



Establishing and Maintaining Industry Partnerships



INTRODUCTIONS



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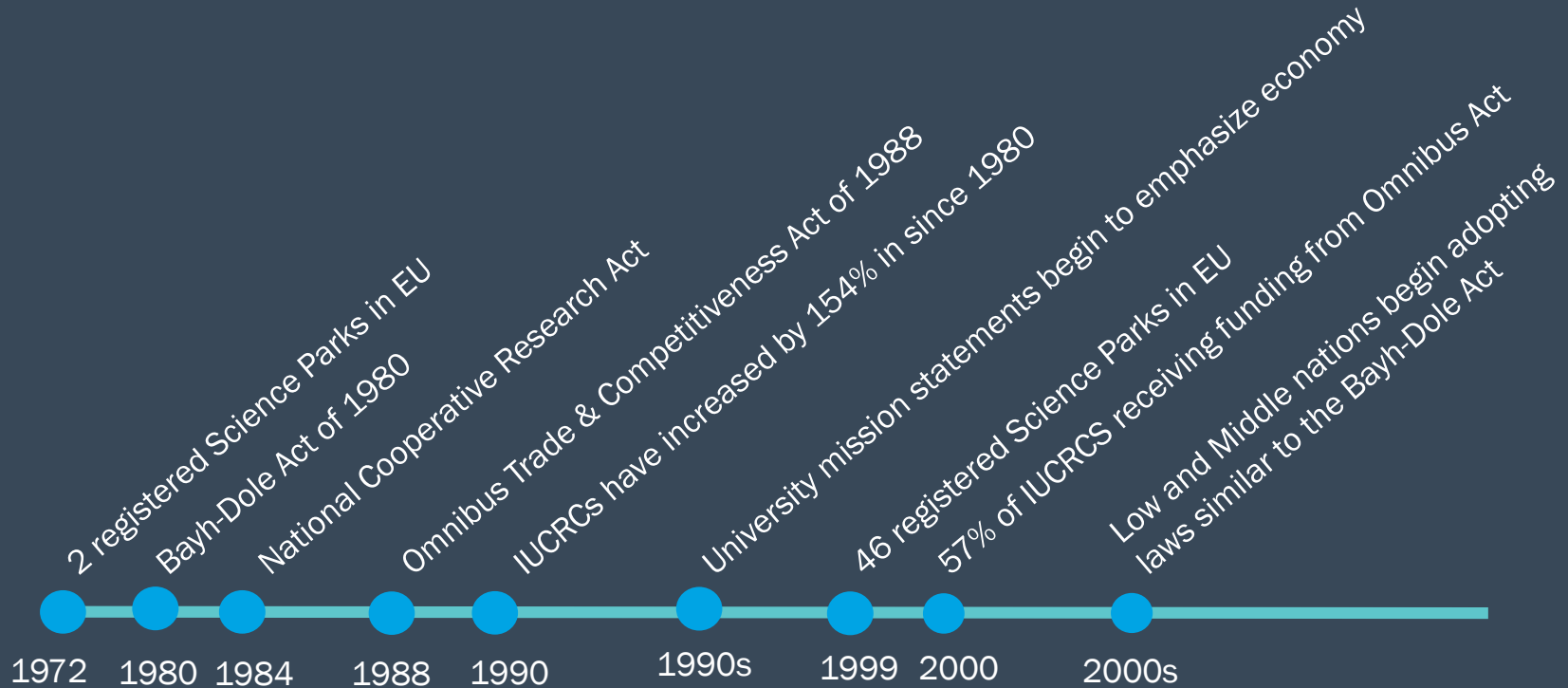
Participant Survey



Evolution of Industry Partnerships



EVOLUTION OF PARTNERSHIPS



TYPES OF UNIVERSITIES



TEACHING



RESEARCH



ENTREPRENEURIAL



DEVELOPING

PARTNERSHIP MODELS

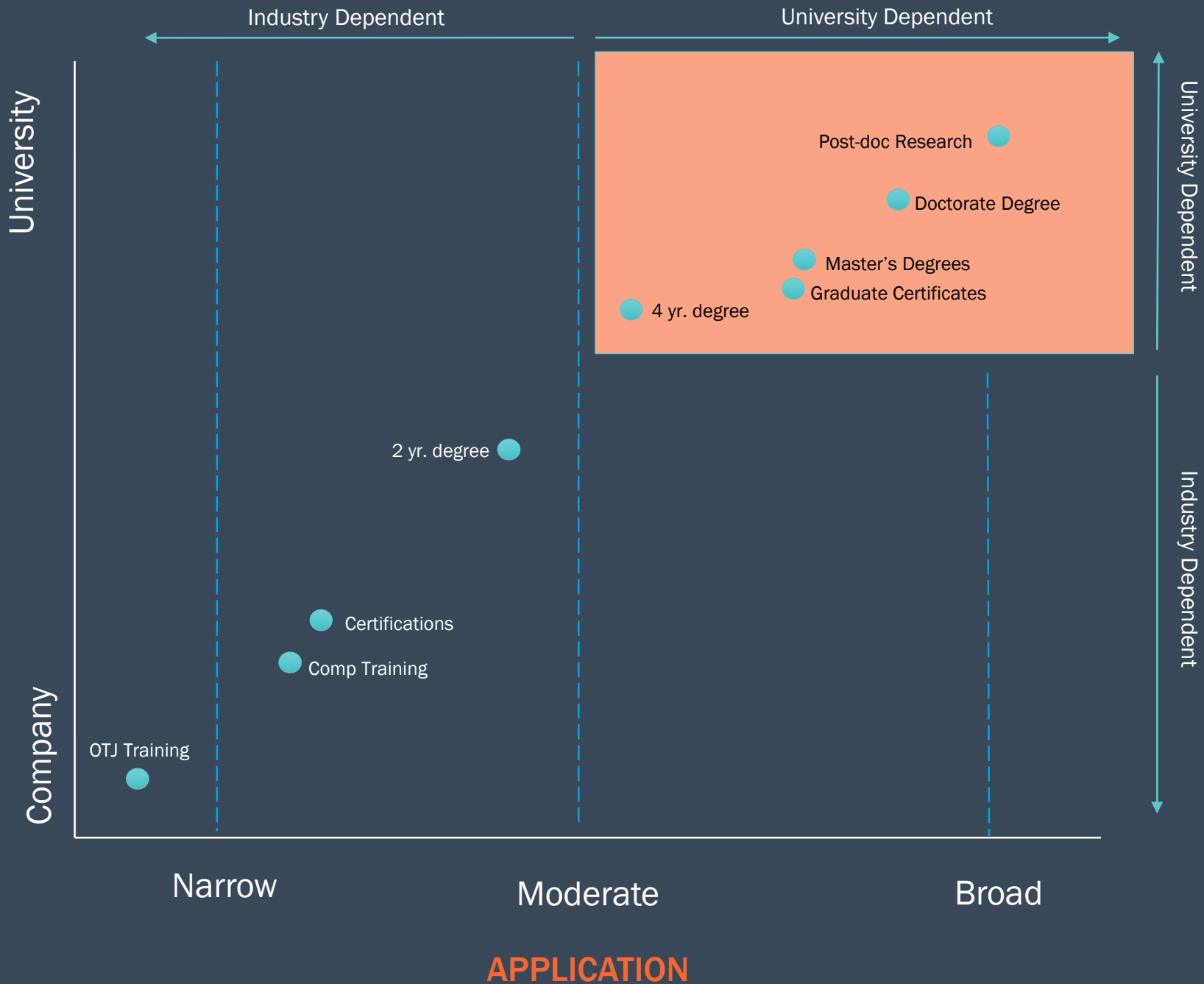
Firm contracts with University to do R&D

Payment by results

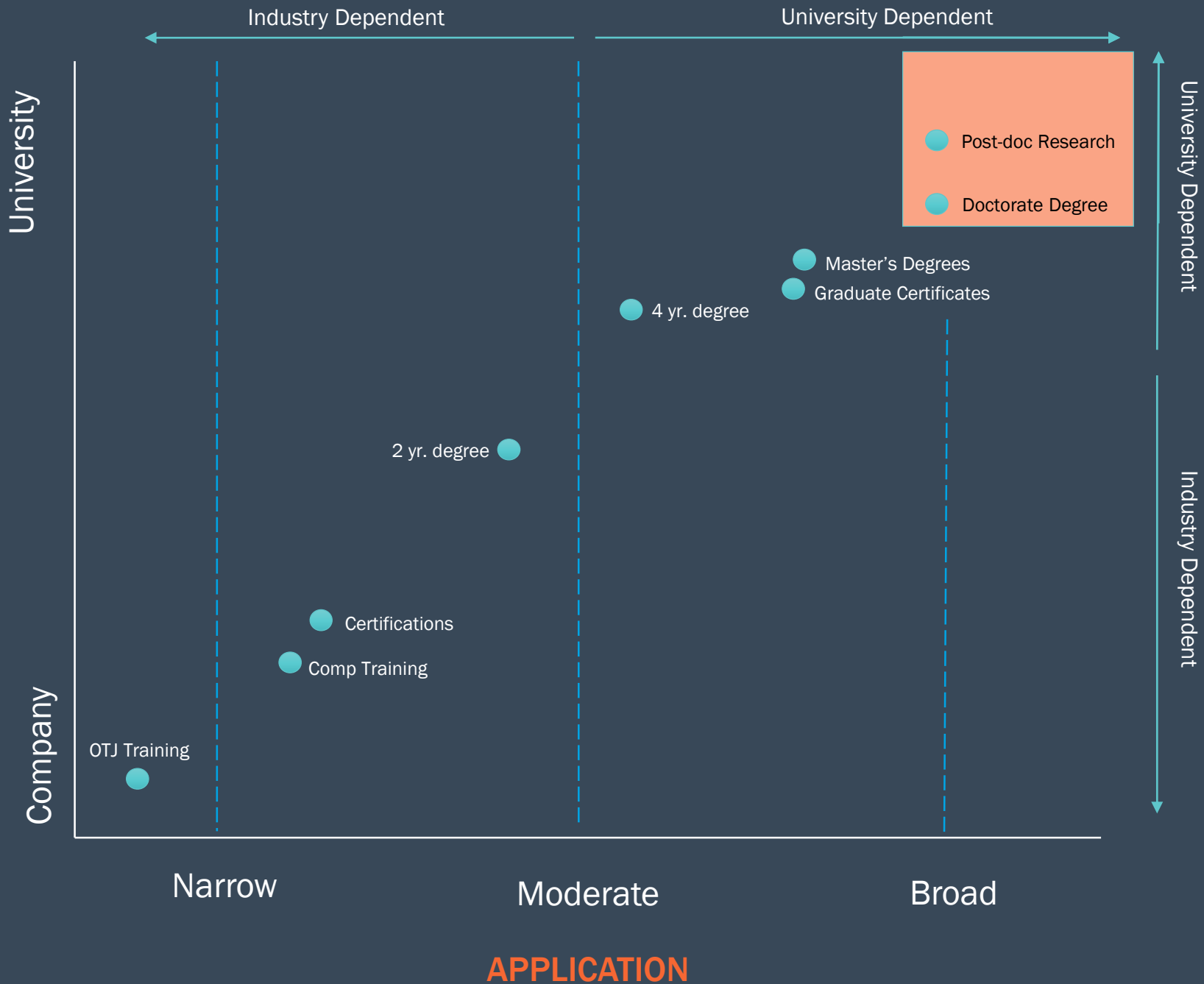
Commercialization of research

Firm employs university researchers

SETTING



SETTING



HOW TO INITIATE INDUSTRY PARTNERSHIPS

Match researchers with industry needs

Select a strategic partner

Articulate and document the terms
of the partnership

Setup a framework and structure for
monitoring the partnership



EXISTING BARRIERS AND CHALLENGES

Mismatch of values

Insufficient resources

Lack of incentive

Poor structure and communication models

GUIDING PRINCIPLES

PARTNERSHIPS:

- Ensure missions are mutually beneficial and aligned.
- Focus on developing long-term partnerships.
- Focus on benefits when negotiating parameters.

EDUCATION INITIATIVES:

- Establish consultative process by which industry talks to universities
- Offer internships to undergraduates
- Involvement in graduate programs

Center for Risk Engineering and System Analytics



ESTABLISHMENT

- Center was established with a 4 million dollar gift to Clemson University from AIG.
- Mission of the center:
- Structure of center:
 - Data Analytics Center
 - Virtual Reality
 - Research and Modeling
 - Graduate Education Programs
 - Industry Training Programs
- Core Strategies
 - Engage in research and provide technical services
 - Create education and leadership programs
 - Establish global partnerships



VALUE TO CLEMSON



RECRUITMENT OF
TALENT



STIMULUS TO
RESEARCH



ACCESS TO
STUDENTS



OPPORTUNITIES FOR
COLLABORATION

VALUE TO AIG



ACCESS TO
RESOURCES



OPPORTUNITIES FOR
RESEARCH



SUPPORT FOR EMPLOYEE
EDUCATION/TRAINING



DISTINGUISHED
COLLABORATION

Education in our Partnership



PROGRAM OVERVIEW



Evolving portfolio of graduate programs



Designed for working professionals



Asynchronous online course delivery



Offer courses on a contract basis

PROGRAM OVERVIEW

- **Certificate in Risk Engineering**
 - 12 credit hours
 - 4 courses
 - 18 months
- **Courses**
 - Uncertainty Modeling for Risk Engineering
 - Quantitative Methods
 - Human Factors for Risk Engineering
 - Fundamentals of Risk Engineering

FACULTY & INSTRUCTORS

- **Multi-disciplinary faculty**
 - Civil Engineering
 - Industrial Engineering
 - Management
 - Computer Science
- **Enterprise Faculty**
- **Graduate Students**

Leadership

- **Steering Committee**
 - Quarterly meetings
 - Includes:
 - Clemson: provost, deans, center director, center staff
 - AIG: business leadership
- **Academic Advisory Board**
 - To guide the development and direction of graduate education offerings.
 - Review of proposed courses and programs, work with faculty to develop real world content for courses, assist with administrative processes



ACADEMIC ADVISORY BOARD

RESA Education & Training

RESA Director of Operations

RESA Faculty Lead

Civil Engineering

Industrial Engineering

Research PIs

CLEMSON-AIG ACADEMIC ADVISORY BOARD

AIG-Clemson Partnership

Learning & Development

HR

Employee Benefits

Legal

Business Stakeholders



COMMUNICATION



Building relationships



Creating space to communicate



Setting expectations

FINANCIAL SUPPORT

- **Initial Gift: \$4 million**
 - \$1 million endowed professor
 - \$2.25 million in quasi endowment
 - \$750,000 Technical services
- **Continued Investment:**
 - Student Tuition



ASSESSMENT

- Survey of student needs
- Survey of student experiences in courses
- Industry evaluation of proposed courses

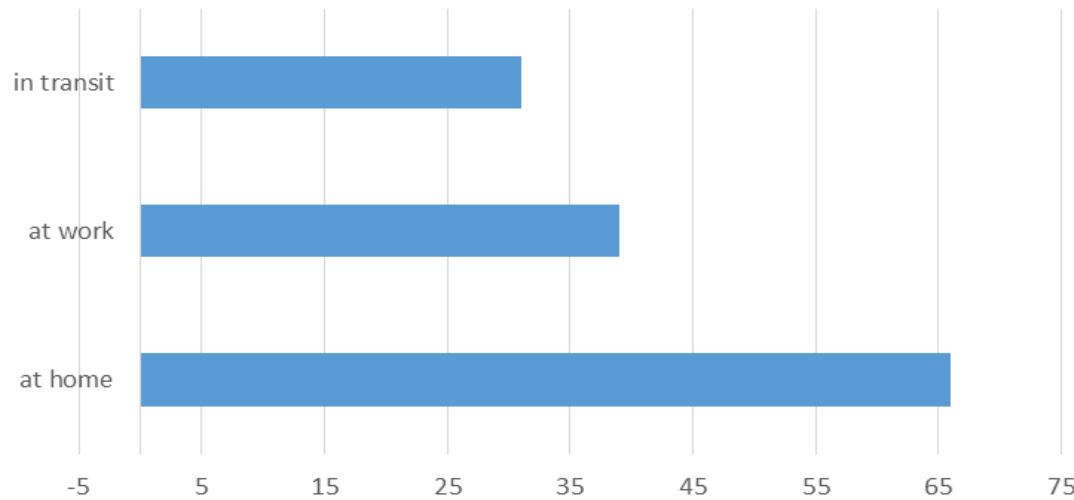
ASSESSMENT ON STUDENT SUPPORT

CS What type of support was most valued?



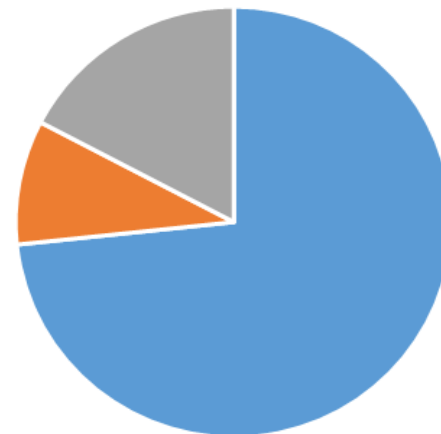
■ academic ■ network ■ tech

PS Anticipated Study Location



**ASSESSMENT
ON STUDENT
SUPPORT**

PS Most Convenient Location to Study



■ at home ■ in transit ■ at work

Nationality

We have students enrolled on 6 continents and in over 15 countries.



Professional Roles



10.3 average years of work experience

Benchmarking



OTHER NOTABLE INDUSTRY-UNIVERSITY PARTNERSHIPS



Technical
University
of Munich



JPMORGAN CHASE & Co.

Current Literature and References



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Thank You
Questions/Comments?

