

Manufacturer-University Alliances: The New Product Development Center (NPDC) at OSU

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Session Outline

- **Panel Introductions**
- **Session Goals**
- **Model of University Industry Bidirectional Technology Transfer**
- **Screening Projects and Companies for NPDC Assistance—Kay Watson, Joe Genet**
- **What NPDC Does**
- **Beyond the Development Stage—Doug Enns, Mike Proctor**
- **Discussion/Questions**

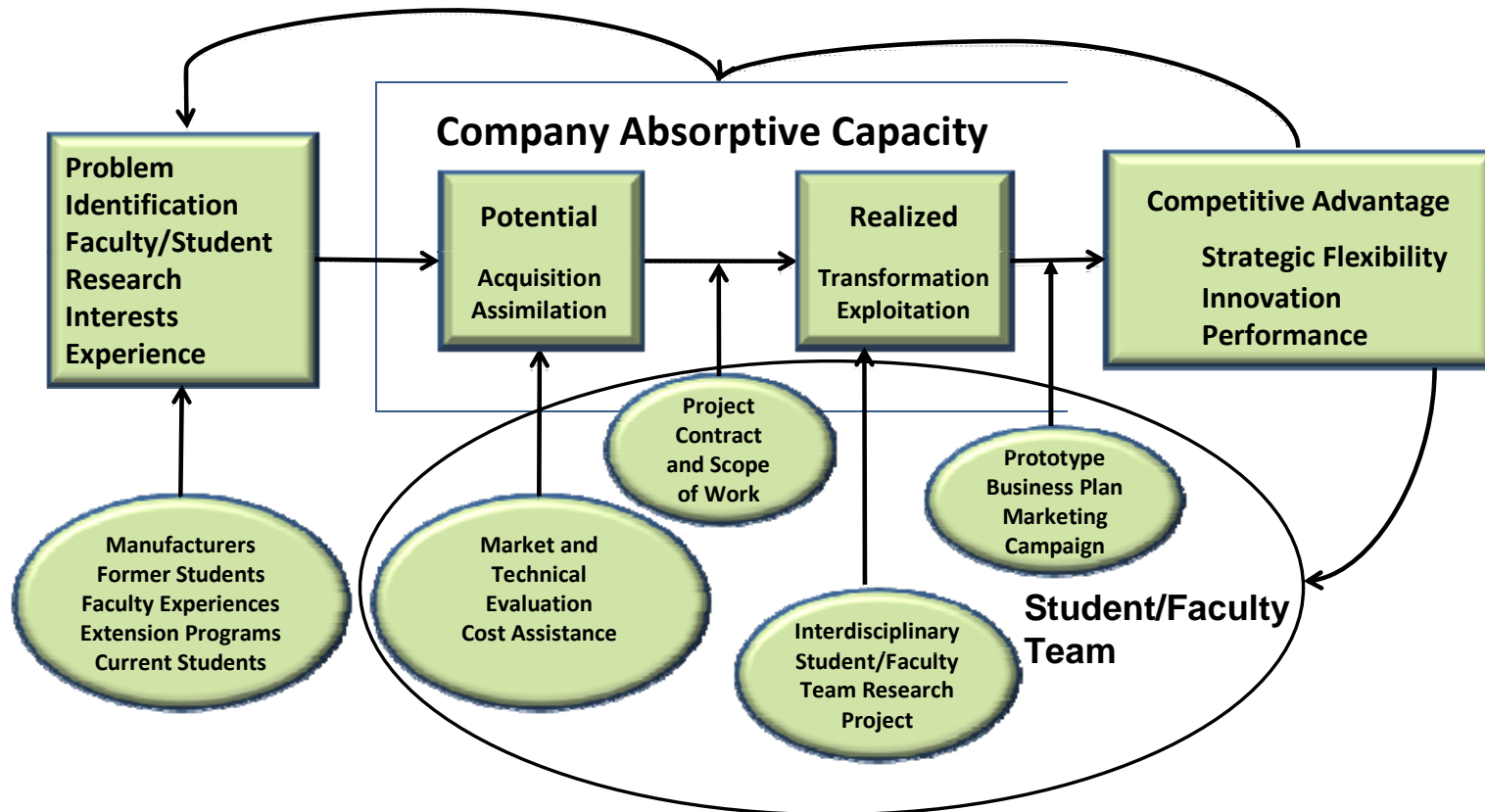
Session Goal

- **Help session participants understand what the New Product Development Center does**
- **Describe how best to work with the New Product Development Center**

The OSU New Product Development Center: Role and Scope

- **The NPDC helps take Oklahoma manufacturers' and inventors' unique, new ideas from concepts to manufactured goods**
 - **OSU Applications Engineers, Manufacturing Extension Agents and NPDC staff screen/identify projects**
 - **Identify and form university-based, multidisciplinary faculty/student project teams**
 - **Provide business analysis and communications implementation assistance**
 - **Provide grant writing assistance to leverage base NPDC funding**

Figure 1.
Increasing Agribusiness Manufacturers' Potential and
Realized Absorptive Capacity With Student/Faculty
Senior Design/Capstone Projects



Source: Tilley, et al., 2009, Using Student/Faculty Projects to Increase the Potential and Realized Innovation Capacity of Small- and Medium-Sized Manufacturers, in review.

Screening Projects

- **Customer need is identified**
- **Competitor has a new product**
- **Opportunity to apply new technology**
- **Need for a new possibly cost-saving manufacturing process**
- **Top line growth has been stagnant**
- **Diversification is desirable**
- **Competitor has cease to exist**

Screening Companies

- **Open to innovation**
- **Need to revitalize their product line**
- **Financially sound**
- **Capacity for product line expansion**
- **Potential to sustain a competitive advantage**

When is the NPDC the correct service provider?

- **Resources are limited**
 - **Engineering, business, communications talent**
 - **Financial limitations**
 - **Time**
- **Client companies are open to interaction with the faculty/student teams**
- **Good match between the problem and faculty/student resources**
- **Length of project and time deadlines are flexible**
- **Funding agencies have compatible interests**
- **Intellectual property may need to be protected/defended**

Types of NPDC Projects

- **New Product/Process Development** – Design, build, test, and deliver (under licensing agreements) working prototypes to manufacturers or inventors
- **Business Analysis** – Analyze and report the business case for new products/processes.
- **Marketing Communications** – Design and deliver electronic and hard copy files of marketing materials to small manufacturer or inventor
- **SBIR and other grant writing support** – Proposal writing, marketing and business plan development, subcontract support

Issues Beyond the Prototype

- Making the product producible
- Testing
- Redesign
- Meeting customers specifications
- Implementation issues
 - Developing and managing a marketing campaign
 - Expanding production capacity

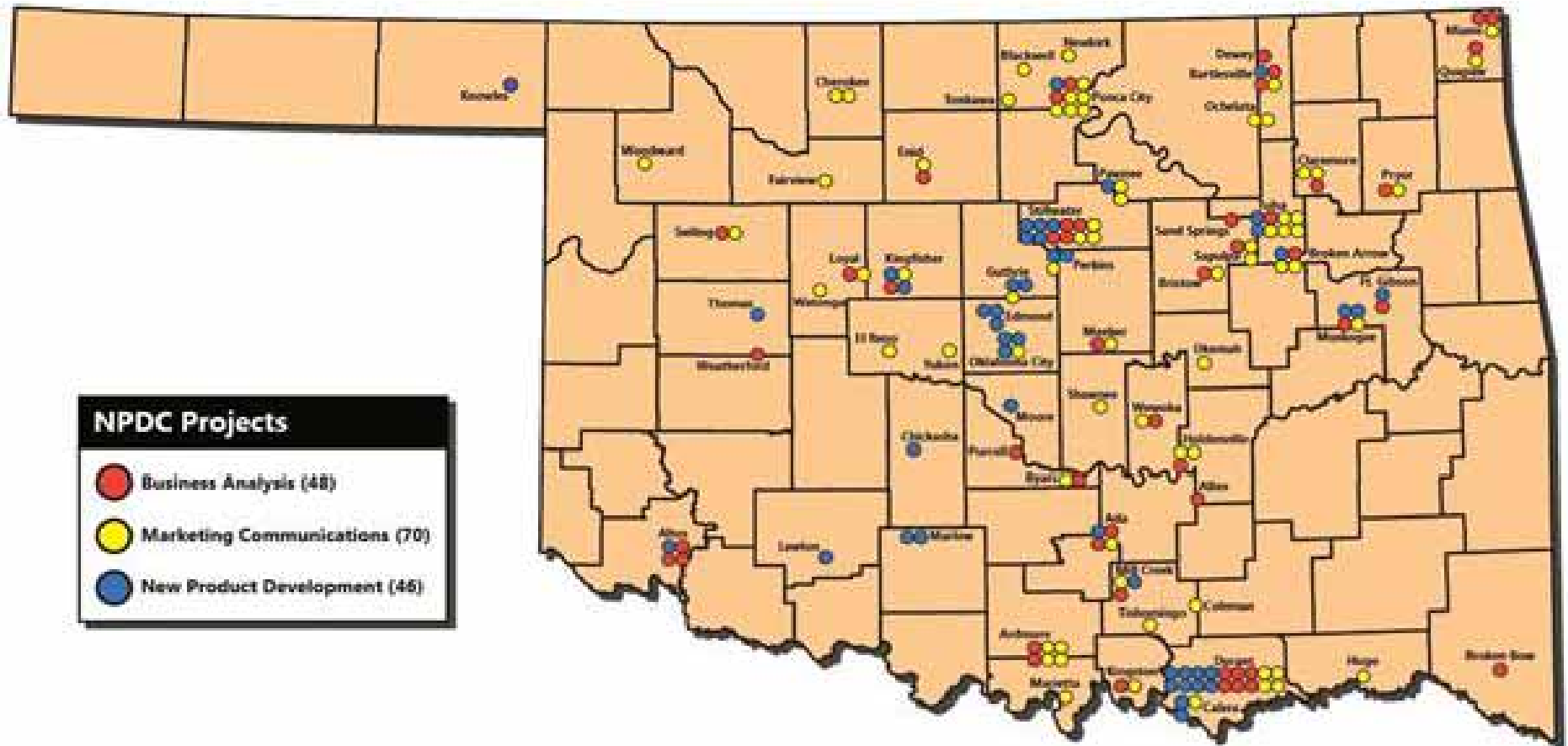


Impact Measurement

- **Measured by Manufacturing Extension Agent Survey which are spot checked by National Institute of Standards and Technology**
 - **Cost Savings**
 - **Revenue Gains**
 - **Jobs created or saved**
 - **\$20 million short-run impact in 2007/08 alone**

Questions? Thank You!

Project Activity 2002/09



Questions

Thank You!