SOFTWARE, TECHNOLOGY & CREATIVE MEDIA

ECONOMIC DEVELOPMENT STRATEGIES & ACTION PLAN 2021-2024

SOFTWARE, TECHNOLOGY, & CREATIVE MEDIA

Goal: A holistic, accessible system of care that builds agency and reflects community priorities so everyone thrives.

STRENGTHS

- Unique geographic location
- Geographic diversity - climate zones, features
- Cultural diversity
- World class STEM entities x research facilities
- Higher education x competency centers
- Mentors, connections to major companies

OPPORTUNITIES

- Geographic isolation and location (Pacific Rim leadership x commerce facilitation)
- Adoption of evolving digital communication tech for industrial x career diversification
- K-12 STEAM education and funding for computer science, digital literacy
- Expanded astronomy focus and investment
- Enable health tourism
- 'Āina Aloha economic development
- Demonstrate global leadership on climate action (investment, intellectual property)
- Renewable energy, transportation mandates
- Brand innovation opportunities

ASPIRATIONS

- Recognized as technology incubator
- Robust technology industry that delivers world class software, engineering, and creative media solutions
- Strong academic programs at all levels that supports digital literacy and access, project-based learning, continuing ed
- Broadband is a right and accessible to all
- Hawai'i Island is a research destination
- Innovation Hub that solves challenging problems and is magnet for talent/research

RESTRAINTS

- Infrastructure challenges (inadequate, aging, non-existent broadband)
- Costs and diminishing public funding
- Brain drain secondary to perceived and actual lack of local opportunities
- Trends, challenges (cyber threats, deep fake)
- Emerging community sentiment (anti-science bias, anti-development bias)
- Governance and decision-making (silos; lack of vision, future proofing, transparency)
- Geography
- High energy and fuel costs

OBJECTIVE 1

Obtain broad awareness and support for the development of a technology ecosystem

STRATEGIES

- Define vision of Hawai'i Island's technology ecosystem
- Establish community, business, and political support for our technology ecosystem
- Develop and deploy pilot projects to demonstrate success early to showcase benefit and create momentum
- Establish communication and networking capacity
- Identify metrics for success and establish an entity to monitor innovation

OBJECTIVE 2

Create pathways for residents and returning kama'āina to engage in the tech economy

STRATEGIES

- Build local capacity for both workers and managers engaged in the remote and hybrid economy
- Normalize remote work
- Expand the economic opportunities available through e-commerce
- Develop and deploy strategic communication and marketing to raise visibility of local talent
- Establish innovation centers, accelerators, sandboxes and accreditation mechanisms
- Establish a Hawai'i Island Creative Media Hui in collaboration with Hawai'i State Creative Industries office and/or Hawai'i Association of Media Arts

OBJECTIVE 3

Leverage technology to optimize and accelerate our sustainability initiatives

STRATEGIES

- Support R&D of technology and automation to expand regenerative agriculture
- Support automation and other tech solutions that support our clean transportation and energy objectives mandates
- Support automation and other technology solutions to optimize our climate action and resilience initiatives
- Support automation and other technology solutions to optimize the healthcare access
- Support automation and other technology solutions to enable more sustainable tourism
- Utilize creative media technology to support ʻĀina Aloha Economic Futures platform and stratigies

TECHNOLOGY

REFLECTIONS

HOW DO WE BOLSTER HAWAI'I'S TECH INDUSTRIES IN THIS CHANGED WORLD?

- Communicate and connect
- Focus on our youth
- Focus on the use of STEM for real-world and locally relevant challenges
- Establish local accountability

HOW DO WE BETTER SUPPORT HAWAI'I TECH COMMUNITY?

- Build up existing programs
- Invest more in technology sectors
- Build capacity of local workforce and promote globally
- Highlight and market local innovations

HOW IS TECH AT THE CORE OF COMMUNITY WELL-BEING?

- Provides for economic diversity
- Tech can provide solutions to persistent and systemic community issues

HOW DO WE MAKE TECH MORE RELEVANT AND ACCESSIBLE TO MORE PEOPLE?

- Implement a series of small but achievable demonstration projects that highlight local work and opportunities to expand skill sets

PROSPERITY
METRICS

- Job creation, retention, advancement opportunities
- Number of businesses, percentage of economic contribution
- Real wage growth
- Reduction in "Brain Drain"
- Global recognition as innovation hub
- Education markers (digital literacy)
- Well supported incubators and opportunities for experience leading to hiring, business creation, ROI
- Accelerator, venture capital
- Sustainability (including social equity, environment, community building)

We envision a resilient community connected and empowered to care for each other in times of disaster.

We envision an engaged citizenry that contributes to a Vibrant Hawaiʻi.

APPENDIX

LIST OF PROJECTS & TACTICS
FOR SECTOR STRATEGIES

Arranged within an ABCD lens: what we can do, what we need help with, and what we need others such as government, philanthropy, and industry to do

3) COORDINATE EFFORTS TO ENSURE APPROPRIATE INVOLVEMENT BY ALL STAKEHOLDERS IN IMPLEMENTATION OF TOURISM STRATEGIC PLANS

What We Need Others to Do

Broaden awareness and understanding of the Hawai'i Island Tourism Strategic Plan 2020-25 and the Hawai'i Tourism Authority Strategic Plan 2020-25

- Widely disseminate both documents and host conversations that bring together industry stakeholders
  - Open dialog directly between Hawai'i County Research & Development, the Hawai'i Tourism Authority, policy makers, and industry stakeholders
  - Share ideas about how stakeholders are enriching places with their presence (asking questions like: *Is it pono to go there? How can we enrich the place we're visiting through our presence? How will our guests be enriched by taking them there?*)
  - Fully understand the four pillars of the HTA Strategic Plan (Natural resources – if 'aina is not thriving, we as kanaka are not thriving; Hawaiian culture – we need to preserve, perpetuate and promote the culture in responsible ways; Community – without people, this place/destination is not worth visiting; Branding – what are we doing to tell stories and who's telling the stories) and how/where stakeholders fit into the plan)
- Living and Sharing Pono Pilot Projects
- Highlight stakeholders with promising or proven projects to serve as a model for others

What We Need Help With

Bring to life the tenants of the HITSP and HTASP

- Partner with Hawaii County Research and Development and Hawaii Tourism Authority to provide technical assistance and support for implementation of plans goals, objectives and mandates
- Request and obtain pre-determined periodic updates and assessments of the progress of both plans

TECHNOLOGY

1) OBTAIN BROAD AWARENESS AND SUPPORT FOR THE DEVELOPMENT OF A TECHNOLOGY ECOSYSTEM

Define Hawaiʻi Island's Technology Ecosystem Vision

What We Can Do

- Co-develop vision with community through public forums, surveys; ensure cross-sector coverage
- Identify what types of technology do we want to attract

What We Need Others to Do

- Leverage best practices
- Establish relationships with relevant organizations

Establish community, business, and political support

What We Can Do

- Actively socialize vision through public and private roadshow, with emphasis on diversity and inclusion
- Partner with business community
- Establish presence through the Chambers of Commerce
- Develop and socialize 'creative tension narratives' to illustrate value of tech and hurdles to overcome

Demonstrate success early to show benefit & create momentum

What We Can Do

- Partner with or support existing business and programs that are either already contributing to (or are close to contributing) to the vision
- Actively communicate progress to stakeholders
- Market our success stories - individuals and groups who have been making progress in this space
- Create awareness of the 'been there, done that' stories to inspire our youth

What We Need Help With

- Develop and deploy a pilot project to demonstrate the operation, utility, and value of a target industry

Establish communication capacity

What We Need Help With

- Stand up a robust communication/marketing group (or leverage an existing one)
- Develop and deploy a PR campaign targeting web, social, print, and TV
- Establish a web and social media presence
- Establish a cadence for communications – press releases, website updates, social engagement

Monitor innovation

What We Need Others to Do

- Identify or establish an entity to monitor innovation
- Establish critical success metrics, data and reporting processes
- Deploy a cadence for communicating progress, e.g., and annual report on progress, emergent trends, barriers, etc.

2) CREATE PATHWAYS FOR LOCAL RESIDENTS AND RETURNING KAMAʻĀINA TO BECOME ENGAGED IN THE GLOBAL TECHNOLOGY ECONOMY

Build local capacity

What We Need Help With
- Promote upskill, workforce development, internships, mentoring through badging and micro-credentialing
- Build broad digital literacy and proficiency in software design/development, creative media, and emergent technologies for all community members of all ages
- Actively recruit Kamaʻāina to return to local opportunities

What We Need Others to Do
- Expand continuing education credits
- Deliver a sustainable STEM curriculum that is current, relevant, and 'future-proofed'
- Create relevant certifications (eg. Remote Ready) and establish as a recognized professional standard
- Establish a training/curriculum on management of remote employees and (semi-) virtual organizations

Normalize remote work

What We Need Help With
- Change the perception this is short-term; articulate this is the new normal (white paper - for employers)
- Socialize/market various advantages (eg. work-life balance, environmental, lower employee costs, lower business costs, increased productivity, gender equity, flexibility of schedule)
- Bring in people who can talk about best practices (Jeffery Berlin - remote work webinar) and provide training for remote workers on time management etc.
- Identify positions that are able to be done remotely

What We Need Others to Do
- Address the challenges - establish trust with managers and employers

Expand economic opportunities available thru e-commerce

What We Need Others to Do
- Developing mechanisms for achieving the level of trust
- Development of new metrics for good work
- Model of advising on ecommerce strategies
- e-commerce centers via Resilience Hubs where people can learn how to list and sell local products through concierge service (Amazon, eBay, and other sites)
- Web design training by leveraging existing programs such as Small Business Development Center

Develop and deploy communication/marketing to raise visibility of local talent

What We Need Others to Do

- Talk to Silicon Valley companies; launch marketing campaign to show training programs, broadband access
- Sustain and expand programs like Aloha Connects Innovation

Establish innovation centers, accelerators, sandboxes

What We Need Others to Do

- Complete the Innovation & Manufacturing Center - electronic makerspace/NELHA
- Secure funding for capital projects from various sources (ie. government, industry, philanthropy)
- Establish Creative Media group for Hawai'i Island to foster collaboration between like-minded groups such as Hawai'i State Creative Industries Office and Hawai'i Association of Media Arts
- Establish a business incubator to create pathways that inspire local innovation, attract investors, and commercialize local solutions
- Create business/technology working communities (including through Resilience Hubs) that provide local entrepreneurs access to hardware, software, broadband, work stations, collaboration spaces, and shared services to help build and grow businesses
- Create and nurture an Innovation Council, a cohort of mentors representing business, technology, indigenous knowledge, and other critical sectors

3) LEVERAGE TECHNOLOGY TO OPTIMIZE AND ACCELERATE OUR SUSTAINABILITY INITIATIVES

Support research and development of technology/automation solutions to expand regenerative agriculture efforts

What We Can Do

- Support deployment of automated solutions (bots/drones) for vector detection and pinpoint issue mitigation

Support automation and other technology solutions that support our clean transportation and energy objectives

What We Can Do

- Support deployment of geofenced autonomous transport zones, e.g., airport, or in-town

Support automation and other technology solutions to optimize our climate action and resilience initiatives

What We Need Help With & What We Need Others to Do
- Use of GIS mapping, forecasting models, and monitoring technology to support resilience efforts, e.g., future proofing of critical infrastructure
- Maximize the value of the climate data being generated by NOAA at the Mauna Loa observatories

Support automation and other technology solutions to optimize the healthcare access

What We Can Do
- Support research and development/deployment of AI-enabled diagnostic solutions

What We Need Others to Do
- Expand telemedicine access

Support automation and other technology solutions to enable more sustainable tourism

What We Need Help With
- Collaborating with HTA to define a visitor program that will appeal to corporations, workers, and our local communities

What We Need Others to Do
- Focus on the knowledge/information worker, health and well-being visitor
- Focus on innovation and technology conferences

Support implementation of the ʻĀina Aloha Economic Futures

What We Need Others to Do
- Use creative media to elevate and amplify diverse community voices around shared values outlined in the AAEF framework
- Use technology to local tools to utilize the AAEF rubric to evaluate policy and making

HOW TO CONTRIBUTE

CORE TEAM ROLES

This strategy is designed to foster collective action. While priority projects are identified, everyone is encouraged to select a tactic or project that resonates, join (or create!) a core team, and work to implement. Core teams will be empowered with a goal setting framework and evaluative and feedback tools to ensure sustained and measured progress.

CONVENER

Convene and guide the Core Team to reach 90-day Key Results.

CONTRIBUTOR

Commit to the success of the initiative: plan, design, launch, evaluate, iterate, and scale. Contributors must have bandwidth (time) and capacity to commit to a 90-day action timeline focused on key results, organizational commitment and alignment, vision for transformation, and a willingness to take risks and weather small failures.

COLLABORATOR

Supportive community partners who are relied upon to share their knowledge, perspectives, and to bring thought partners into the process.

CURIOUS

For folks who are not ready to jump into a Stream - but want to learn more - Vibrant Hawai'i hosts quarterly CONFLUENCE. An open meeting where all Streams come together to share the outcomes of the last quarter and opportunities to contribute to activities in the next quarter.

EVALUATION FRAMEWORK

The Economy Stream co-chairs will lead efforts to conduct quality, on-going evaluation of Core Teams formed to implement Action Plans for this economic development strategy. The purpose of this evaluation is to document objective performance measures and intended outcomes of the identified activities.

Utilizing both quantitative and qualitative methods, co-chairs will develop a way to help Core Teams monitor their progress and ensure that they are meeting their 90-day Key Results.

Process evaluation provides assessment of project implementation efforts. As indicated in the Logic Model (page 4), each activity will have identified Outputs *(direct tangible results)* with corresponding performance measures included as Outcomes *(short-term, positive impacts on the community)* that can be measured within a one year period.
Outcome evaluation is primarily concerned with the efficacy of the project, which is outlined in the Logic Model as Waypoints *(population level indicators)* and the Scorecard *(indicators that tell us how well we are doing in our journey toward a vibrant Hawai'i)*. The combination of these tools will effectively assist in assessing the overall effectiveness and impact of this Economic Development Strategy and Action Plans.

This evaluation effort will be enhanced by qualitative information through observation of program activities, site visits, interviews with Core Teams and stakeholders, and focus groups with residents; all of this will tell us how well activities are meeting anticipated outcomes.

White papers and data dashboards will be an option for communicating and visualizing the ongoing progress of the activities within this strategy.

Vibrant Hawai'i is a growing community that commits to individual and collective 'auamo kuleana to increase equitable opportunities to build wealth: an abundant reservoir of human, social, natural, and financial capital that we contribute to and draw upon.

GET INVOLVED

vibranthawaii.org

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FOR HAWAI'I ISLAND