



University Industry
Demonstration Partnership

Building and Maintaining Large Value University Industry Partnerships

UIDP25 September 2017

Andrew Cockerill

Monday, September 25, 2017

1:00 – 1:30 PM	<p>UIDP Academy Workshop: Building and Maintaining Large Value University-Company Partnerships Hilbery Room E&F <i>Andrew Cockerill, UIDP</i></p> <p>Welcome, Workshop Goals, and Introductions</p>
1:30 – 2:00 PM	<p>Looking Beyond the \$ <i>Andrew Cockerill, UIDP</i> What is a large value partnership and what is the value proposition?</p>
2:00 – 3:00 PM	<p>The Role of Regional Government in Building University-Company Partnerships <i>Denise Graves, Michigan Economic Development Corporation</i></p>
3:00 – 3:15 PM	Break
3:15 – 4:15 PM	<p>Company Structure and Organization to Initiate and Manage Large Value Partnerships: Procter and Gamble’s Decision to Get Strategic with University Partners <i>Jennifer Moe, Procter and Gamble, Nick Nikolaidis, University of Cincinnati</i></p> <p>This session will include a discussion on P&G’s overall university partnership strategy, key learnings, and partner perspectives from the University of Cincinnati and University of Michigan.</p>
4:15 – 4:45 PM	<p>Managing Stakeholder Interests to Deliver Greater Value <i>Andrew Cockerill, UIDP</i></p> <p>A framework to understand the needs and desires of all stakeholders in a large university-company partnership.</p>
4:45 – 5:30PM	<p>Sustaining Large Partnerships <i>Ric Gonzales, ConAgra Brands, Ryan Anderson, University of Nebraska-Lincoln</i></p> <p>University and Company structures and processes required to sustain the partnership. How are changes in university or company priorities managed? How are changes in leadership handled and effective dialogue maintained between the academic and corporate cultures?</p>
5:15 – 6:00 PM	<p>How similar is the large partnership to other partnerships – do existing relationships scale or is an entirely different model needed? <i>Andrew Cockerill, UIDP</i></p>
6:00 – 6:30 PM	Break
6:30 – 8:00PM	Post-Workshop Reception

Tuesday, September 26, 2017

8:00 – 8:30 AM	Reflections and Learnings from the First Day <i>Andrew Cockerill, UIDP</i>
8:30 – 9:00 AM	Creating a Large Value Partnership <i>Spencer Reynolds, Princeton University</i> <i>Arturo Pizano, Siemens Corporation</i>
9:00 – 10:00 AM	University Organization and Structure to Grow Industry Engagements to Large Value Partnerships <i>Daryl Weinert, University of Michigan</i>
10:00 – 10:15 AM	Break
10:15 – 11:00 AM	Putting It All Together – A Conceptual Framework to Inform and Guide Large Value Partnerships <i>Andrew Cockerill, UIDP</i> While no two partnerships are alike, a shared conceptual framework can help university and industry leaders to build and maintain important partnerships.
11:00 – 11:30 AM	Summary and Concluding Remarks <i>Andrew Cockerill, UIDP</i>

Workshop overview and objectives

- Develop a shared understanding of how universities and industry can collaborate
- Why large value partnerships? What is the added value?
- Examine how large partnerships are initiated
- Building and Maintaining partnerships
 - Managing stakeholder interests
 - University and Company structures and processes to support the partnership
 - Handling leader transitions
 - Building depth and breadth
 - Seizing synergies

Identify some actions to take back to my organization or partnership

About me...

- Mechanical Engineer
- Oil and Gas, Operations, Project Management, Technical Capability, Strategic University Partnerships



- Enhanced Organizational Teamwork
- Advisor Program
- Leadership & Collaboration for Technologists
- PhD recruitment.. Technology Associate Program

▶ Current ..

- Consulting at industry/academic interface
- UIDP Guidance for PhD students considering a career in industry
- Research Program Director
- iCorps mentor



What is a large value partnership?

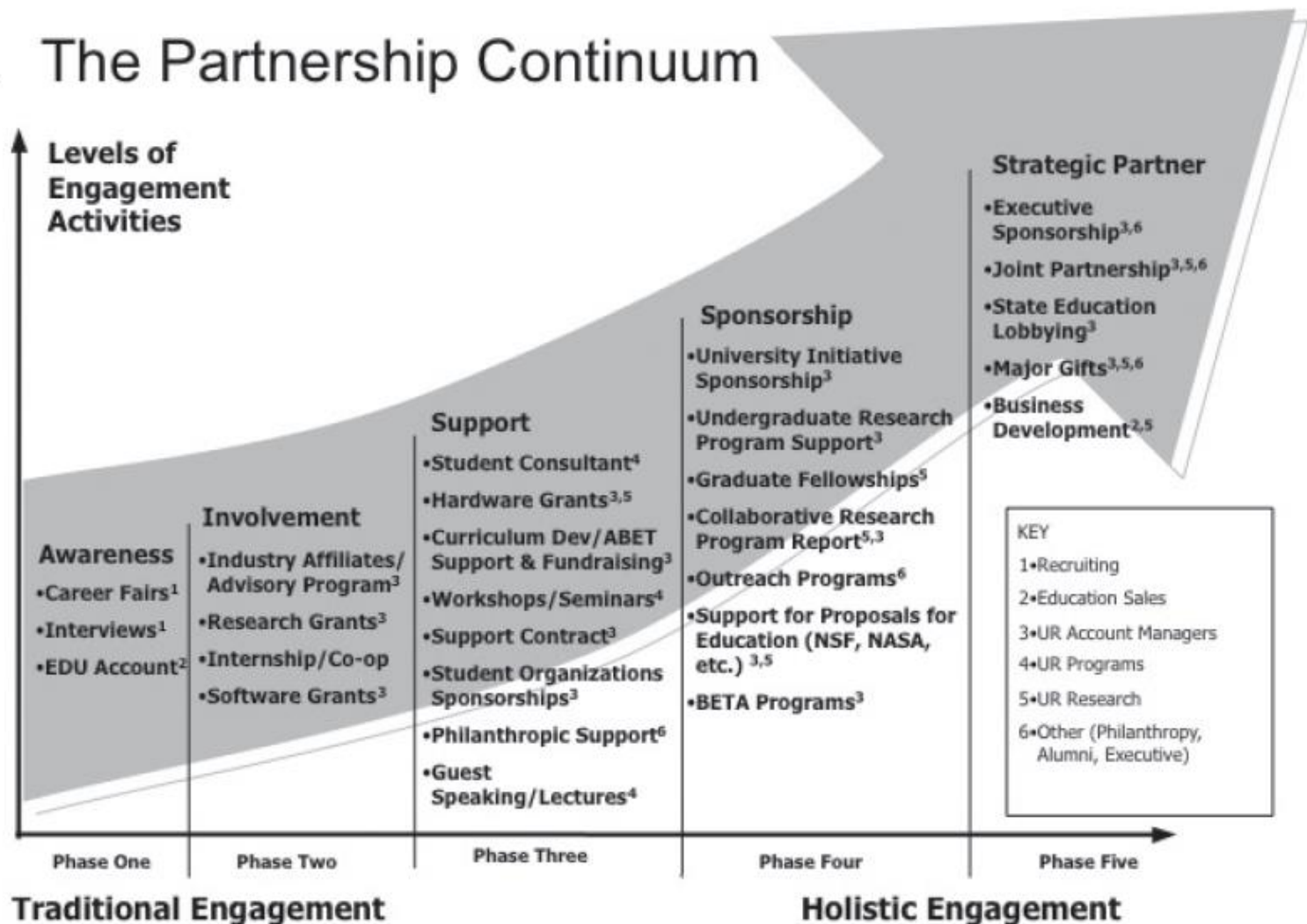
Usually..

- Multiple activities with multiple touch points
- Includes large sponsored research component
- Longer term commitment, > 5years
- Senior level sponsorship on both sides
- Includes relationship managers
- Periodic discussion about performance, quality of engagement, new opportunities, need to adjust scope and people
- Co-location of some staff and/or temporary assignments at partner location

What is the value proposition?

- Longer term partnerships increases trust and influence between partners
- Longer term increases understanding of partners context and needs
- Greater trust improves dialogue for problem solving, program reviews and evolution
- Shared experience and multiple touch points helps leadership transitions
- More candid dialogue around opportunities and threats
- More predictable funding attracts best faculty and researchers
- Enables greater flow of tacit knowledge and valuable “by-products”
- Enhances organizational learning in both the company and the university

Figure 1. The Partnership Continuum



- Large Value partnerships typically encompass multiple types of collaborations
- Builds breadth and depth which helps to sustain

The Role of Regional Government in building industry university partnerships

Denise Graves



Company Structure and Organization to Initiate and Manage Large Value Partnerships

Jennifer Moe, P&G and Nick Nikolaidis, University of Cincinnati



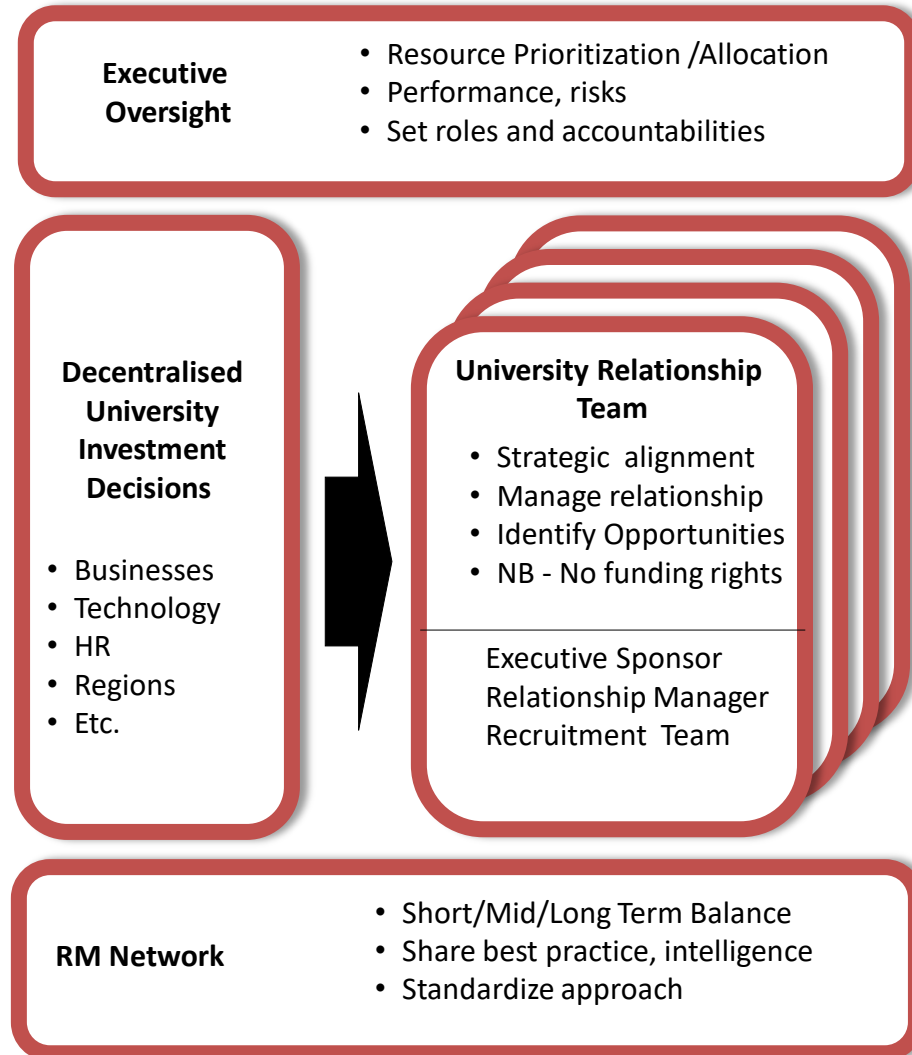
Sustaining Large Partnerships

Ric Gonzales, ConAgra Brands, Ryan Anderson, University of Nebraska-Lincoln



How Companies are organized to manage strategic university partnerships

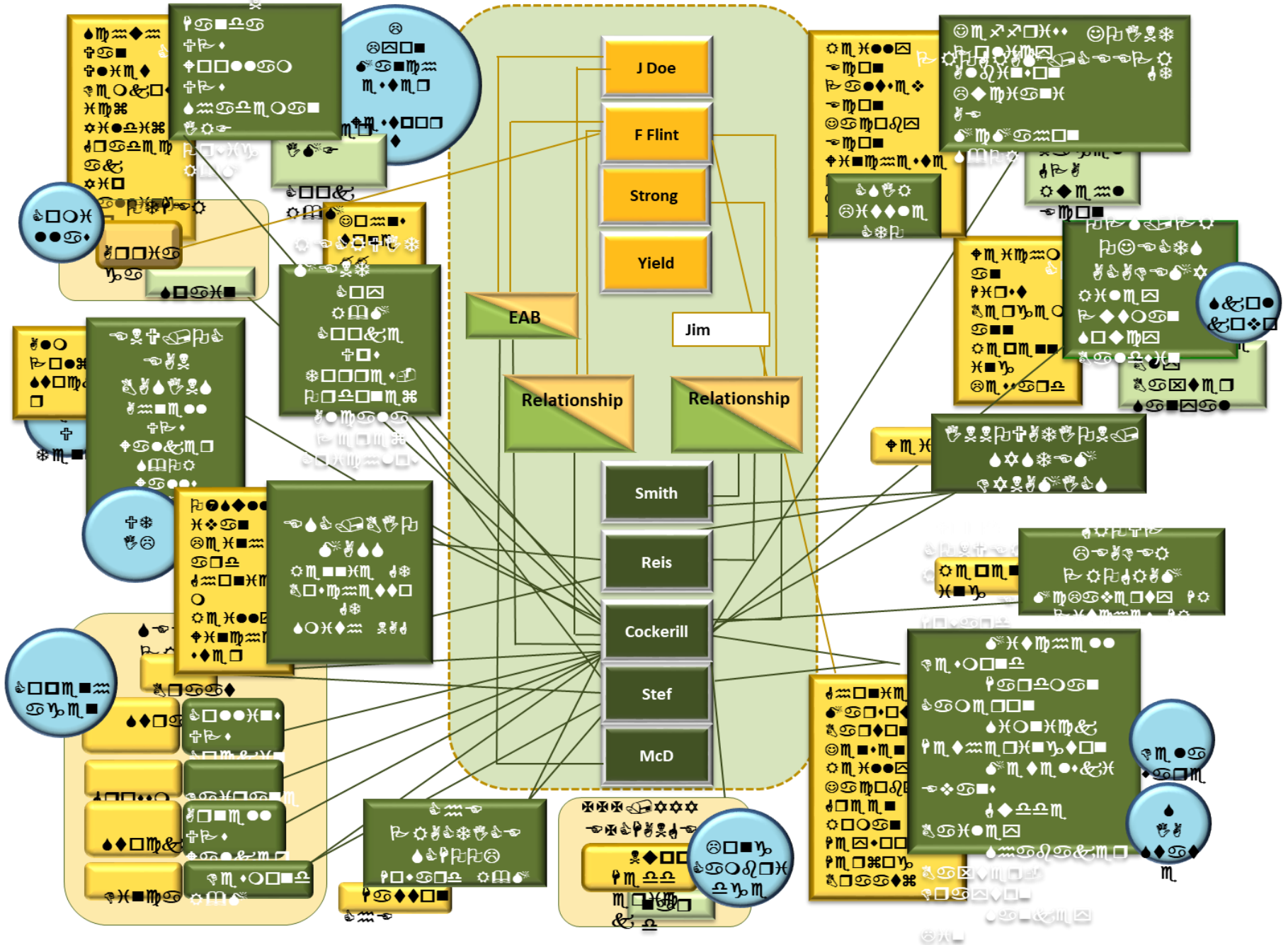
Centralized
or
distributed
decision
making?



Reflections and Learnings Day 1

- Examined what is a large value partnership and discussed the added value
 - Key Learning: Must be strategic and aim for broader organizational value to both company and university. (See Cyert and Goodman paper from Carnegie Mellon)
- Heard an example of how state government can assist industry/university collaborations
- Two case studies of large partnerships, how they were formed, the tactics and effort required to grow and sustain
 - Key Learning: Build depth and breadth to insulate against shocks and reap synergies from multiple types of collaboration within the partnership
- Examples of how companies are organized and structured to manage university partnerships
 - Key learning: Critical to have relationship managers to monitor the relationship and intervene where necessary
- Essential to have the right people at the interface with the right behaviours and broader context and understanding of their organization and its needs

Example Relationship Map



Creating a Large Value Partnership

- *Spencer Reynolds, Princeton University*
- *Arturo Pizano, Siemens Corporation*

SIEMENS



**PRINCETON
UNIVERSITY**

University Organization and Structure to Grow Industry Engagements to Large Value Partnerships

Daryl Weinert

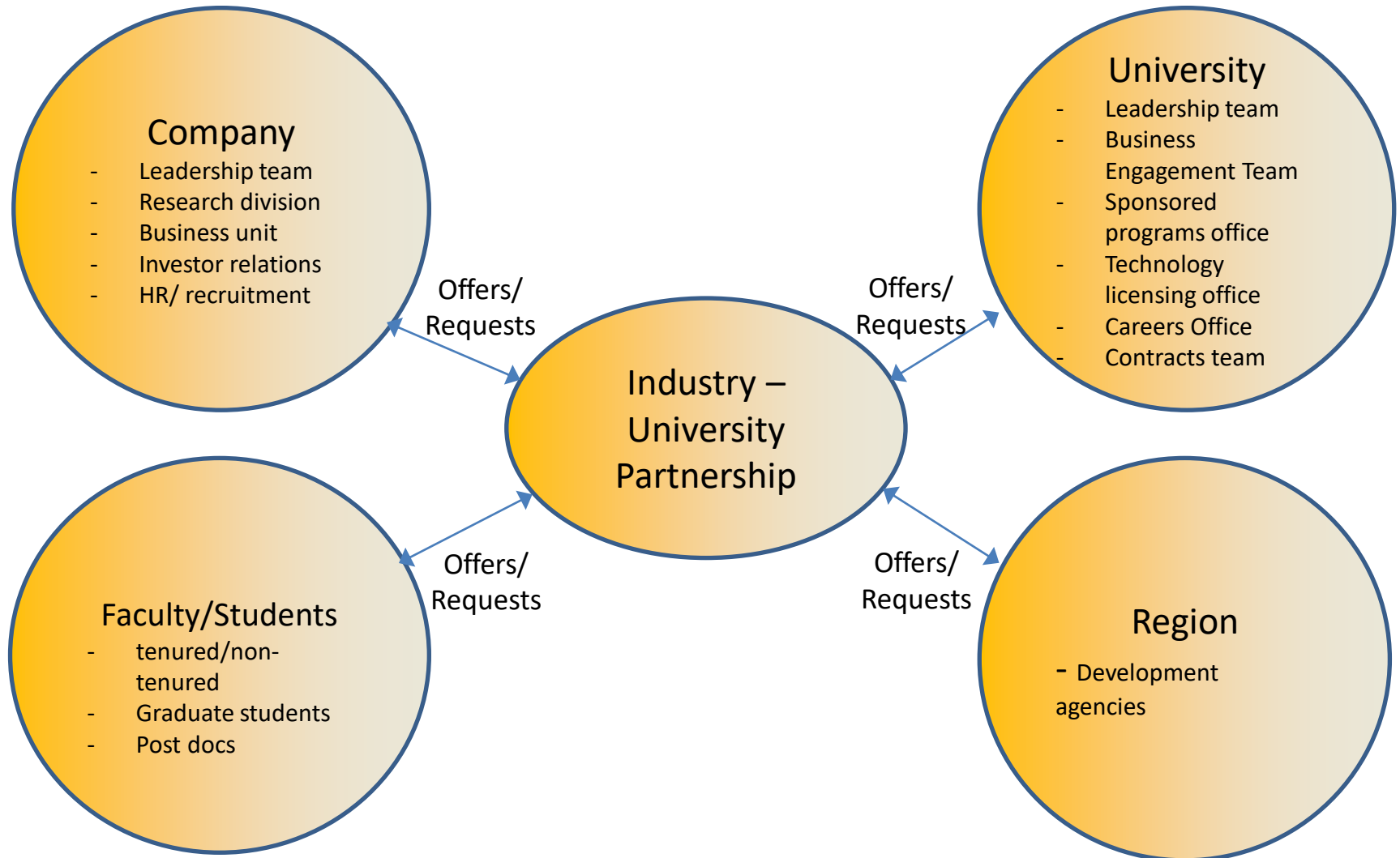
Associate VP Business Operations



University Organization and Structure to Grow Industry Engagements to Large Value Partnerships *Daryl Weinert, University of Michigan*

- Large Value Partnerships do not start out that way.
- You need to have a Corporate Relations structure that nurtures relationships along the "value" spectrum.
- Let's first examine the elements of the University/Industry relationship:
 - Student recruiting
 - Joint research projects
 - Student design projects/team projects
 - Technology utilization/commercialization
 - Faculty consulting
 - Professional development (short courses, distance learning, special programs)
 - Utilizing lab space or other campus facilities
 - Speaking opportunities, Advisory board participation
 - Vendor relationships
 - Sponsorships
 - Strategic philanthropy
- Case study: how the University of Michigan is structured to nurture relationships:
 - Business Engagement Center
 - School/Unit-based corporate relations
 - Recruiting offices/professional development programs/technology transfer, procurement, etc.
 - Tools for engagement
- Prioritizing relationships:
 - Regression analysis: categorizing as Tier 1, 2, & 3
 - Expectations for engagement
 - Handling "new" company inquiries
- The realities of making something "big" happen

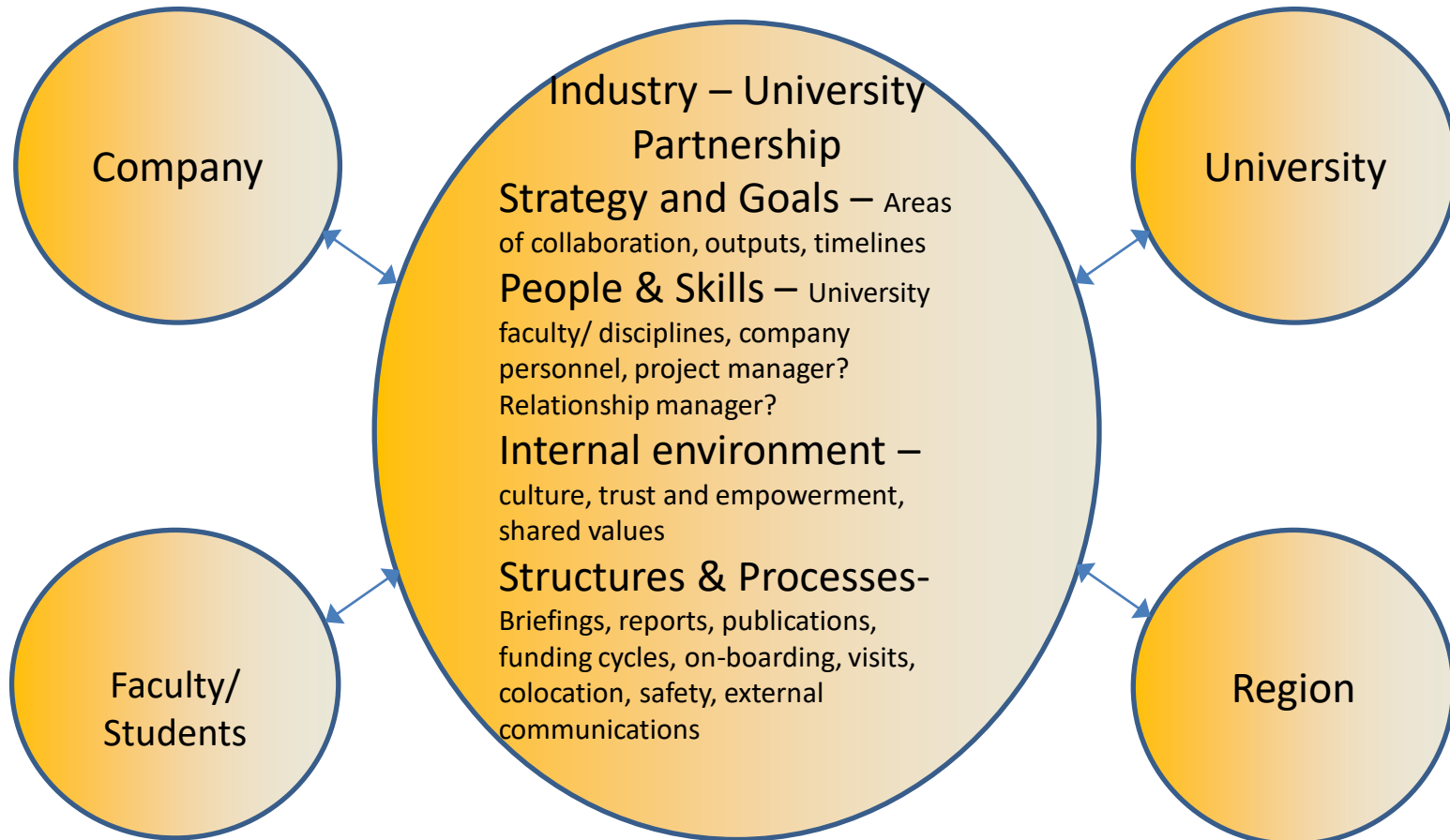
Partnership stakeholders



Examples – “Offers and Requests”

Company	Request	Offer	Importance
Leadership	Access to academic thought leaders relevant to our business strategy	Periodic briefings, summary reports with insights gained, direct and collateral benefits	
Business Unit	How can academic expertise impact my business bottom line?	Understand operational challenges and be alert for short term focused research opportunities	

Building and Maintaining Partnerships



Creating New Partnerships

What People, Structures and Processes are needed?

- Grow organically (Partnership Continuum)
 - People
 - Company “Boundary spanners” who can identify collaboration opportunities beyond their immediate need and are given time and space to explore these
 - Faculty who invest time to understand the company challenges
 - University business liaison/engagement personnel to facilitate connections
 - Structures
 - Company Strategy and technology functions with explicit remit to scan externally for thought leaders, innovations, solutions and talent
 - University engagement office
 - Processes
 - Personnel exchanges (sabbaticals, graduate internships)
 - Talks, seminars (Both directions)
 - Master Agreements OR NOT!
 - Culture and Fit

Examples

Creating New Partnerships

What People, Structures and Processes are needed?

- “Moonshot”
 - Strategic Alignment
 - Major technical challenge or research area with potential business application
 - Select projects linked to company priorities and of interest to leading researchers
 - People
 - Motivated university and company leadership
 - Company program manager
 - Possibly insufficient company internal expertise (but still require company experts to collaborate with researchers)
 - Structures
 - University engagement office to coordinate and facilitate proposals
 - Alignment of relevant company business units and functions
 - Company and University Legal/Contracts groups

Examples

Building and Maintaining Partnerships

Strategy and Goals

- Co-developed goals and priorities
- Joint review of accomplishments
- Ability to evolve and change projects as new needs or information arise
- Maintain understanding of partner's broader context and goals

People and Skills

- Engage interesting and innovative people
- Support personality matches
- Multiple touchpoint at multiple levels
- Dedicated relationship managers on both sides to monitor quality of engagement and address conflicts
- Consider co-location, encourage assignments, internships to other partner

Examples

Building and Maintaining Partnerships

“Internal” environment /culture

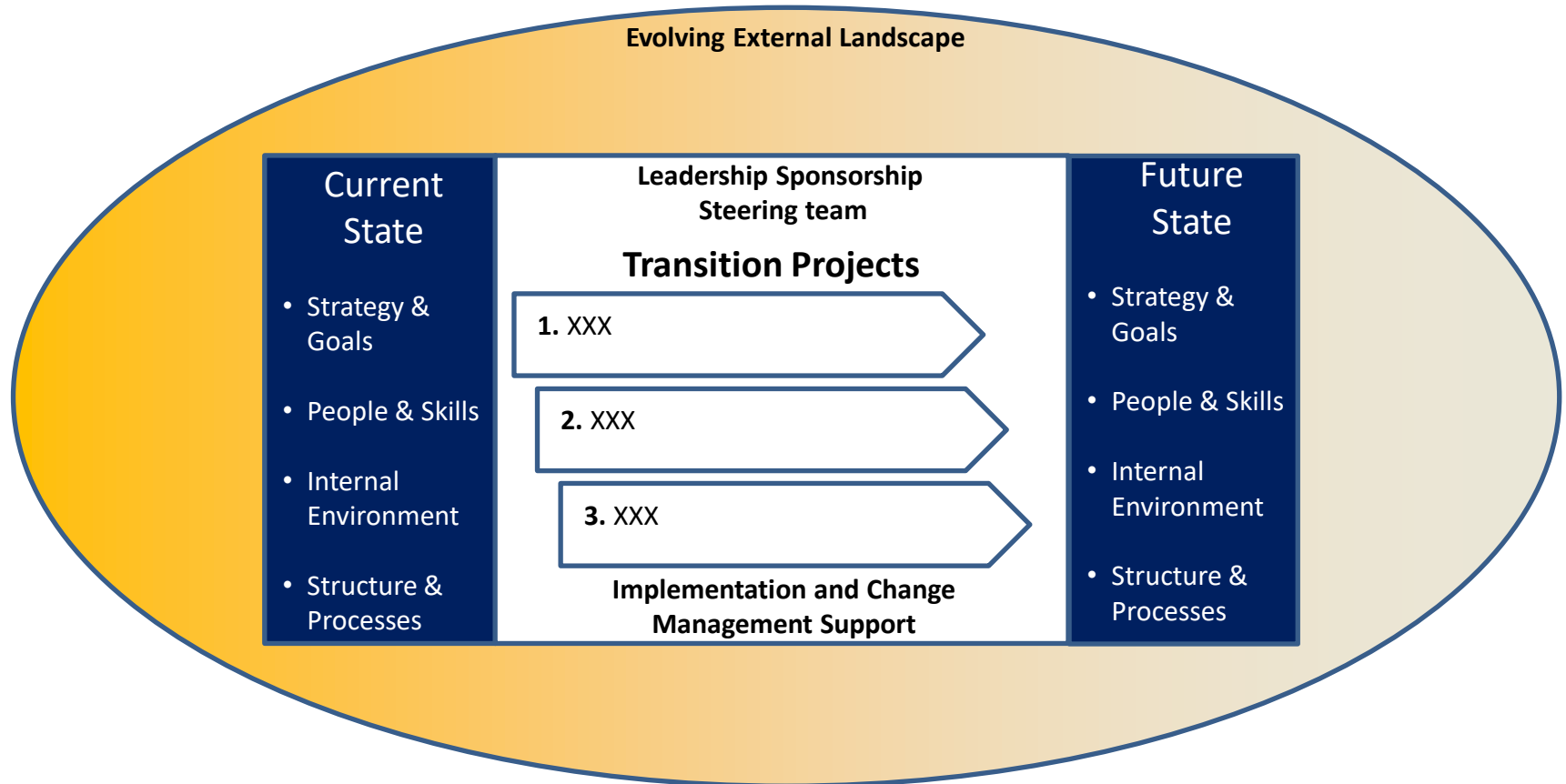
- Trust and empowerment
- Open dialogue
- 50-50 relationship
- Recognize and respect partner’s broader goals

Structures and Processes

- Company and university leaders conduct periodic partnership review: Strengths, Weaknesses, Opportunities & Threats (SWOT)
- Clear agreements and contracts (IP, publication review/release etc.)
- Align with existing organizational resources and processes
- Simplify processes for temporary assignments and internships
- Proactively manage leadership transitions
- Onboarding process for new company or university personnel
- Mechanism’s to build broader awareness of the partnership inside both institutions

Examples

1. Specific Partnership Development -a 50:50 endeavor.
2. Building or Maintaining partnerships at my company or university



U-I Partnerships, Learn before doing...

- **Learning from the Ford-MIT alliance** – *Magee & Roth, 2002*
- **MIT Industrial Partnerships** – *Report of Ad-Hoc Committee, 2003*
- **Guiding Principles for University- Industry Endeavors** – *National Council of University Research Administrators (NCURA) and Industrial Research Institute (IRI), 2006*
- **Best Practices for Industry – University Collaboration** – *MIT Sloan Review, 2007*
- **Partnership Continuum** - *UIDP, 2012*
- **Creating Effective University-Industry Alliances: An Organizational Learning Perspective** - *Richard M. Cyert Carnegie Mellon University Paul S. Goodman Carnegie Mellon University*
- **Several UIDP publications**

Best Practices...

- Multiyear programs with annual leadership review and designated Executive Sponsors and Relationship Managers – build trust and rapport at all levels
- Clear up-front articulation of Company and University goals for the relationship and each project that links to business objectives
- Sharing broader business context and research program context with the university team ... not once but throughout the project
- Manage leadership transitions
- Build broader awareness of the work inside both institutions
- Measurement of outcomes and benefits

FORD-MIT ALLIANCE PRINCIPLES

1. **Engage interesting and innovative people**
2. **Support personality matches** -Knowledge is held by and travels with people. When they willingly and regularly spend time together they themselves facilitate the transfer and application of knowledge.
3. **Link projects to company priorities**
4. **Align with existing organizational resources**
5. **Look beyond costs and orient to value** Corporate-university alliances are different from traditional sponsored research in the amount, breadth and timeframe of their commitments.
6. **Gain both local and organizational benefits** - Consider value and benefits at multiple levels, beyond just project outcomes, and actively managing these multiple components
7. **Seek and capture multiple value streams** -Individuals, departments and programs in a university operate relatively autonomously, so integrating activities are needed to identify and capture this value.

Magee-Roth 2002

Creating Effective University –Industry Alliances:

An Organizational Learning Perspective¹

- U-I partnership ‘Effectiveness Indicators’ are helpful but overlook the opportunity for organizational learning
- U-I partnerships are an opportunity for learning – on both sides – and should not simply focus on technology transfer from university to company
- Create an environment where continuous learning occurs in both the university and the company and is not limited to the principals but extends deeper into each institution
- The partnership may influence the company’s strategic thinking, culture, problem solving skills etc.
- University benefits should include more than published papers.. How does the university learn from the partnership? Any changes in curriculum or teaching?