



# DESTINATION STARTUP

## HiveTech Solutions

**One-Sentence Summary of What You Do:** HiveTech Solutions, a women-owned company, is commercializing its proprietary climate-smart technology to improve honeybee survival.

**Affiliated Institution:** University of Colorado Boulder

**Have you formed a company yet?** Yes

**Funding/Financing:** Grant Funding

**Please describe your company and the problem you are trying to solve:** We are the developer of MICA - a Mobile, Indoor, Climate-controlled Apiary for the Beekeeping industry. Our product addresses the 40% honeybee loss rate that beekeepers suffer every winter. Our technology has demonstrated a 72% higher survival rate for honeybees as compared to conventional methods. We do this through a patent pending design specific to honeybee biology that induces a healthy hibernation to preserve colony strength and protect against mite infestations. Our MICA system is a non-chemical approach to maintaining the strength of honeybee colonies and stopping the spread of deadly Varroa mites. By improving survival rates for our beekeepers, reducing their labor cost, and offering an affordable financing model, we provide a substantial annual ROI for our customers.

At our core is selling our climate smart container with a data monitoring system across three customer segments – small commercial, hobbyists, and large commercial beekeepers - through a combination of Hardware as a Service (HaaS), direct sales, and distribution through retailers.

With technical validation of prototype complete, we have launched our early adopter pilot program. We are completing construction of three full scale versions of our MICA with key opinion leaders this winter. We will incorporate their feedback into our MVP set to launch in 2022.

**What is/was your go-to-market strategy?** We consider our Total Addressable Market to be the combination of small commercial, large commercial, and hobbyist beekeepers. Small commercial beekeepers (9,000 entities) own 47% of 2.88 M total colonies. Large commercial businesses (2,000 entities) own 50% of 2.88M. The hobbyists (200,000 individuals) own ~800,000 colonies. We consider our Total Addressable Market to be the amount of colonies that are managed by the combination of small commercial beekeepers, large commercial business and the hobbyists who collectively manage 3.5M colonies (2.7M total commercial + 800,000 hobbyist colonies) in the United States. We define our Serviceable Addressable Market as the 2.8M colonies that are located in areas that are experiencing the most impact from climate change and are dealing with high Varroa infestations. If all 3.5M colonies in our TAM were housed in a MICA, the total gross revenue would be \$2.25B. The SAM of 2.8M colonies is \$1.8B.



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We are completing the final stage of a USDA SBIR Phase 2 grant by piloting MICA with three small commercial beekeepers who are key opinion leaders to support our commercialization efforts. We are incorporating their feedback and optimizing the design for our first market-ready product to launch in 2022.

Our plan for the next two years is to focus on building revenue with products and our data service for the small commercial market. This will allow us to gain traction, build our initial software platform and validate our technology in the industry as we develop our product for the large commercial market.

**How will/do you generate revenue?** At our core is selling the MICA hardware and data monitoring system across three customer segments – small commercial, hobbyists, and large commercial beekeepers with thousands of colonies. To serve these diverse segments, we offer the option of (1) a direct sale of our hardware and services or (2) Hardware as a Service model that allows customers to bundle a service and hardware package in payments of a three year term.

We will distribute through our facility in Colorado and through large equipment retailers such as Mann Lake, Dadant, and Tractor Supply. We are using a relationship sales approach that highlights the high ROI that beekeepers can achieve when they use a MICA.

We make our products cost effectively by outsourcing manufacturing and software development then controlling the final assembly in Colorado. We are constantly generating new IP through our product development which includes research into transportation stress, new materials for lightweight insulation, testing new mite treatments while in cold storage, and data modeling for colony survival prediction.

**How will this showcase benefit your company or technology?** Destination StartUp is happening at the right time in HiveTech's development. We are currently raising \$1.5 M in our first seed round and would love to opportunity to meet and pitch investors in our regional ecosystem. We are an attractive investment opportunity because \$500k is already committed by the State of Colorado OEDIT ESCR program. This round gives us 18 months runway. We are looking for accredited angels and VC's to invest through a SAFE that would consider participating in future priced rounds. Our seed round will be used to bring on key hires, to establish our supply chain and manufacturing infrastructure, build our customer pipeline, and continue to optimize our product.



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## **Who are the members of your team and why is this the right team to get the job done?**

- CEO: Kimberly Drennan, AIA, LEED AP, Co-founder, Kimberly has led the development of our business from the earliest concept to the current state of the product development and business strategy. She is an architect and faculty Environmental Design at CU Boulder with a specialized background in high performance housing (for humans), she has deep knowledge of the built environment, building systems technology, engineering, and project management.
- CSO: Dr. Chelsea Cook, PhD in Ecology & Evolutionary Biology, expert in Honeybee Biology, Co-founder. Dr. Cook has led the hypothesis-driven approach that has informed the development of the product from the earliest stage of the project. She has deep knowledge of honeybee health, experimental design, data analysis, and the beekeeping industry.
- Director of Product Development: Dr. Osvaldo Buccafusca, PhD Electrical Engineering. Dr. Buccafusca is an expert in product development and manufacturing. A more recent addition to the core team, he will lead the next phase of product design and manufacturing. Dr. Buccafusca's experience in high tech R&D and manufacturing spans over 20 years. Along the way, he led multifunctional teams developing precision electronics and implementing process improvements.

We have strategic partnerships in place:

1. CRADA with the USDA
2. Mann Lake (major retailer) is an early adopter
3. HaaS financing partner in negotiations currently