

Makerspaces

CORNERSTONES OF COMMUNITY
& ECONOMIC GROWTH

Erin Sharpe

Director of iHub

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Director of iHub at Northeast Community College. I began my career in manufacturing and procurement, working in global logistics and operations for companies across agriculture, e-commerce, and industrial sectors.





N | iHUB

Groundbreaking April 4th, 2024



Collapse May 9th, 2024 | Erin Receives Job Offer



North America's Driving Factors

1

DIY Culture

Increase in embracing do-it-yourself projects and innovation. High Cost continue to fuel DIY culture.

2

Education & Innovation

Schools & Universities are incorporating makerspaces into curricula to foster creativity and practice STEM skills.

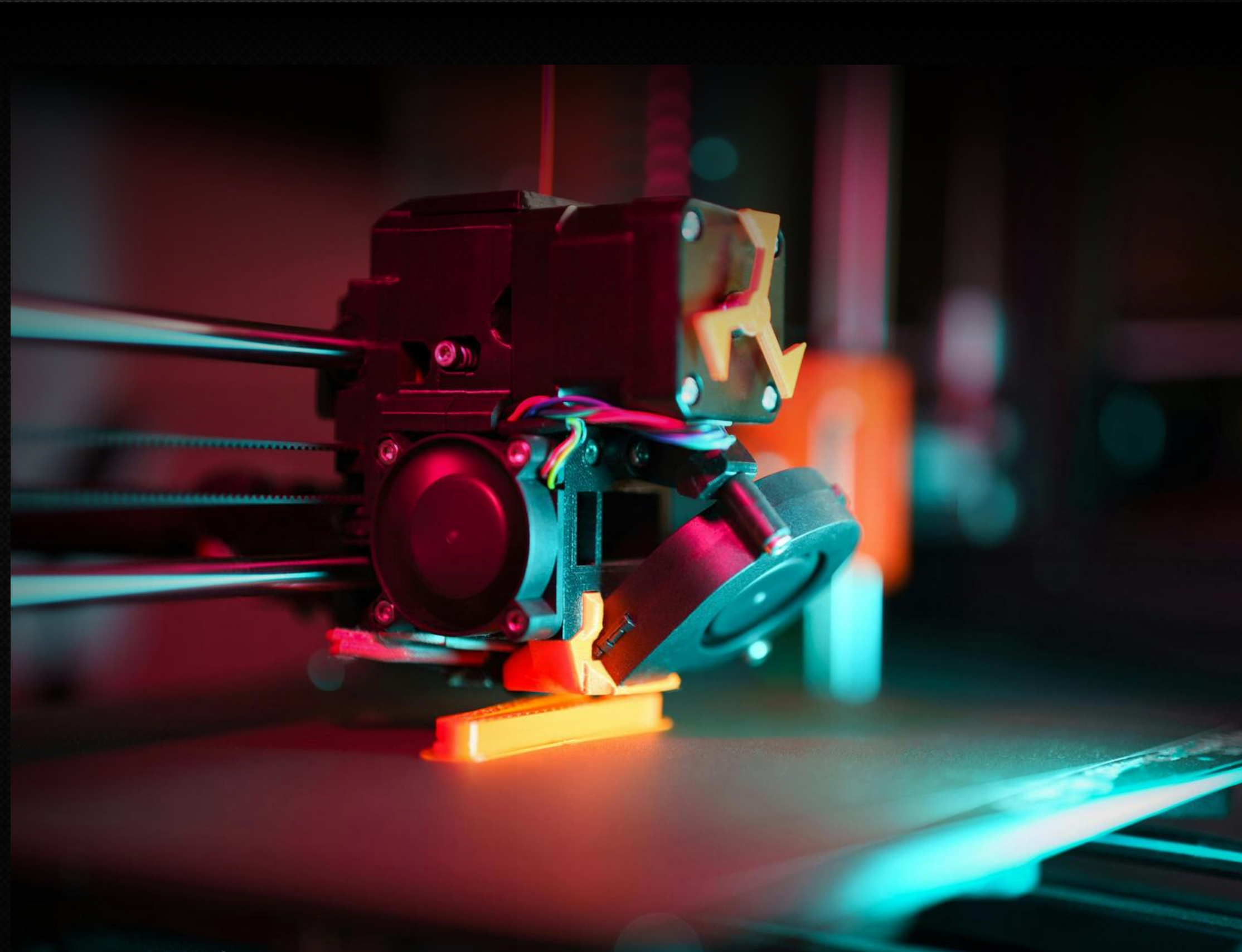
3

Modern Tech / Industry

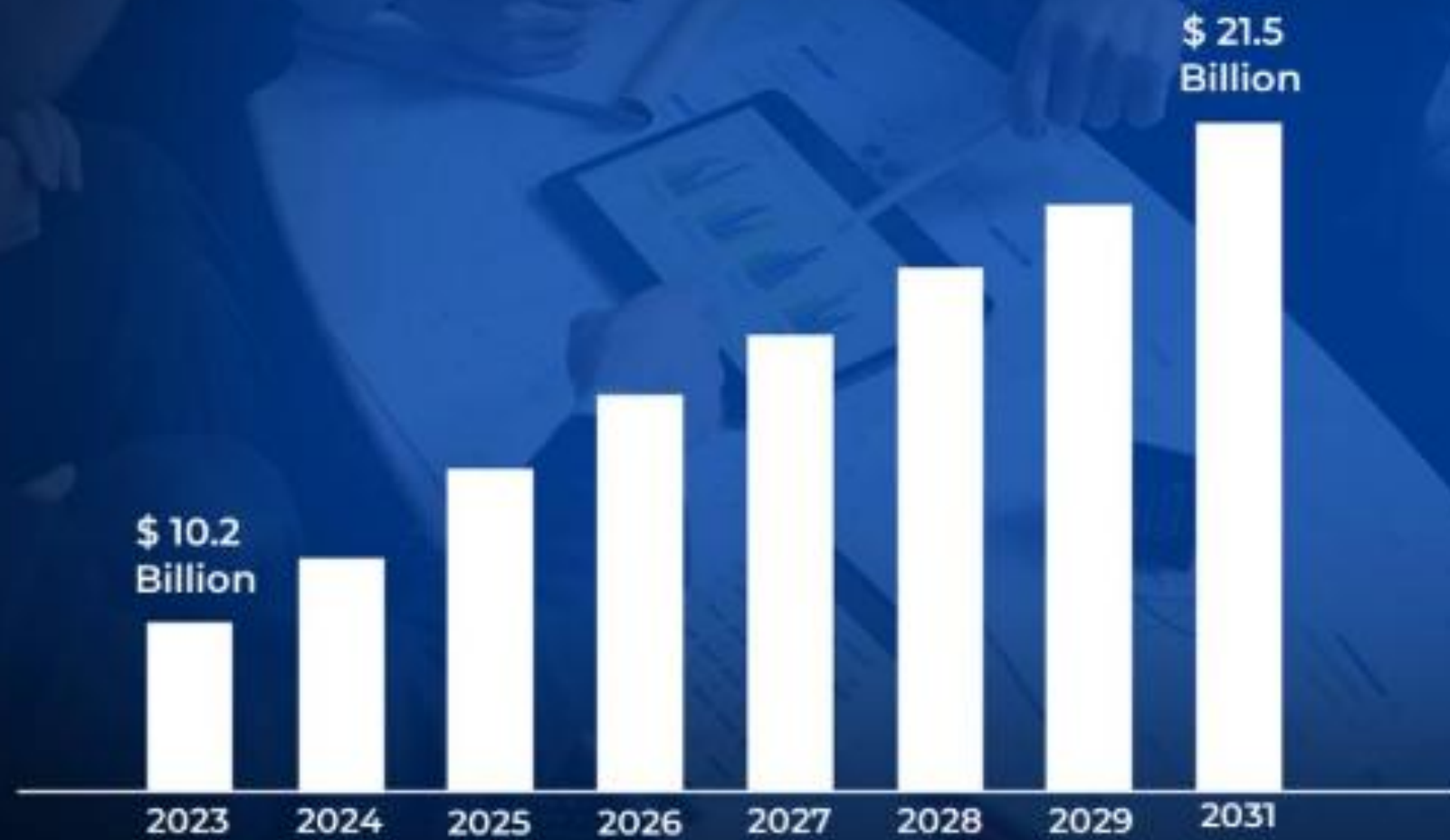
Growth in technologies and cost effective equipment such as 3D printing, laser cutting and CNC machining.

Other Driving Factors

- Community Engagement & Social Collaboration
- Entrepreneurial Growth
- Government & Corporate Support
- Cost -Effective Prototyping
- Growth of Gig Economy & Freelance
- Health and Wellness



Global Makerspace Services Market



Traction

Projected 9.1% CAGR from
2024 to 2031

Key Challenges

1

High Initial Cost

Startup cost for space, technology, software can deter some from starting.

2

Limited Awareness

Many potential users may not fully comprehend how makerspaces can enhance learning & Innovation

3

Regulatory Challenges

Compliance with safety and privacy regulations can pose obstacles for implementation in schools

**Educational
Institutions**

Libraries

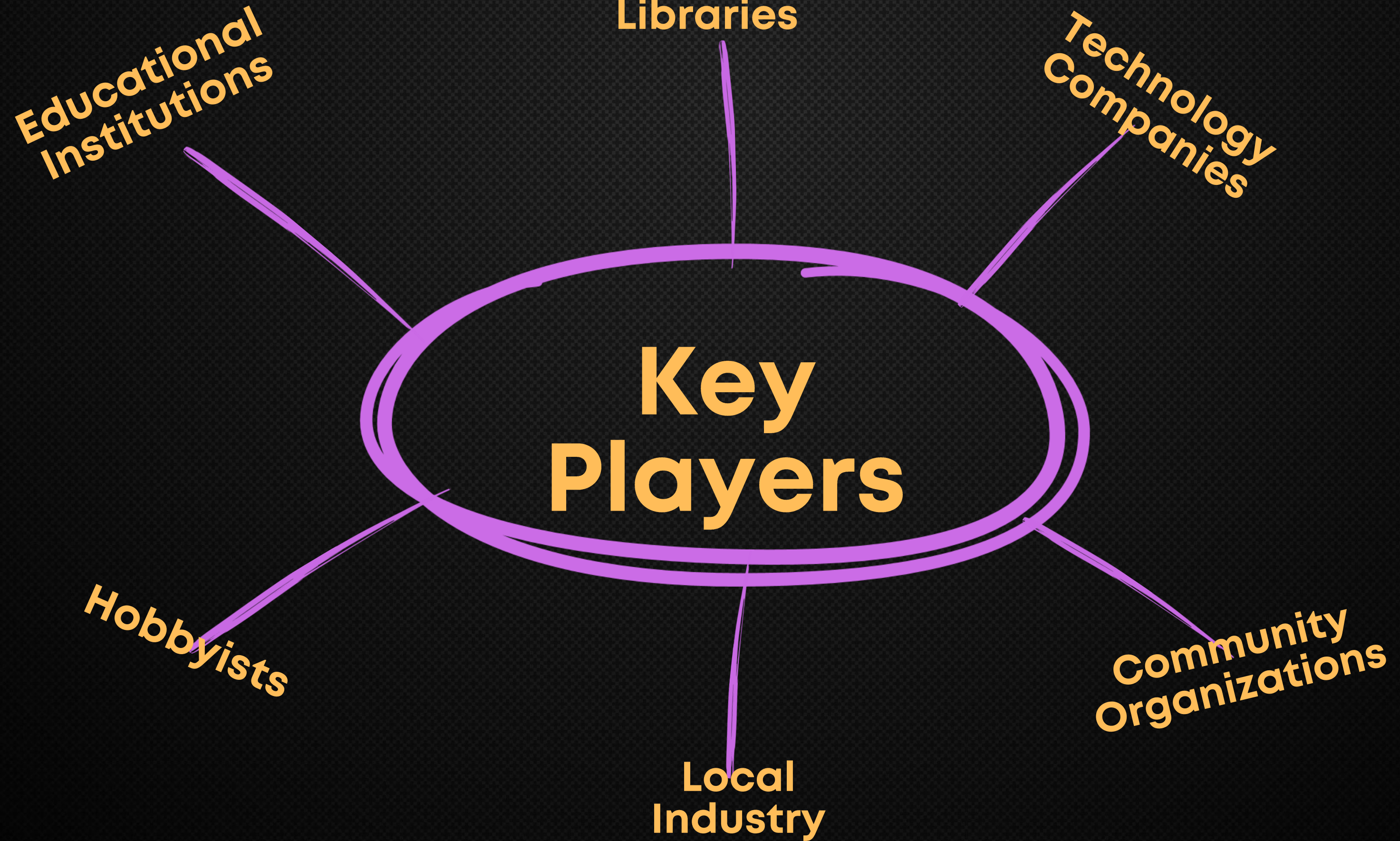
**Technology
Companies**

**Key
Players**

Hobbyists

**Community
Organizations**

**Local
Industry**



Closing Workforce Gaps & Driving Revenue

- **Training & Workshops:** Hands-on training sessions
- **Community & Collaboration:** Facilitating networking & collaboration
- **Education:** Enhancing learning for area schools
- **Industry:** Utilizing makerspaces for R&D & Product Development
- **Government/Non-Profit:** Community development and technological outreach
- **Woodworking & Metalworking:** Traditional Crafts being revived
- **Electronics & Robotics:** Driving Innovation and Technical Skill

Know Your Story, Share it Boldly

NEWS

Northeast iHub project poised to become a cornerstone for manufacturing, and agriculture Norfolk

Norfolk's new iHub project is set to revolutionize the local workforce landscape.

Friday, December 20th 2024, 12:34 PM CST

Updated: Friday, December 20th 2024, 1:29 PM CST

By Hanky G. Hazelton



Own Your Value

Radiate Confidence

Speak Everywhere

Tell it Boldly

Align Your Team



iHub Key Talking Points

Introductory Paragraph(s) on the project as a whole – high level

The iHub is an 18,000+ square-foot, state-of-the-art workforce development and community fabrication facility located in the heart of downtown Norfolk, Nebraska. Designed to be a cornerstone of lifelong learning, innovation, and collaboration, the iHub is equipped with cutting-edge labs for industrial automation, electromechanical, robotics, prototyping, and both wood and metalworking. This facility, the staff, and the equipment that it houses will empower learners as young as kindergarten to adulthood, to gain industry-recognized credentials, explore diverse career pathways, and engage in hands-on STEAM education.

The iHub is not just a static facility; it's a versatile and mobile resource serving a 20-county region. By offering portable equipment and adaptable programming, we ensure that the transformative power of technology, robotics education, and workforce development is accessible to communities across our entire region. From youth robotics practice spaces and STEM camps to adult upskilling and professional development, the iHub is a launch pad where education meets real-world application, community engagement flourishes, and a new generation of innovators and skilled professionals are nurtured. Whether on-site in our state-of-the-art facility or through outreach to remote areas, the iHub Project is committed to creating a dynamic environment where learners, makers, and professionals can thrive together and shape the future of our region.

Diving into the Details

- The iHub will have 3 Full Time Staff
 - Director of iHub – Erin Sorensen
 - Robotics Trainer – Henry Goeden
 - Manufacturing Trainer – Brandon Sohl
- Outreach Numbers – *Annual Projected Numbers*
 - Youth Robotics (Competitive Teams and Supporters) – 375
 - Youth Robotics (Camps and Programming) – 200
 - Member Fabrication space annually (Includes Week Pass and Month to Month Members) – 500
 - Workforce Training – 200
- Offering Non-Credit Credentials in Robotics – By end of 2025
- Offering Non-Credit Credentials and upskilling for incumbent workers in electromechanical operations (Once Manufacturing trainer is hired – targeting before EOY)
- Youth Robotics, Industrial Automation, and Electromechanical equipment is portable offering flexible upskilling, credentials, and camps/activities
- Industrial Automation – Skills Offering (Doesn't include all)
 - Industry 4.0
 - Robot System Operations & Integration |

Nebraska Manufacturing Facts & Figures

- 2.6% Unemployment Rate (July 2024)
- Manufacturing accounts for 10.3% of the state's workforce (Nebraska.gov)
- 1,595 Open Jobs in Manufacturing in the state (Nebraska.gov)
- Northeast Nebraska is the second largest development region for MFG behind Metro with 387 employees.
- Manufacturing is responsible for 11.81% of total GDP in the state of Nebraska (Nam.org)
- In the state of Nebraska, there were 513 STEM Community College Graduates compared to 88,274 nationwide. (2021 National Center for Education Statistics, IPEDS)

Know Your Community Partners

Chamber Economic Development

Speak with your local chamber or economic development team about your goals. They can help connect you with partners and opportunities

Local Non Profits

Kiwanis, Rotary Club, Young Professionals groups, Community Theatre, Lions Club, Arts Centers, Legion, etc.

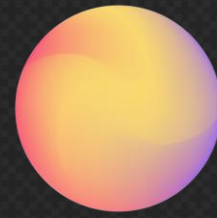
Schools Libraries

Partner with similar organizations. Utilize each others strengths and resources help facilitate growth and cross-pollination

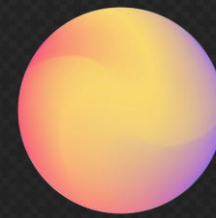
Industry Groups

Your local Chamber can help connect you. Many regions have industry groups that meet monthly or quarterly.

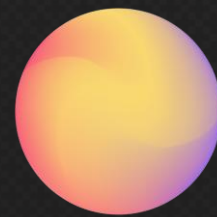
Partnerships Drive Growth



Partnering with post-secondary education, libraries, afterschool programs, high schools, clubs, camps, etc. Allow you to cast a wide net, expand programming, and showcase community commitment.



Volunteer at local events to show community support and build your network. Chamber events, Community parades, local school competitions, etc.



Meet with local business and industry ask questions and listen. Learn where they are experiencing pain points - how can you help?



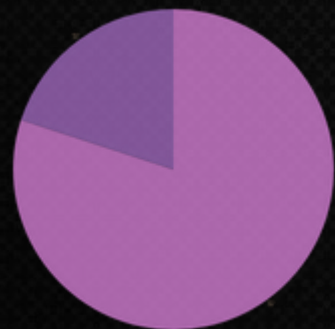
Private Donors

Investing in your success and future growth.



Sponsorships

Support Programming or Future Growth



Grants: Local, State, Federal

Stronger with other local partners than sole applications

Funding Opportunities

Now that you understand your community, it's people, and the needs within the community and you pair that with your knowledge and confidence in your facility it is time to identify funding opportunities current and future.

Steps to Growth & Funding

What are your next steps and goals? How to find sustainable sources of funding starts long before the ask or application.

Know Your
Story

STEP 1

Believe in
Your Story

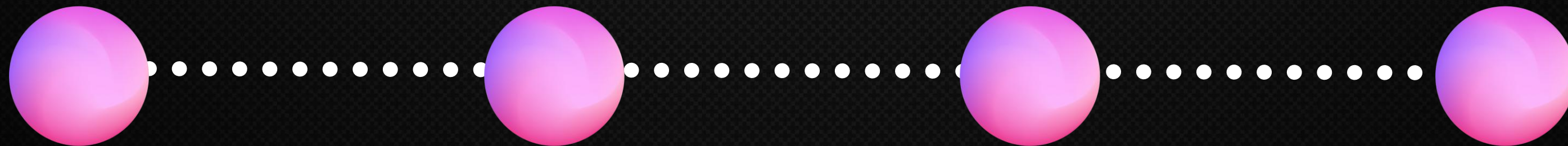
STEP 2

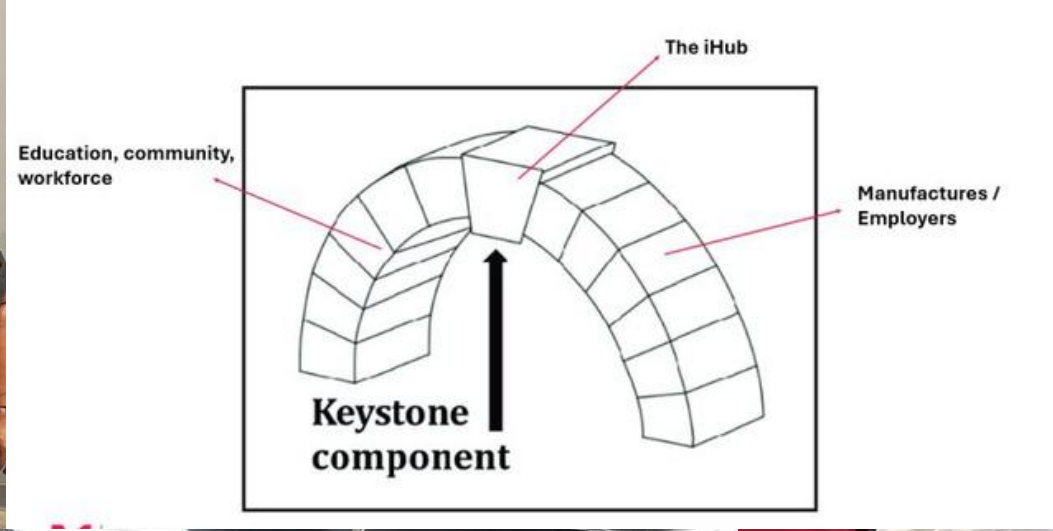
Know Your
Community

STEP 3

Partner in Your
Community

STEP 4





HEARTLAND ROBOTICS CLUSTER
DAN HOFFMAN, ERIN SHARPE, SANTOSH PITLA

CITY OF LINCOLN
KATE BURNS, NANDITHA MENON, NATHAN MEIER

EDUCATION, COMMUNITY, WORKFORCE

THE I HUB

INDUSTRY PARTNERS

WHY DO YOU DO RESEARCH?
ARE YOU ASKING THE "RIGHT" QUESTIONS?
AND ADAPTING?

WE HELP PEOPLE GET TO YES

ACTION

EVIDENCE-BASED POLICY MAKING

THE BRIDGE TO ANSWERS IS NOT ALWAYS OBVIOUS

COMMUNITY MEMBERS, CITY, AND UNL COMING TOGETHER TO CITE PRIORITIES

IT'S LIKE YMCA FOR STEM KIDS

WE ASKED ABOUT ROLES, CAPABILITIES, POLICIES

WE WORKED THROUGH HARD QUESTIONS TO GET TO TRUTHS

OUR FOCUSES:
WORKFORCE DEVELOPMENT
PARTNERSHIPS
IDENTIFYING AN ECOSYSTEM

CONTINUE BUILDING UP OUR INDUSTRY AND TALENT

NEXT STEPS:
ASKING YOU HOW YOU CAN SAY YES!
WHO ELSE CAN YOU BRING ALONG?

FINALIST IN BUILD BACK BETTER INNOVATION CHALLENGE



What You Do Matters

- **Kids learn to ask questions, create, solve, and build confidence**
- **You impact lives by making people believe in themselves**
- **You drive your local economy by create a safe and nurturing environment to learn and innovate**
- **You Provide kids with the belief that they can be something more**
- **You are a cornerstone of Economic Growth and Community**

Thank You

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