

Economic Development Update

Economic Development Appropriations



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Today's Presentation

- Business & Community Services Overview
- Additive Manufacturing – 3D Printing
- Advance Iowa
- Entrepreneurship – MyEntre.Net
- Local Economic Development
- Grow Iowa Values Fund Updates



Business and Community Services

13 Programs That Support:

- Businesses & Entrepreneurs
- Communities & Regions
- Environment & Sustainability



UNI Economic Development Outcomes

Economic Development Contributions — 2014

- Nearly 1,950 businesses served
- Active projects in all 99 counties
- 250 faculty and 1,900 students participated
- Each State dollar invested leveraged nearly \$5 in federal, grants, or private sources

Additive Manufacturing

- Operated under the direction of the UNI Metal Casting Center
- Largest printable area available in any 3D printer in North America and can produce molds for virtually any metal alloy



Additive Manufacturing

- Located off Campus at the Cedar Valley TechWorks
- Provides a solid starting point for the Iowa Advanced Manufacturing Center
- Partnering with Hawkeye Community College, workforce development
- Public-private partnership development
- First floor expansion planned for March 2015



Additive Manufacturing

- Providing support to Iowa Manufacturers including:
 - Deere & Company – Provided over 576 cores for a new tractor build program. Have been involved in every major build program since Aug 2014
 - Wellman Dynamics Fansteel – Creston – Providing cores from 3D scanning and reverse engineering
 - Emerson Process Control – Marshalltown – Assisted in equipment capabilities demonstration. Opportunity for \$30 million in reshoring of casting purchased overseas.
 - Vermeer Manufacturing, Pella – Experimental Wear Plates in composite castings.



Additive Manufacturing

- Providing support to Iowa Manufacturers including:
 - Sivyer Steel – Bettendorf
 - Locomotive Diesel engine cylinder head cores, heavy equipment track and pinion components.
 - Progressive Foundry – Webster City
 - American Pattern Company – Cedar Falls



Additive Manufacturing

- Providing support to Regional Manufacturers including:
 - Rock Island Arsenal
 - Working on collaborative engineering of steel castings. Future collaboration will include interaction of underutilized titanium casting furnace.
 - Eck Industries – Space X rocket engine components, fuel distribution system for jet engines
 - Caterpillar – Large prototype EMD castings that accelerated development and testing cycle.
 - Developmental casting for Hornady, automotive engine exhaust manifold



Research Accomplishments

- Developed domestic sources for resins and aggregates for 3D sand mold printing. This reduces cost of 3D sand printing by 30%.
- Developed specialty sand blends for printing
- Developed methodology for utilizing engineered sand additives for printing
- Developed fast printing methodologies to reduce printing times by 40%



Expanding Additive Manufacturing Technologies

Making Iowa a Technology Leader

- Building on similar sustainable technology model as currently being used in Sand Mold Printing
- Ability to provide advanced technology solutions and prototypes to almost any manufacturing company in Iowa
- Ability to integrate alloys, materials and expertise that are "Iowa Home Grown"
- Ability to attract additional funding through leveraging of advanced technology resources
- Continued sustainability for UNI, IIC and TechWorks through IAMC

Direct Metal Printing

- Direct Metal Laser Sintering
- Accurate metal parts
- No post processing required
- Can use almost any metal alloy
- Cost effective



Printing in Plastics

- Fused Deposition Modeling
 - Accurate with moderate surface finish
- MultiJet DLP Modeling
 - Accurate with superior surface finish
- Prototypes





Iowa Advanced Manufacturing Center Phase I

- Building a Nationally Recognized Center
 - Additional sand-cast printer
 - Direct metal laser sintering
 - DLP to replace lost wax casting
 - M-flex printer
 - Fused deposition printing
 - Advanced design center with Hawkeye Community College
 - Mold router
 - Private sector role
 - Expand client base



Developing Business Leaders, Delivering Marketplace Intelligence

Paul Kinghorn, UNI-Advance Iowa

Dan Beenken, UNI-Advance Iowa

Customer Needs

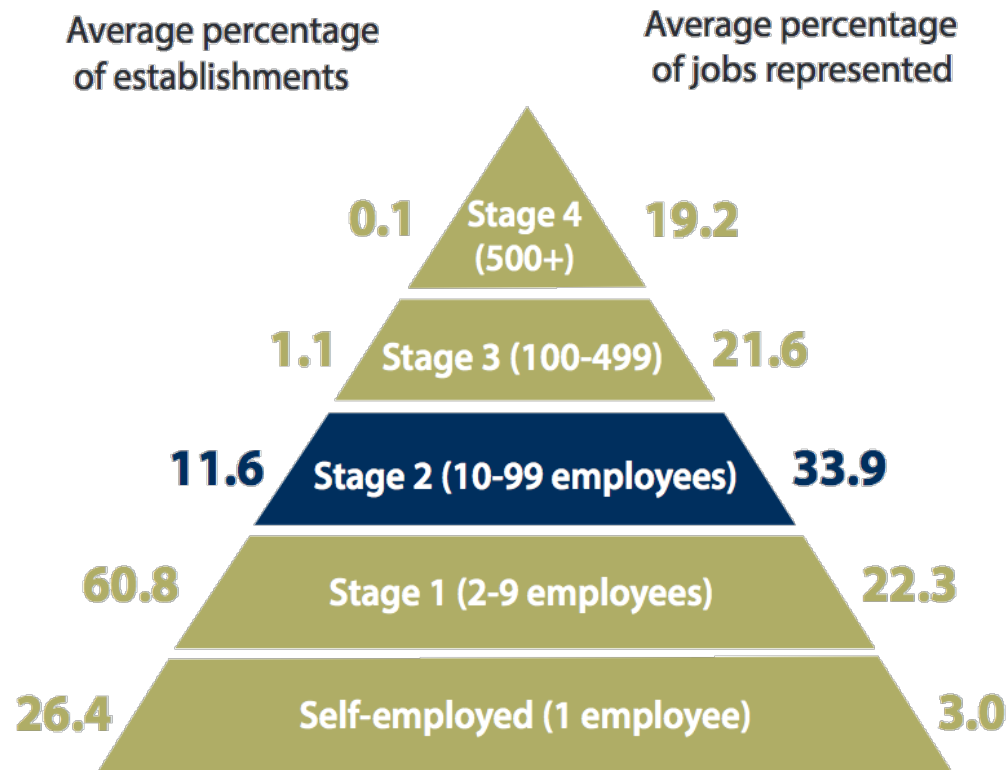
- Strategic planning
- Access to peer experiences
- Data driven decision making ie., financial
- Succession planning, family owned planning
- One-on-one coaching
- Accountability



Second Stage Companies

Iowa's Statewide Consulting Program focused on
Stage II businesses

United States 1995-2012



What We Offer

- Strategic needs assessment
- Financial benchmarking
- Market intelligence/Economic Gardening
- Peer-to-peer roundtables
- Coaching and consulting
- Succession planning





Financial Scorecard

This is an example of what a business owner would be shown.

The Scorecard allows a company to see where they are sitting compared to others in a similar industry.

<div> <div> <div>University of Northern Iowa</div> <div>Business Center Entrepreneurship Outreach</div> <div>ADVANCE IOWA</div> </div> <div> <div>Financial Health Screening Comparison to Industry NAICS 99999</div> <div>Company Name: ABC Company</div> </div> </div>									
	Like Biz	Industry	Value	Category	Current Results	2014	2013	2012	2011
Profit & Loss									
Growth%	0.5%	4.1%	>10%	Optimal	Optimal	✓ 27%	✓ 11%	✓ 98%	✓ 10%
			0-10%	Average					
			<0%	At Risk					
Cost of Goods %	68%	75%	<60% of sales	Optimal	At Risk	✗ 84%	✗ 79%	✗ 87%	✓ 72%
			60-75% of sales	Average					
			>75% of sales	At Risk					



Partners



Our Team



Dan Wubbena
North Western Iowa
Sales/Marketing



Dan Beenken
Statewide
Finance/Strategy



Joe Papp
North East Iowa
*Manufacturing/
Operations*



Phil Akin
North Central Iowa
*Marketing/Leadership
Development*



Anna Jensen
South Eastern Iowa
IT/Operations



Paul Kinghorn
Statewide
*Strategy/Leadership
Development*



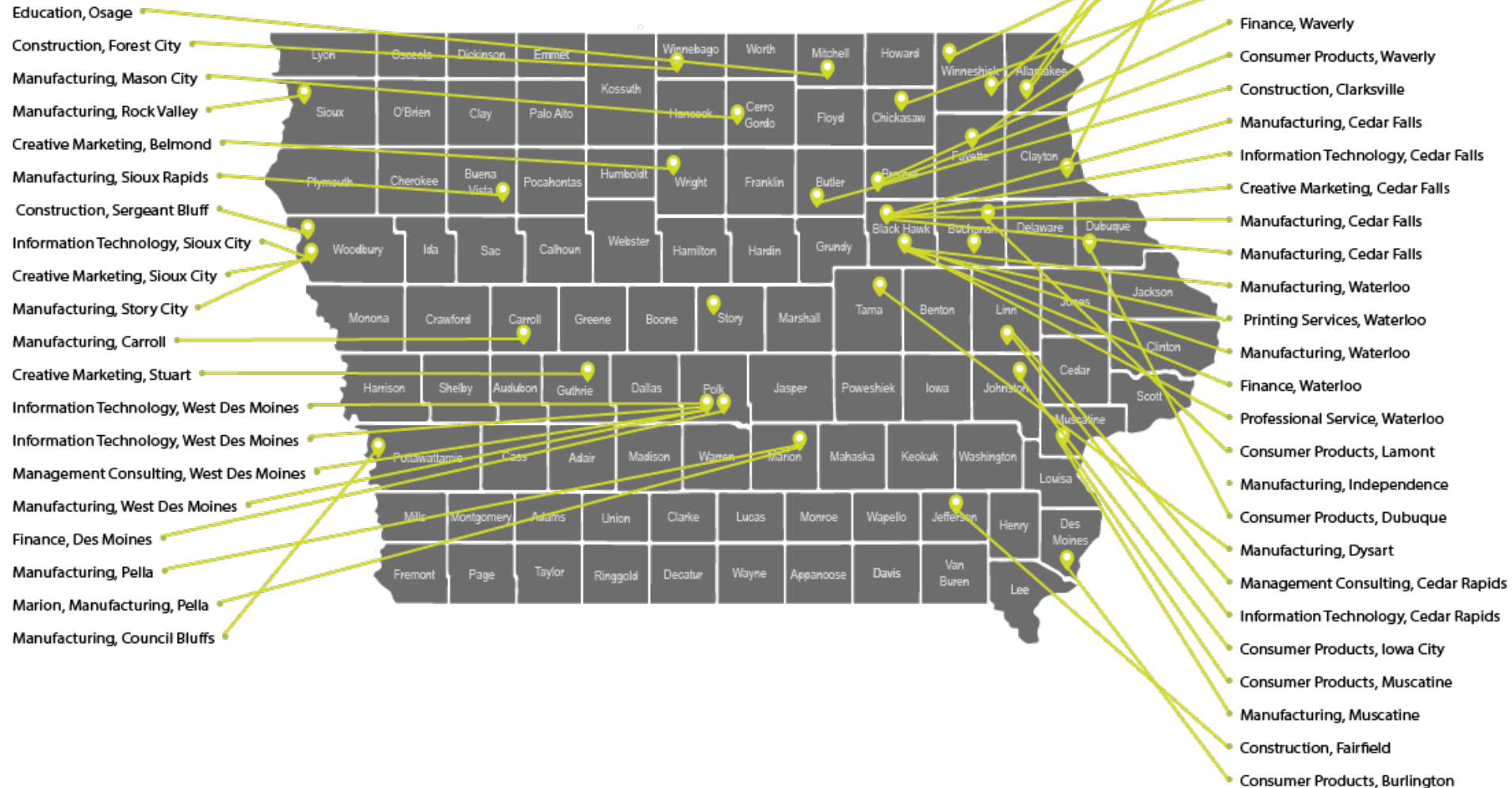
Scott Bailey
South Central Iowa
*Finance/Business
Development*



Taylor King
Statewide
Market Intelligence

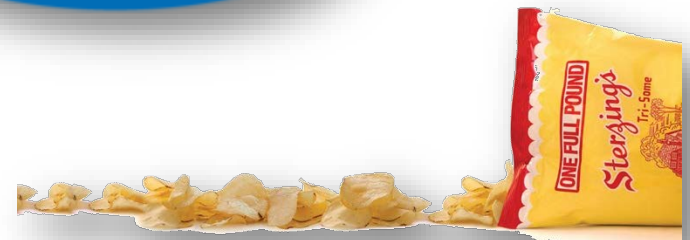


Client Project Map



Economic Impact

- 51 actively engaged clients
- 90 new jobs created
- Projects in 31 counties
- 9 industry sectors served
- Battelle support



Rada Manufacturing – Case Study

Dan Kielman – VP of Marketing & Development

- Based in Waverly, Iowa
- Makers of cutlery – sold over 140 million knives worldwide
- Focused on the fundraising market
- Assistance:
 - Online presence
 - Client segmentation/prospect identification

Supporting Entrepreneur Growth



Directed Services (micro)

- Technical and operational assistance
- Business intelligence
- Coaching/counseling
- Business incubation



Developmental Support (macro)

- Networking
- Culture/community building
- Information dissemination
- Resource connectivity





BusinessConcierge

- 1002 Iowa small businesses served (850 Unique Users)
- Last impact survey (2011-13)
 - \$694K Sales increase
 - \$657K Capital infusion
 - 66 new employees/contractors



- Access to early-stage seed funding
- 100% statewide coverage
- Industry/Sector concentration
- 779 total business entrants (Since Inception)



- 363 resource partners in database
- 38,486 users (70% were new in 2014)
- 83% users were Iowans
- 4 minute average session duration
- 3,420 direct contacts
- 657 events in statewide calendar
- 11,950 total newsletter recipients



Local and Regional Economic Development

Institute for Decision Making



Institute for Decision Making | University of Northern Iowa

- Hands-on assistance for local development groups for 25 years
- 45 partners and 700 communities served
- Provides important economic development services

Institute for Decision Making Projects

Economic Development Planning – Visioning

- Oskaloosa/Mahaska County
- Tipton
- Crawford County
- Adel
- Sumner



Workforce – laborsheds, asset mapping, regional workforce plans, Skilled Iowa, Home Base Iowa

Targeting & Marketing – expanding economic base

- Charles City, Marshalltown
- LOIS - IEDA

Entrepreneurial Regions

- EDA University Center
 - Region I – Adair, Audubon, Greene, Guthrie Counties
 - Region II – Hamilton, Wright Counties
 - Region III – Monona, Plymouth, Woodbury Counties



Regents Innovation Fund

Four Projects at UNI:

- Entrepreneurship and apps Lab
- Tech transfer and business incubation
- Regional development
- Market research – Market Solve

Thank you.

For more information, please visit

www.bcs.uni.edu



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