Economic Development Update
Economic Development Appropriations

University of Northern Iowa

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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
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
  - 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
• 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 i.e., financial
- Succession planning, family owned planning
- One-on-one coaching
- Accountability
Iowa’s Statewide Consulting Program focused on Stage II businesses

United States 1995-2012

Average percentage of establishments

- Self-employed (1 employee): 26.4
- Stage 1 (2-9 employees): 60.8
- Stage 2 (10-99 employees): 11.6
- Stage 3 (100-499): 1.1
- Stage 4 (500+): 0.1

Average percentage of jobs represented

- Self-employed (1 employee): 3.0
- Stage 1 (2-9 employees): 22.3
- Stage 2 (10-99 employees): 33.9
- Stage 3 (100-499): 21.6
- Stage 4 (500+): 19.2

Source: Edward Lowe Foundation
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.

### Financial Health Screening Comparison to Industry NAICS 99999

<table>
<thead>
<tr>
<th>Company Name: ABC Company</th>
<th>Like Biz</th>
<th>Industry</th>
<th>Value</th>
<th>Category</th>
<th>Current Results</th>
<th>2014</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
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<tr>
<td><strong>&amp; Loss</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Growth%</td>
<td>0.5%</td>
<td>4.1%</td>
<td>&gt;10%</td>
<td>Optimal</td>
<td>Optimal</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>0-10%</td>
<td>Average</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>&lt;0%</td>
<td>At Risk</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Goods %</td>
<td>68%</td>
<td>75%</td>
<td>&lt;60% of sales</td>
<td>Optimal</td>
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<tr>
<td></td>
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<td>60-75% of sales</td>
<td>Average</td>
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<td>&gt;75% of sales</td>
<td>At Risk</td>
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</tr>
</tbody>
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[Table and chart from the University of Northern Iowa]
Our Team

Dan Wubbena
North Western Iowa
Sales/Marketing

Joe Papp
North East Iowa
Manufacturing/Operations

Dan Beenken
Statewide
Finance/Strategy

Phil Akin
North Central Iowa
Marketing/Leadership Development

Anna Jensen
South Eastern Iowa
IT/Operations

Scott Bailey
South Central Iowa
Finance/Business Development

Taylor King
Statewide
Market Intelligence

Paul Kinghorn
Statewide
Strategy/Leadership Development

Paul Kinghorn
Statewide
Strategy/Leadership Development
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
Business Concierge

- 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)

$694K Sales increase
$657K Capital infusion
66 new employees/contractors
• 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

- 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
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