

Strategic Partnerships: Best Practices and Regional Models December 9, 2015





Support and Attract Business Through Talent Clusters

Talent clusters are concentrated geographic pools of talent focused on a particular technology or specialized discipline:

Proximity still matters

Critical mass is important

Clusters need stars and supporting talent

Regions that are global innovation leaders and offer world-class training and education programs will attract talent clusters





To Respond to Innovation Challenges, Involve Multiple Stakeholders



The Innovation Triangle

Strategic alliances are key to R&D leadership and economic growth





Changes in the Innovation Eco-system are Driving Strategic University-industry Alliances

- **"Open" innovation** Decline of internal corporate labs, corporate alliances between large and small companies
- Technology convergence Innovation occurring through multi-disciplinary collaborations
- Shared intellectual resources and facilities Science budgets outstrip individual capabilities and funding
- Applied science rises Academic paradigm shifts as funding focuses on applications; basic science is embedded

(Courtesy of Mass Insight/Battelle Technology Road Map: "Choosing to Lead")





Corporate Funded Research is Currently a Small but Growing Source for Universities – and a Priority

(Research Funding Sources for Selected Massachusetts Universities)









Nonprofits







2-7 Year Horizon Aligns University-Industry Interests







MA/Northeast Should Develop a Cross-Sector Innovation Centers Strategy

Principles for today's Centers of Excellence:

- Explicit ties between universities and industry
- Challenge- and application-driven needs
- Shared infrastructure between partners
- Focus on developing the next generation of talent alongside translational research
- Leverage state funds with federal and industry engagement and investment

Examples

Public-private:

- NNMI
- UMass Institute for Applied Life Sciences
- Massachusetts Green High Performance Computer Center
 - Massachusetts Open Cloud

Private:

- Broad Institute
- Fraunhofer

Innovation Centers offer a faster path to scale and crosssector collaboration, generating a number of benefits:

- State-wide economic impact
- Vehicles for institutional change
- Talent attraction and development
- Additional inbound investment





Critical Success Factors for Strategic Partnerships

- Goals & Metrics
- Intellectual Property
- Resources
- Leadership/Organization
- Talent





Goals & Metrics





Understand Your Partner's Needs

- Examples:
 - Publications and student dissertations will almost always be important to research universities
 - Talent and potential commercial applications (whether in near-term or long-term) will always be important to companies





Metrics are Critical to Success

- Important to have consensus and clarity on what will be measured and reported regularly
- Example MIT/CSAIL formally reports annually to industry partners on its engagement activities (as well as maintaining regular ongoing communication). Focus is on previously identified priorities, including research results, company recruitment goals and talent development, executive education, etc.





Intellectual Property





IP is an Outcome, Not a Driver, of Partnerships

- Partners should communicate clearly on the entire range of benefits—including IP—expected to result from the collaboration and align effort accordingly
- Industry partners report IP as <u>one</u> of many benefits that come from partnerships, along with understanding the leading edge of technology development, access to talent, and other impacts.
- Flexibility around IP issues is critical for both companies and universities to successfully engage in strategic partnerships
- A number of successful models begin with less stringent IP terms and increase emphasis on management and control of IP as intensity of the collaboration increases





Resources





Strategic Corporate Partnerships Seek Visibility and Critical Mass in a Regional Ecosystem

- In addition to collaborations with an individual university partner, companies allocate resources and create value by embedding themselves in the regional ecosystem
- Example Thomson Reuters' Data Innovation Lab in Boston engages with the broader community:
 - Participation in tech industry groups;
 - Sponsorship of business plan competitions and other programs;
 - Engagement of start-ups;
 - Support for incubators/accelerators.





Leadership & Organization





A Dedicated Point of Contact is Critical at Each Partner

- In many collaborations, there is a single POC at each partner.
 S/he
 - typically reports to the executive-level leader,
 - is aware of all the elements of the partnership,
 - manages process and troubleshoots problems.
- Partners are increasingly hiring staff specifically for this role

 ideally with both corporate and university experience not
 a tech transfer officer or a technical project manager
- Examples A number of alliance models emphasize shared decision-making (and ongoing review) of both research priorities and investments through joint steering committees or other formal mechanisms.





Talent





Build a Talent Strategy into Research Partnerships

- Both companies and universities place a strong focus on using partnerships to develop talent
- Universities want students to learn from real world data
- Companies benefit from an up-close look at potential new employees
- Especially true in cross-functional areas like big data and cybersecurity where competition is fierce
 - State Street is competing for talent with Amazon, Google, tech start-ups, etc.





Master Agreements Provide a New Organizing Paradigm for Strategic Partnerships

Awareness of Need

Identification of Partners

Formation of Partnership

Implementation

Outcomes

Old World Transactional

Identify specific technology / research challenge

Conduct national / global search for leading researchers

Engage faculty individually, or through institutions and sign bilateral agreements

Specific project runs its course; any follow-on projects or tangential areas of research will need further negotiation

Multiple projects and areas of research can be explored under the same agreement, which runs for several years.

Specific research challenge addressed; potential commercializat ion, depending on nature of project

Company's innovation pipeline has been expanded in both expected and unexpected directions



New World Strategic

Mass Insig

GLOBAL PARTNERSHIPS

Identify broad technology / research area in which a partnership could drive innovation

Identify major research institutions with multiple assets and reputations for flexible partnerships and/or identify in parallel complementary corporate partners

Develop master research agreement with all parties that "pre-permits" individual faculty agreements



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