td>
<td>Evidence of differentiation through initial target customer feedback that the solution solves their problem significantly better than others in the market.</td>
<td>Team has clear understanding of product development costs and how to build the initial product cost-effectively.</td>
<td>Evidence of a $1Billion+ total addressable market.</td>
<td>Team has financial model with cost and revenue projections articulated and a strategy for hitting these projections.</td>
</tr>
<tr>
<td>3</td>
<td>LaunchLab (Students) I-Corps Training (Researchers) Phase 0 Incubator</td>
<td>Value Proposition</td>
<td>Team has technical ability to build a fully functional product and has a clear understanding of the value chain and cost structures in their industry</td>
<td>Feedback that potential customers will pay the target price. For B2C = 100 customers. For B2B = 5 customers and conversations with multiple stakeholders in each.</td>
<td>Team has built a working prototype and a product roadmap</td>
<td>Initial evidence through sales that team can capture initial target market.</td>
<td>Team can articulate projected costs along the value chain and target cost points to reach positive unit economics.</td>
</tr>
<tr>
<td>2</td>
<td>LaunchLab (Students) I-Corps Training (Researchers) Phase 0 Incubator</td>
<td>Setting the Vision</td>
<td>Team has senior members with lived experience of the problem and/or deep understanding of their target customer's problem.</td>
<td>The team has confirmed with potential customers that the solution solves key pain point - product is a painkiller, not just a vitamin.</td>
<td>Team has a basic low-fidelity prototype that solves the problem.</td>
<td>Team understands any regulatory hurdles to entering the market and has a strategy to overcome them.</td>
<td>Company can point to pricing and business models of similar products in the industry as further evidence that their revenue assumptions are reasonable.</td>
</tr>
<tr>
<td>1</td>
<td>LaunchLab (Students) I-Corps Training (Researchers) Phase 0 Incubator</td>
<td>Establishing the Founding Team</td>
<td>Strong founding team - at least 2 people with differentiated skillsets</td>
<td>Team has identified their hypothesis of their target customer - the specific type of person whose problem they are solving.</td>
<td>Team has ability to develop a low-fidelity prototype and has freedom to operate - not blocked by other patents.</td>
<td>Team can clearly articulate total addressable market, the percentage they will capture and initial target market.</td>
<td>Team has identified an outline of their revenue model.</td>
</tr>
</tbody>
</table>

Private Investors will Expect a Company to have Progressed through Level 4

- Recruit and train a cohort of Startups from within the WVU “pipeline”, as well as from across West Virginia and beyond.
- Goal is to help them get to the point at which they can attract private capital.
Accelerator & Coworking Space

Possible configuration in identified space at U-Place complex – easily accessible to the public with student traffic and parking. Also close to current B&E and future B&E buildings.