The Rural Innovation Network Model
A collaborative approach to commercialization
Outline

• Background Research
• Findings
• The Rural Innovation Network Model
• RIN Model Application
The Problem:

- The information needed to support and spur innovation exists, but in disjointed venues within the region’s collective knowledge.
- We have valuable assets in MN, but they aren’t necessarily aligned.
- Clusters are hard to develop in geographically disperse locations.
Contributing Research

- Mega Communities
- Value Chains
- Wealth Creation Concepts
- Network Theory
- Systems Thinking
- Asset Mapping & Asset Based Thinking
- Approaches to Managing Innovation
- Characteristics of Entrepreneurs
Background

Expert Advisors

- Public Sector
- Private Sector
- Nonprofit Sector
- Academia
AURI’s Experience Includes

- 20-plus years of experience delivering scientific and technical assistance to the ag processing industry
- Work with hundreds of entrepreneurs and small to medium sized businesses to develop new products or processing in the food, renewable energy, biobased or co-product industries.
- A strong tie to rural communities throughout Minnesota with offices, staff, laboratories and pilot labs located in rural areas
- Partnerships with industry that ensure research and services are aligned with industry need
Drawing on our RESEARCH, insights from ADVISORS, and our organization’s EXPERIENCE, we found...
Rural Communities

- Are less dense & have fewer actors that are less likely to run into one another.
- Need more than just money and jobs in order to generate wealth.
- Need to be uniquely positioned to reduce out-migration.
- Are asset-rich: natural resources, agriculture, cost of living, etc.
Findings

Rural Entrepreneurs and Businesses

• Are more likely to keep wealth in their communities, which means less need for costly incentives, more community ownership opportunities, and more community engagement.

• Do not have procedures in place to generate and select new ideas, nor bring them to the market.

• Lack globally competitive research and development capabilities.
Strong Networks

- Are THE MOST IMPORTANT tool in an entrepreneur’s toolbox.
- Share a vision.
- Need actors representing the entire value chain – from idea to commercialization.
- Require a participant driven strategy.
- Are built on a foundation of trust and engagement.
- Can be “communities of practice” which foster “relational” clusters not confined by a geographical or spatial proximity.
Innovation

- Innovation is like physics: increase the number of actors/particles, increase the pressure, decrease the space...the more likely the actors/particles are to run into one another and make something happen....

- Innovation = Idea + Implementation

  - Innovation only occurs when an idea is implemented.
Innovation must be managed!
With these findings, AURI set-out to refine its approach to delivering services.
The RIN Model provides a systematic method to generate, select, and implement innovation. The network manages innovation to support economic development beginning with research and technology.
The Rural Innovation Network Model

What defines an Industry Thought Leader?

• Extensive knowledge in a field
• Well connected and respected within the industry
• Supportive of the work of the network and willing to dedicate time and energy to help it succeed
• Able to advise on trends in the industry
• Willing to provide feedback on research

What is required?

• Attend 1-2 meetings a year
• Review pertinent research
• Advise organizers on trends or hot topics
• Serve as a technical resource for the network
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What defines a Network Enabler?

- Commissioners, Academic Leaders, Foundation Trustees, Presidents
- Able to dedicate resources and staff
- Have broad view of the MN assets and resources
- Familiar with the industry sector of focus

What is Required?

- Dedicate staff and organization resources
- Provide connections with other top officials
- Be engaged – through email, phone calls, occasional meetings
- Attend one meeting or networking event a year

A Well-Connected Group of Actors Interested in Supporting the Needs of the Network
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### What defines a Team Leader?
- **Appointed by a Network Enabler**
- Has the ability to move forward with action plans originating from the Network
- Has expertise in the area he/she will lead
- Has an interest in industry sector
- Has a willingness to partner with others
- Propensity for action

### What is Required?
- Provide leadership/direction to the team
- Provide appropriate connections for action plans and encourage participation and collaboration among institutions
- Work with AURI staff and to arrange meetings, follow-up with participants, and develop projects
- Attend 2-3 Roundtable events and 3-5 Retreats throughout the year.

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**Dedicated Individuals Willing to Provide Hands-On Leadership for their Respective Action Teams**

**Action Team Leaders**
The Rural Innovation Network

Members:
- Industry
- Economic Developers
- Business Resource Professionals
- Researchers
- Political Leaders
- Investors/Bankers
- Others

Diverse group of engaged and knowledgeable professionals who collectively representing the entire value chain.
PESTEL Analysis

• Includes:
  – Political
  – Economic
  – Social
  – Technical
  – Environmental
  – Legal

• As part of the RIN:
  – has an industry-wide focus
  – Is used to Generate Ideas for innovations
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SWOC Review

- Includes
  - Strength
  - Weaknesses
  - Opportunities
  - Challenges

- As part of the RIN
  - Generates Ideas for innovations
  - identifies assets and areas where capacity should be built
Gather Input:

- **Stakeholders**
  - What challenges are you facing and what opportunities would you like to realize? How can we help?

- **Industry Thought Leaders**
  - What research is needed? What does this research mean for the industry?

- **Network Enablers**
  - Who are the players in the system and how do we engage them?

- **Team Leaders**
  - What can we do collectively to address opportunities for the industry? How can we move this research to commercialization?
Industry Driven Research

- Generates ideas for businesses, entrepreneurs, and industry leaders that lead to innovations and informs idea selection
- Focuses on near-term, implementable technologies or advancements that are likely to create economic impact
- Addresses specific needs or opportunities for an industry
- Seeks industry input throughout the research process to ensure end product meets industry need and is implementable
- Often involves an industry partner(s) investing in the research or evaluation of the technology
Roundtable events

• Characteristics
  – Supports members as they seek to select ideas to advance their businesses, organizations and industry
  – Creates shared vision and systems thinking
  – Advances the industry through collaboration
  – Draws on the insight, knowledge, resources and leadership of members
  – Implements short- and long-term strategic action

• Structure
  – Plenary sessions focused on research, overarching policy, or professional development that impacts the entire community,
  – Breakout sessions for Action Teams
  – Each Action Team represents a fundamental building block for the industry: Research, Talent Development, Infrastructure, Policy, Finance, etc.
  – Lead by the Action Team Leaders
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Industry Specific Forums

• Characteristics
  – Supports businesses as they seek to *select ideas* to advance their business
  – Disseminates research on emerging opportunities and are often focused on new technology
  – Targets a specific set of entrepreneurs and businesses
  – Accommodates industry participation (time of year/day, length of meeting, location, etc)
  – Focuses on implementable take-home strategies

• Structure
  – Research and/or technology is presented to a group of 10-20 business or entrepreneurs. This presentation is often fairly technical in nature and participants are typically well versed in the area of the research.
  – Facilitated conversation develops business specific action-plans intended to drive implementation
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**Action Planning**

- Is the bridge between *idea selection* and *implementation*
- Moves research from the general to the specific business (organization) application
- Answers the questions:
  - How does this information change day to day business?
  - How do I incorporate this new knowledge into my business?
  - What questions do I still need answered?
  - Who can help me address those questions?
  - What resources do I need?
  - How do I obtain those resources?
  - Who should be on my team from inside and outside my business? Are they in the room today?
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Hands-on Technical Assistance and R&D Services

- Characteristics
  - Focused on **Implementation** and overcoming the challenges of developing new products or processes
  - Geared toward providing proof of concept, technical feasibility, process or product formulation, etc
  - Answers the questions of **IF** and **SHOULD** it be done
  - Allows for informed decision making that mitigates risk and increases likelihood of accessing capital
  - Business-centric
  - Confidential
  - Take a holistic approach
Targeted Matchmaking

• Characteristics
  – Focused on *implementation* and overcoming the challenges of developing new ventures
  – Business focused
  – Holistic and coordinated approach

• Structure
  – Business Resource Professionals in the RIN work with businesses and Action Plans to identify the needs of the business (from business plan development, to employee training questions, to product formulation)
  – Business Resource Professionals work collectively to address the businesses needs through each organization’s programs and service models
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Evaluation

• Structure
  – Independent evaluator evaluates the overall program
  – RIN member surveys
  – Stakeholder check-in meetings

• Characteristics
  – Attempts to quantify the value captured as part of the implementation of innovations
  – Measures:
    • Wealth Creation and Retention
    • Innovations Implemented
    • Commodity Utilization
    • Job Creation and Retention

Diagram:
- Independent Evaluator
- Stakeholders
- Evaluation of Outcomes
  - Wealth Created & Retained
  - Innovations Implemented
  - Jobs Created & Retained
  - Increased Commodity Usage
AURI is applying the Rural Innovation Network to Minnesota’s
• Renewable Energy Industry
• Biobased Products Industry
• Food Processing Industry
• Co-Product Utilization Industry

However…
The RIN Model can be applied to any community looking to:

- Spur and **IMPLEMENT** innovation
- Align resources and realize efficiencies
- Foster collaboration and systems thinking
- Create and retain wealth
The RIN Model provides a systematic method to generate, select, and implement innovation. The network manages innovation to support economic development beginning with research and technology.


EDA's Know Your Region; A Template for Future Prosperity; created by Western Carolina University. www.knowyourregion.org


Measuring Regional Innovation, A Guidebook for Conducting Regional Innovation Assessments, Prepared for the U.S. Dept of Commerce, EDA by the Council on Competitiveness


Senge, P. M. (2008). The necessary revolution : How individuals and organizations are working together to create a sustainable world.. New York: Doubleday.

