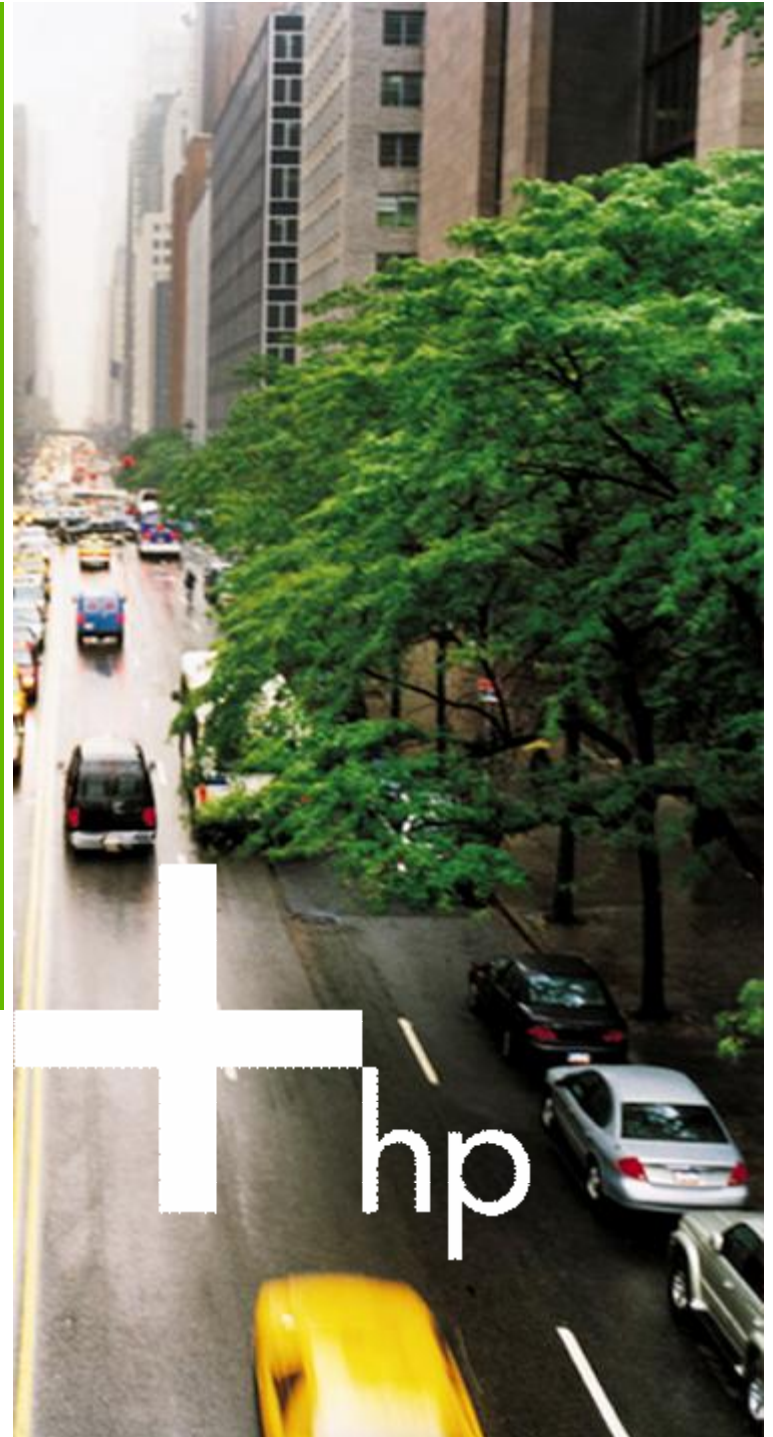




The Collaboration Imperative: Universities and Industry as Partners in the 21st Century Knowledge Economy

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Worldwide
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What If ...

- North American innovation ecosystem was passionately engaged in innovation
- Universities and industries were virtuously involved in collaborating and interacting with each other
- Partnership agreements could be negotiated in days instead of years
- New fields of interest could be explored and new discoveries brought forward for all to benefit
- Companies and universities called each other first when thinking about pursuing areas of endeavor
- Technology transfer was a later-stage indicator of a rapid flow of ideas and early-stage interactions
- The scientists and engineers of tomorrow got their grounding and experience from the collaborations and explorations of today
- We were having this meeting to talk about emerging and exciting areas and not the problems associated with negotiations

Introduction

- It's about the students ...
 - Hiring highly educated and skilled students.
- And the flow of ideas ...
 - To enrich university-industry collaborations.
- And the early-stage interactions ...
 - That generate ideas before they become technology.
- In short, it's about collaboration!
 - Within the context of a healthy U-I partnership.

Agenda

- Impact of changes in the treatment of intellectual property (IP)
- Progress toward achieving positive IP outcomes
- Changing the ecosystem: The opportunity for advancing strategic partnerships

Impact of Changes in the Treatment of Intellectual Property



The IP Problem – A Relationship in Crisis



- The partnership between industry and universities has been weakened over difficulties associated with negotiating IP rights in research contracts in recent times
- Largely as a result of the lack of federal funding for research, American Universities have become extremely aggressive in their attempts to raise funding from large corporations
- Industry feels that it takes too much time, effort, and money to negotiate an agreement
- This has resulted in a perceived deterioration of trust and goodwill between industry and US universities, adversely affecting the long-term partnership between industry, universities, and government

A Silent Breaking

- Given that negotiations with an American university can take more than a year, the idea is often valueless before an agreement can be reached, and the company often spends more in legal expenses than it would be able to pay in royalties.
- This can lead to a company just **walking away** from the negotiation, and declining to sponsor any further research at that university.

“Typically at present, negotiating a contract to perform collaborative research with an American university takes one to two years of exchanging emails by attorneys, punctuated by long telephone conference calls involving the scientists who wish to work together. All too often, the company spends more on attorneys’ fees than the value of the contract being negotiated. This situation has driven many large companies away from working with American universities altogether, and they are looking for alternate research partners.”

Stan Williams

Director, HP Quantum Science Research

Consequence: Globalization of University Research



- Many large companies are finding other sources of ideas and bright young researchers in emerging countries, where they receive very favorable intellectual property agreements.

“Large US based corporations have become so disheartened and disgusted with the situation [negotiating IP rights with US universities] they are now working with foreign universities, especially the elite institutions in France, Russia and China, which are more than willing to offer extremely favorable intellectual property terms.”

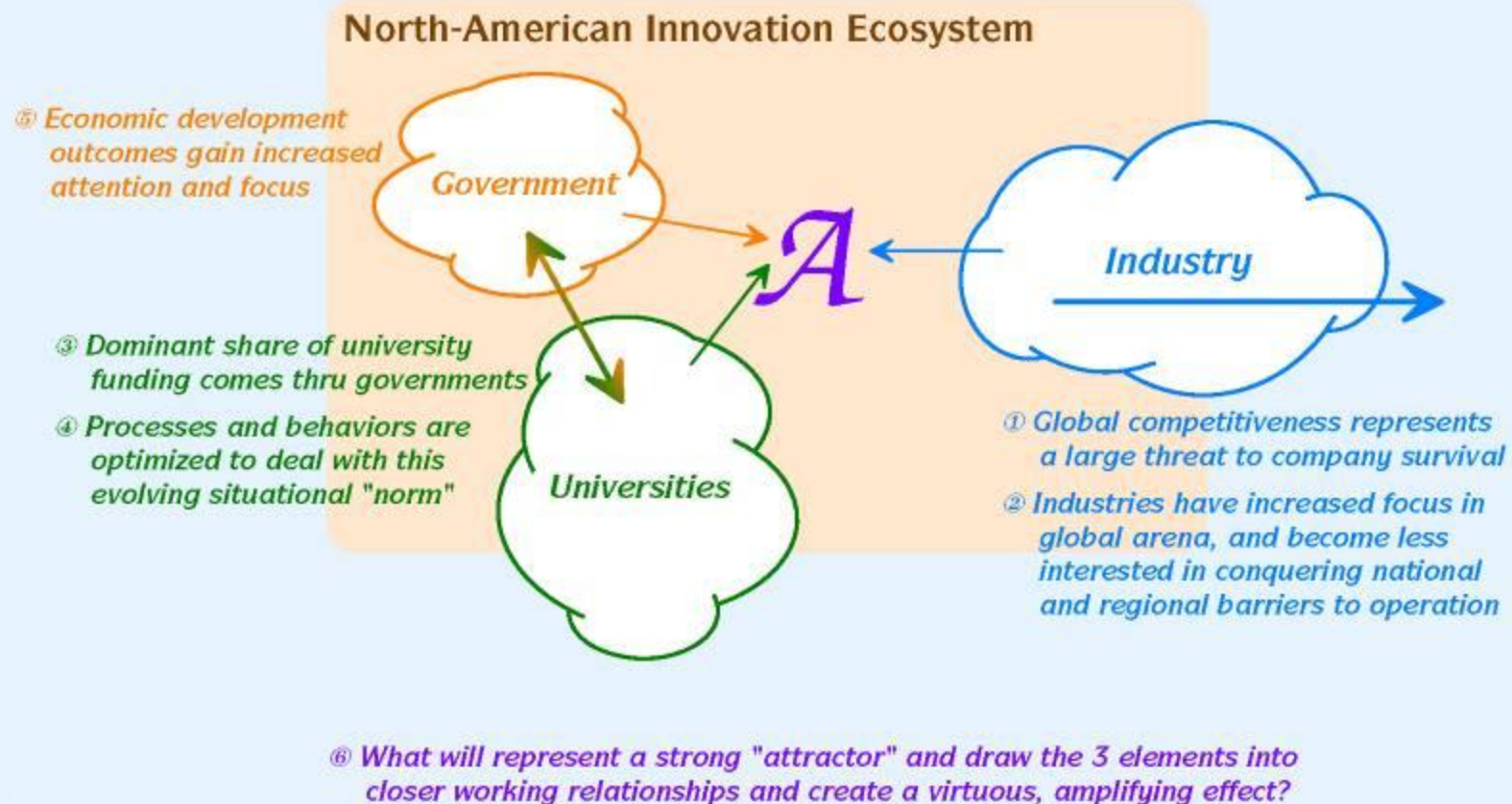
Stan Williams

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Ecosystem Context

Global Innovation Ecosystem



Situation Dynamics

Vicious Cycle

- IP-centric
- It takes too much time, effort, money to negotiate agreements
- Perceived deterioration of trust and goodwill, adversely affecting long-term partnerships & collaborations
- Increased flow of sponsored research funds to other parts of the world
- At the working level, people just walk away



Virtuous Cycle



- Relationship-centric
- Trust-enhancing
- Builds on each other's work
- Attracts increasing financial support
- Motivates increasing commitment and contribution of the current contributors
- Attracts increasing involvement of other organizations

University/Industry Partnership Observations



“Of 3200 universities, perhaps 6 have made significant amounts of money from their intellectual property rights.

IP rights should be pursued as a means for interaction with industry rather than as a means for raising revenue from commercialization.”

*John C. Hurt
National Science Foundation*



Progress Toward Achieving Positive IP Outcomes





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BASIC IP Project

Goal

- Achieve a shared understanding of the principles, practices, and frameworks that will more effectively advance the IP interests of public and private research institutions, including
 - universities
 - industry
 - not-for-profit laboratories
 - national laboratories
 - venture capital/entrepreneurs
- It is our intention to enable more effective alignment with existing activities at the state and national level



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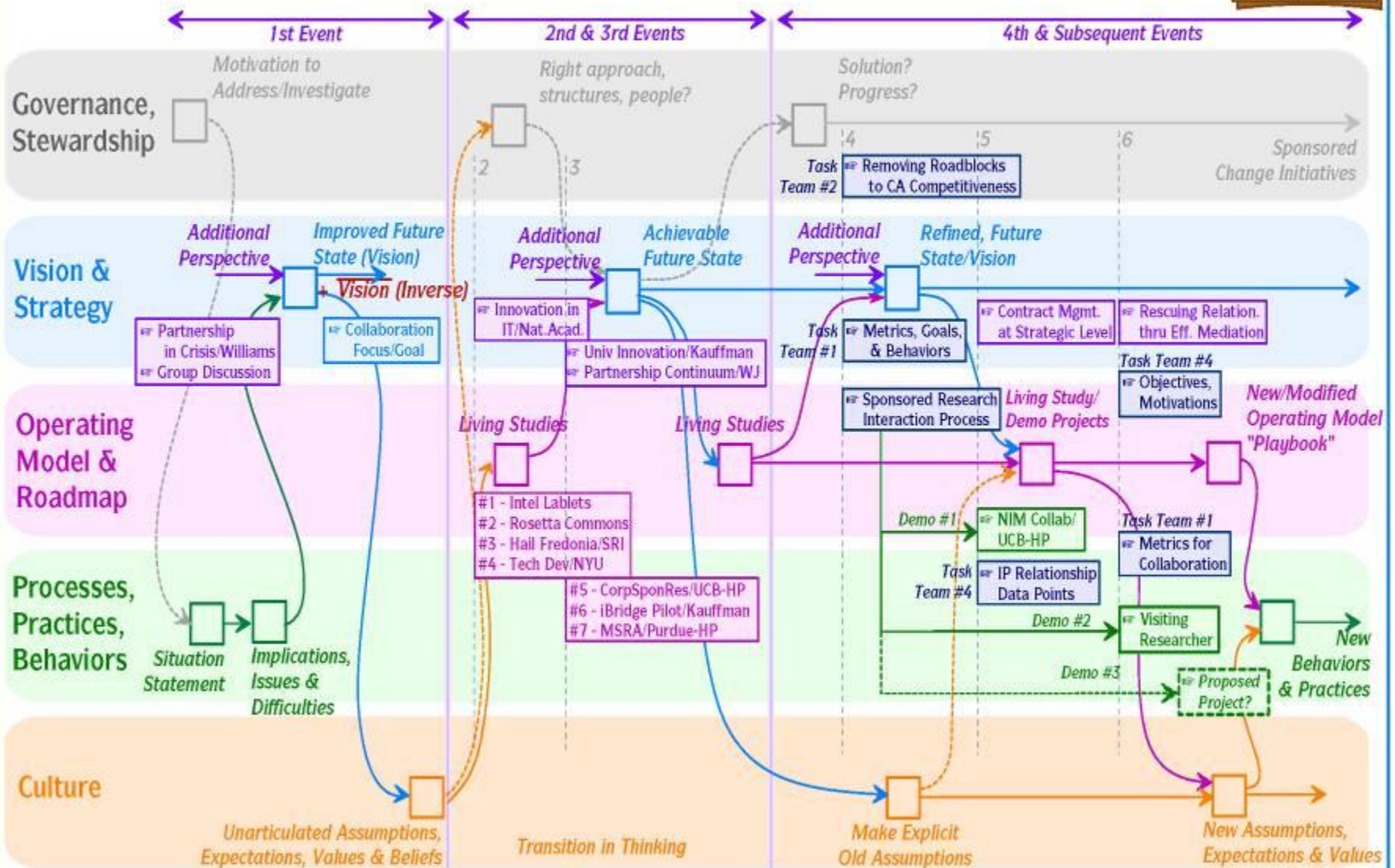
Key Elements of the IP Project

- Goal = Collaboration
- Bias towards action
- Focus: “optimizing whole innovation ecosystem”
- Multi-level thinking approach, using the Vosara™ model
- Ground the work in living studies
 - Making things real at the working level
 - Learn in the process of doing
 - Cross-harvest best practices
 - Utilize existing activities and plans
- Outputs = Objectives/Motivations, Practices, Frameworks
- Recognition of social/cultural change process

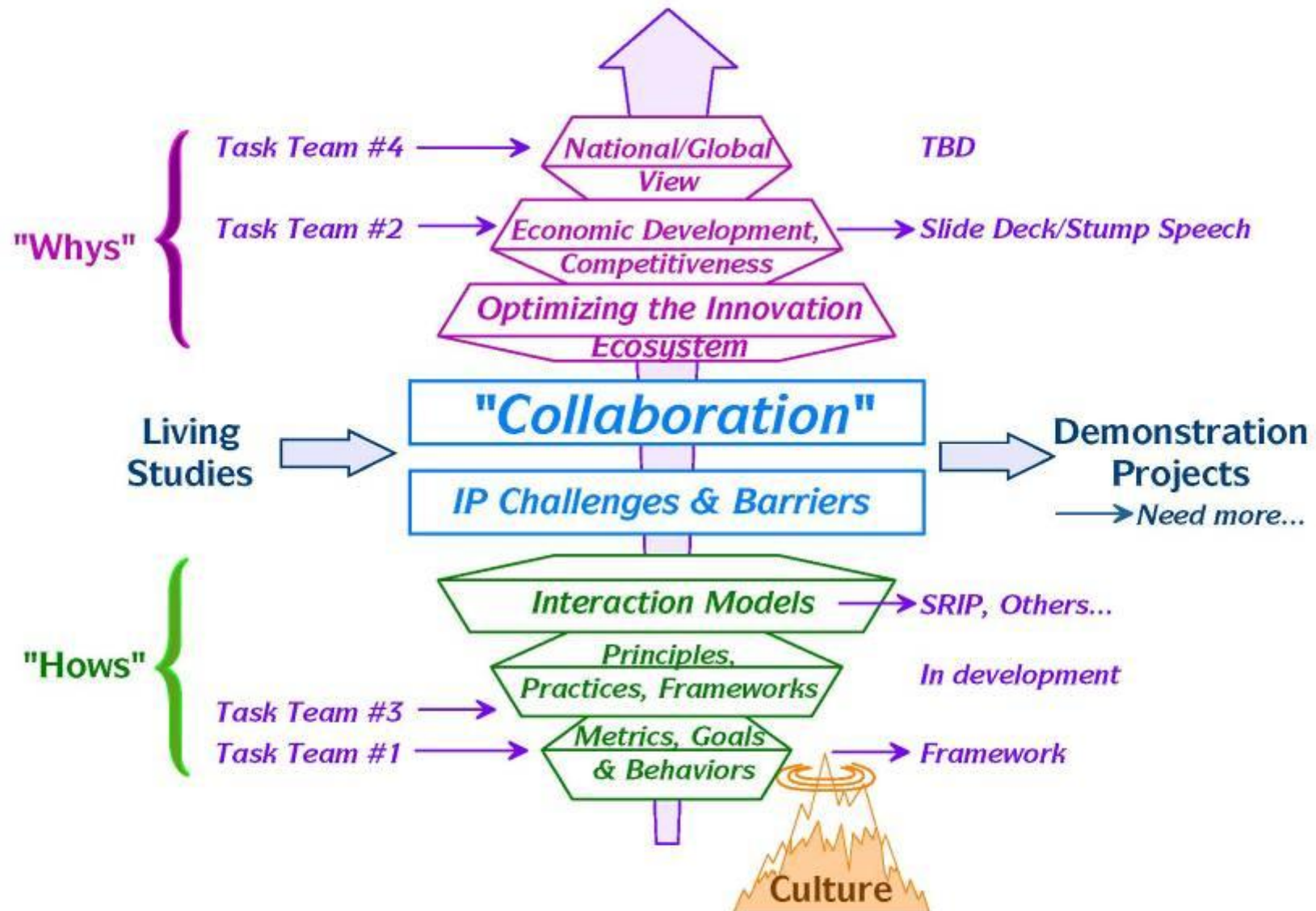
Multi-level Approach

"Multi-level exploration can uncover new approaches and solutions not previously available..."

Grounding This Work:
1. Goal = Collaboration
2. Outputs = Prins, Prac.
FWs → Obj, Motivations
3. Bias towards action
4. Learn from Living Studies
5. Publish a document

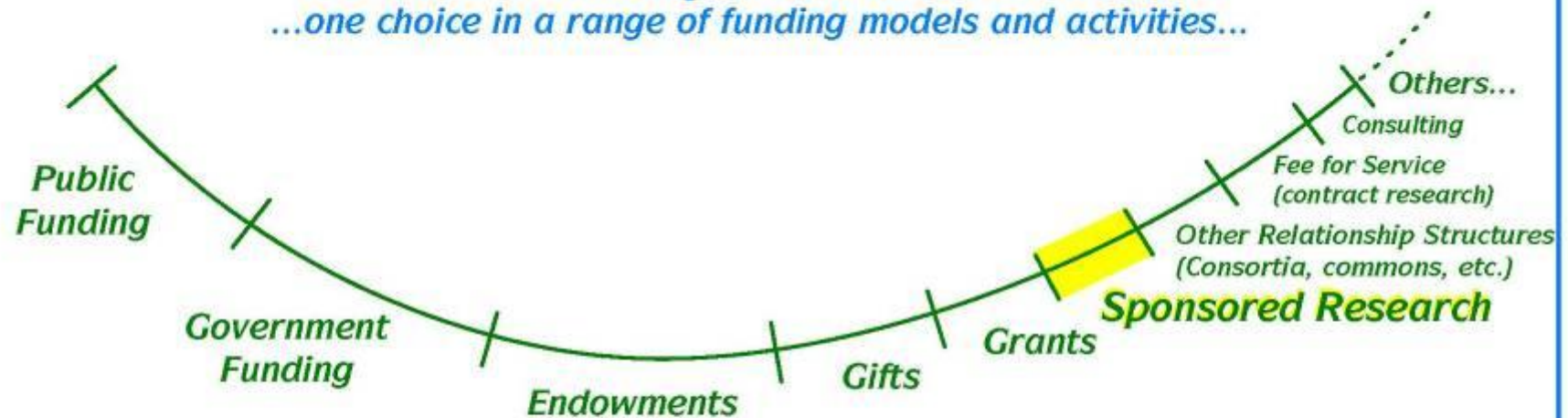


Aligning Across Goals & Focus Areas



Context for Sponsored Research

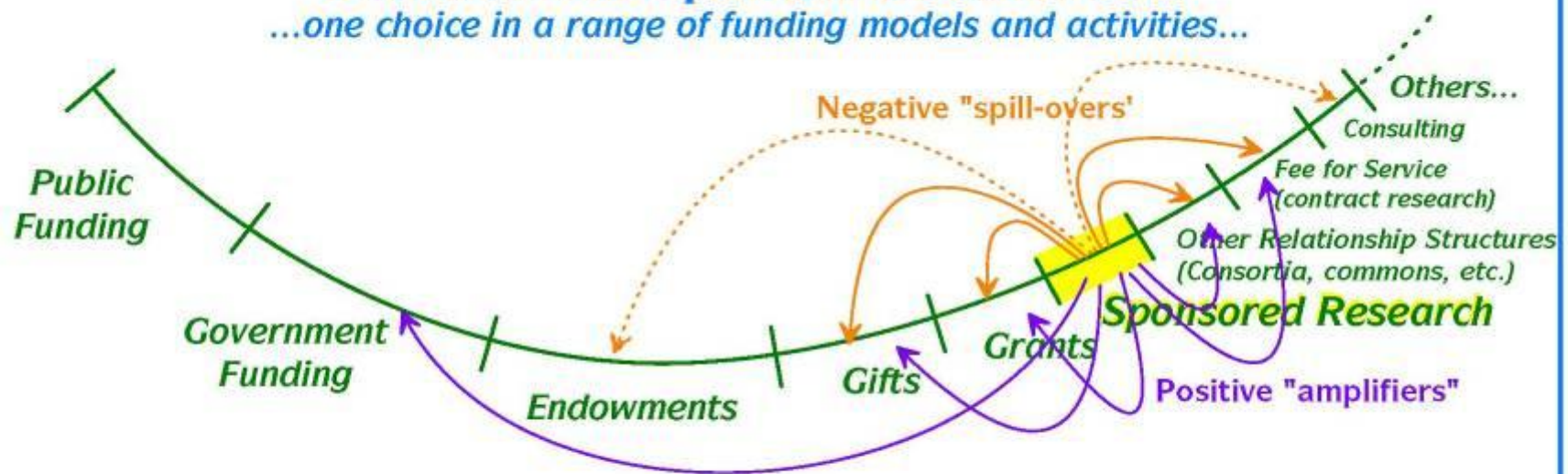
...one choice in a range of funding models and activities...



- ☐ Range of funding options and activities that the university community derives support from
- ☐ Understand the context for sponsored research activity, within the total range of activities

Context for Sponsored Research

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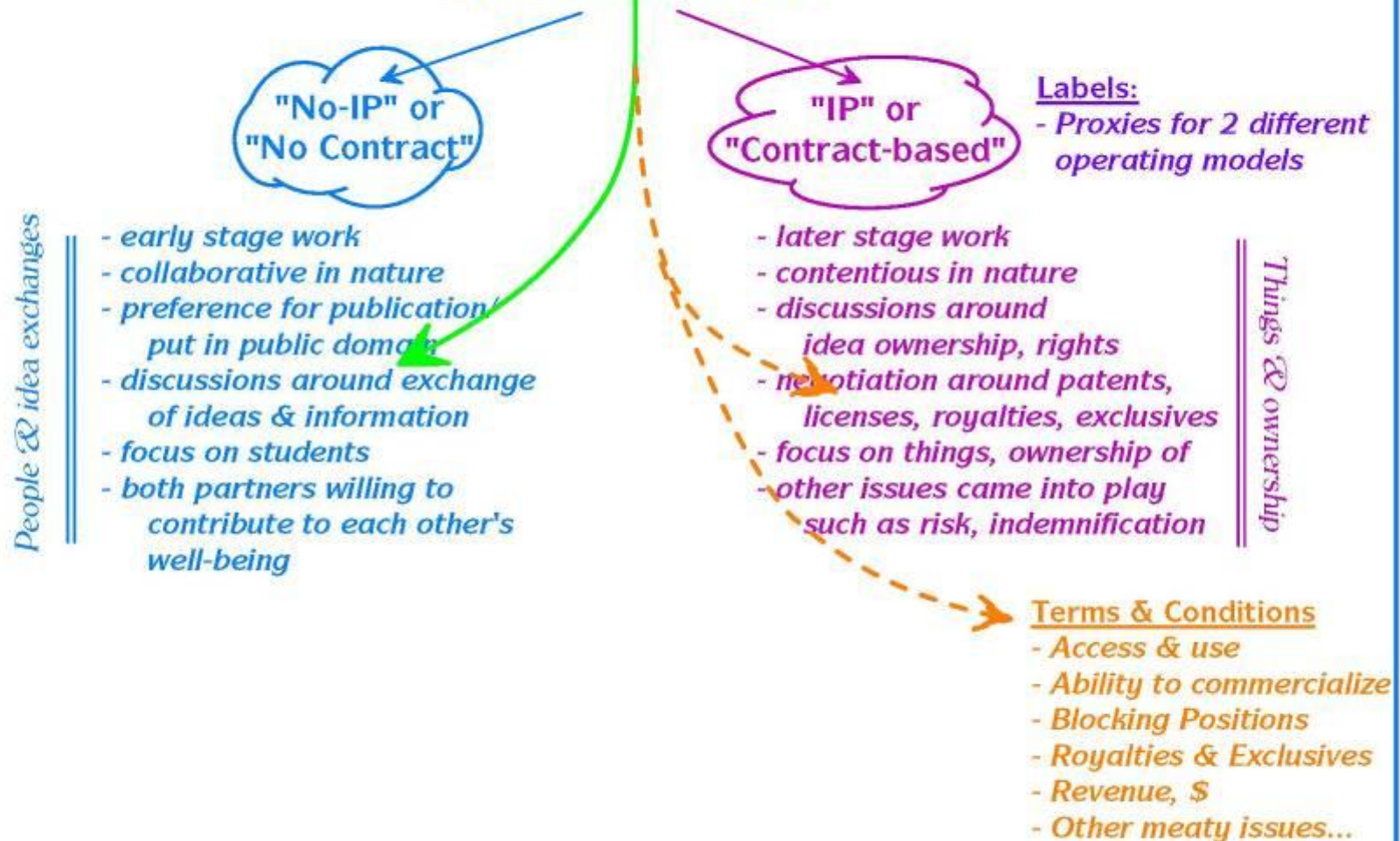


- ❑ Range of funding options and activities that the university community derives support from
- ❑ Understand the context for sponsored research activity, within the total range of activities
- ❑ Look at the "spill-over" effect -- how the experience in negotiating and conducting sponsored research can affect the other activities and areas
 - impact reputation, brand, and perception of both companies & universities
 - impact the desire to do future work together, and with others possible partners
 - provide both direct and indirect benefits (or liabilities)
 - can provide additional leverage in proposing and securing other work opportunities

Models Underlying Sponsored Research

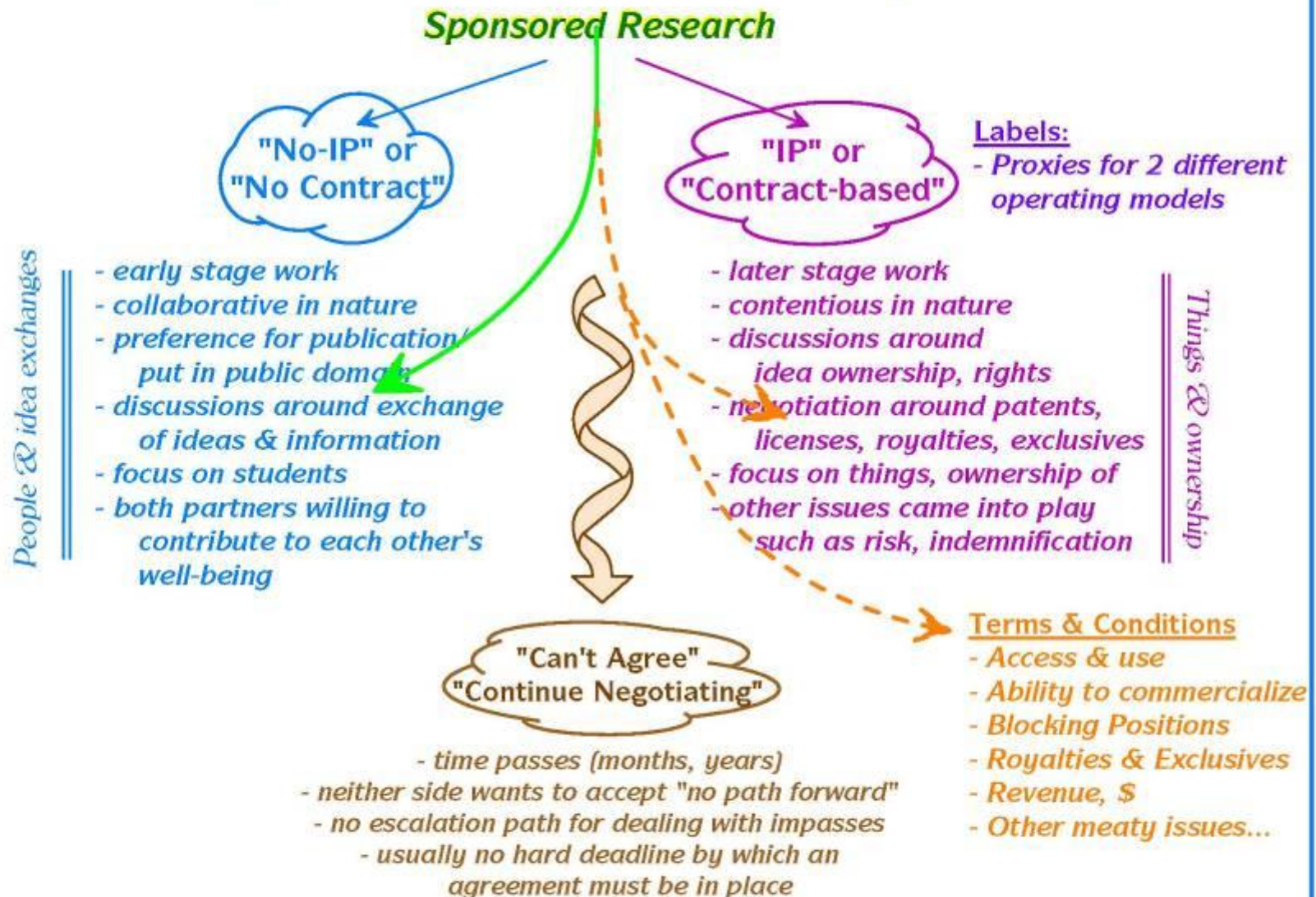
...understanding the patterns of experience and what happens in execution...

Sponsored Research



Models Underlying Sponsored Research

...understanding the patterns of experience and what happens in execution...



...a framework for synthesizing living studies & other experiences...





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Progress and Accomplishments

- Exploring the dynamics of the space to find solution elements
- Built a community of committed leaders
- Established an informal network among leaders
- Conducted 6 large group meeting events
- Hosted monthly supper clubs
- Established “collaboration” as the goal/focus
- Learned from 7+ Living Studies
- Developed and applied a rich set of models
- 4 Task Teams
- 2 Demonstration Projects (initial successes)
- Established & codified 1 interaction model (SRIP) and key elements (success pattern used in demo projects)
- Identified a set of metrics and leading indicators for collaborative structures
- Contributing/sharing results with GUIRR and other related efforts

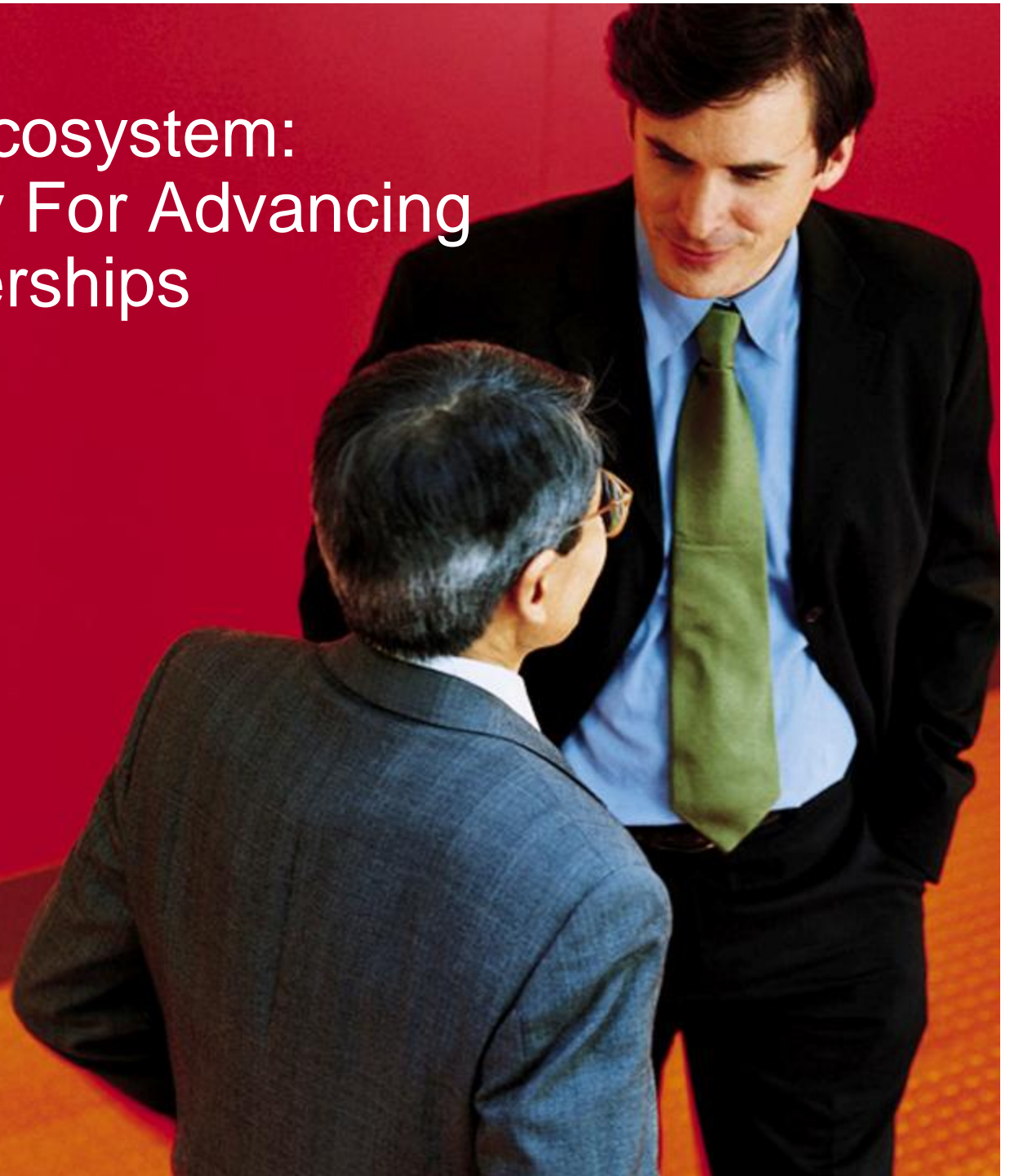


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Key Learnings in the Negotiation Process

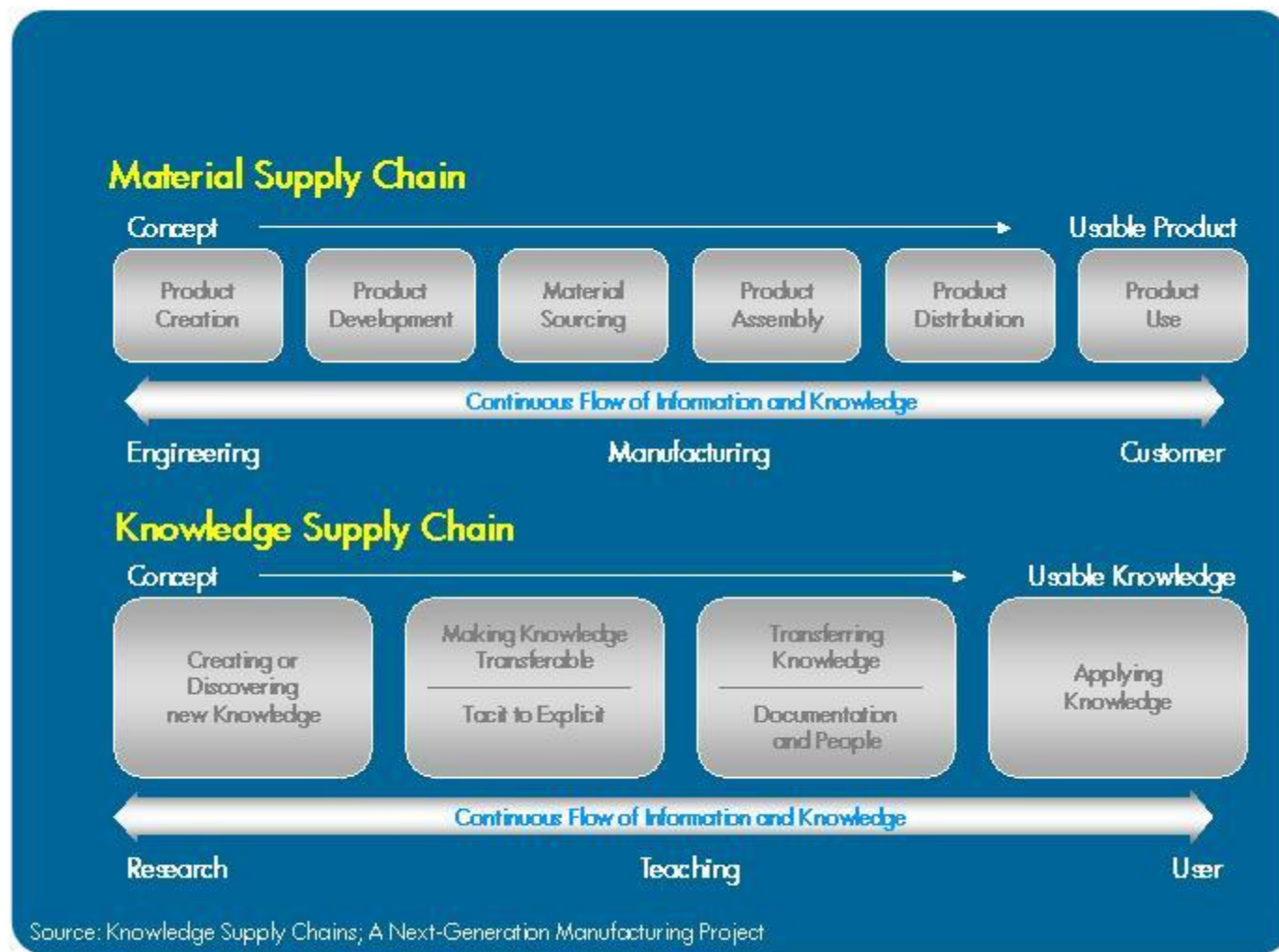
- The importance of having a process
 - Having the teams agree to use the process for the entire negotiation
 - Securing strong sponsorship and commitment to making it work
 - Recognizing the SRIP process is parallel and iterative, not linear
- The importance of getting the right people together in teams in each entity, with clearly defined roles and responsibilities for each member
 - Having a lead person in each team, accountable for getting to a timely agreement
- Meeting face-to-face to build relationship and rapport among the members
- When stuck, be ready to elevate reasoning to a higher-level of intent, relationship, and how this work can benefit both sides

Changing the Ecosystem: The Opportunity For Advancing Strategic Partnerships



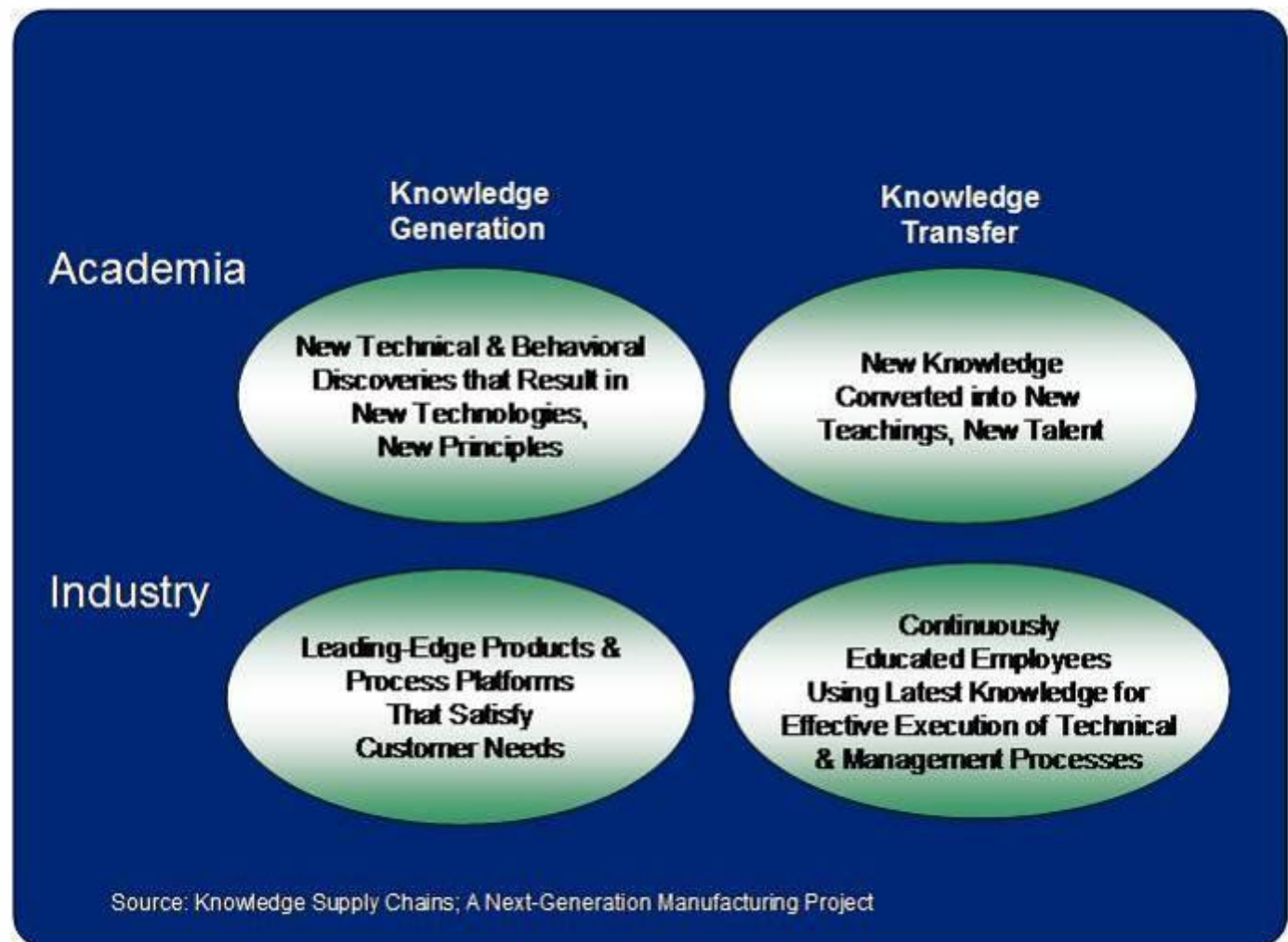
Knowledge Supply Chain

- Universities and industry generate knowledge and transfer knowledge.
- Barriers between the two cultures impact the ability to create new knowledge to satisfy society.



The Knowledge Process Today

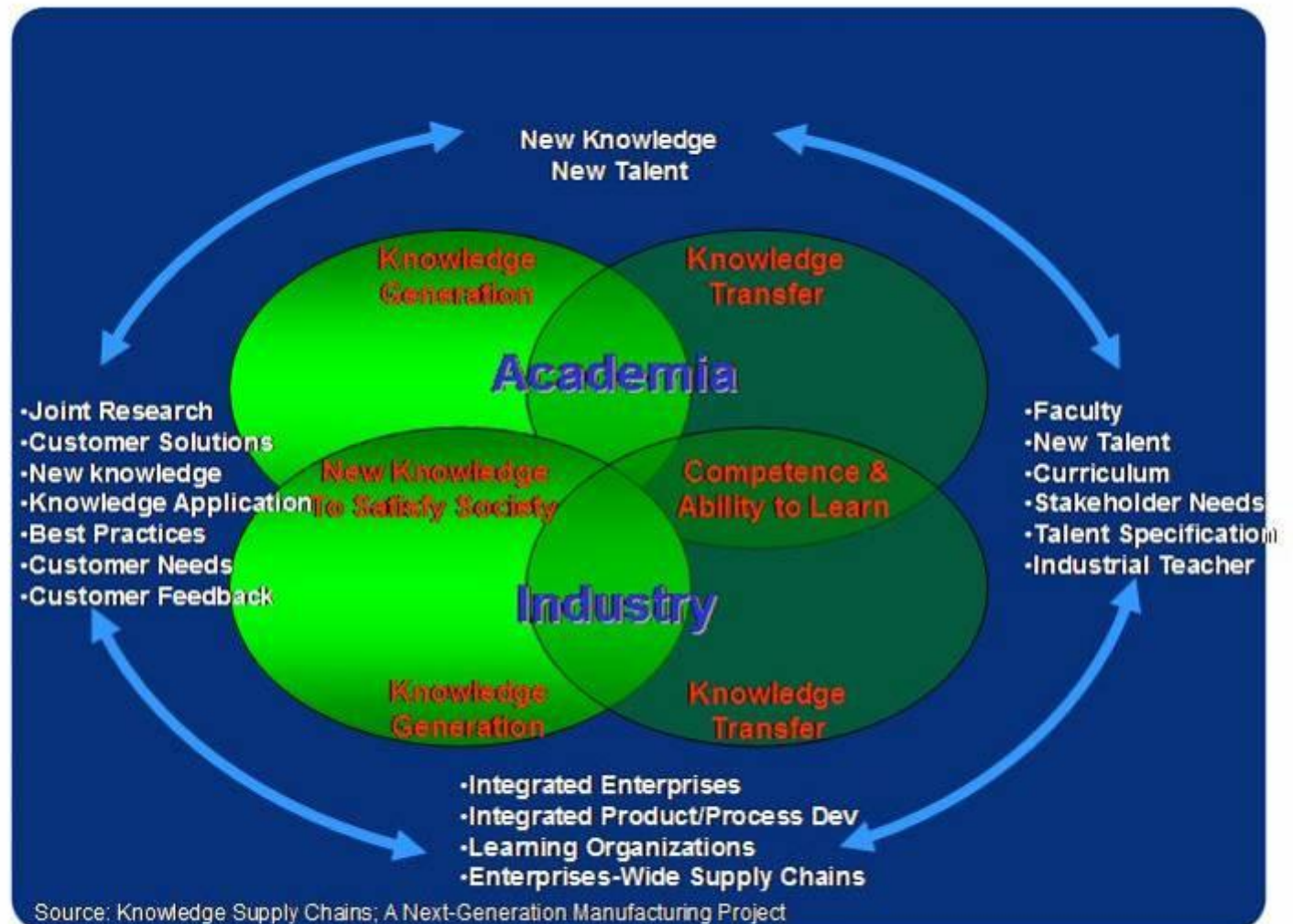
- Partners need to understand how they fit in an integrated knowledge process.
- Each partner is responsible to help others succeed.
- Partners must be part of a continuous, free flow of information and knowledge.



The Knowledge Process of the Future

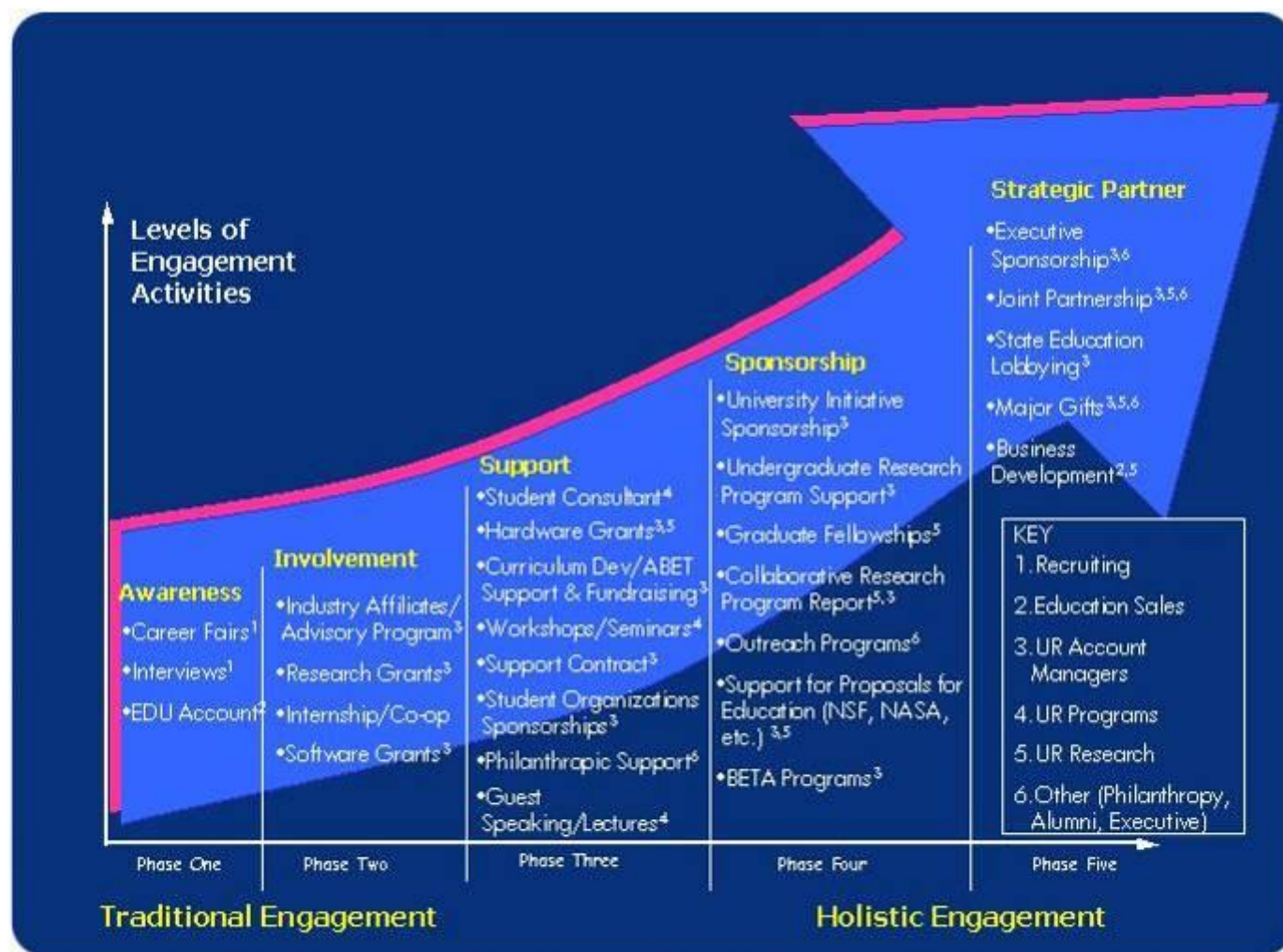


- Outcomes for industry include more effective access to knowledge => reduced technology development cycles.
- Outcomes for universities include increased funds and capacity for pursuing relevant basic research.



The Partnership Continuum

- An increasing level of trust is developed in the partnership.
- The relationship becomes a holistic engagement in the strategic partnership phase.



Reminder ...

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Summary

- Any IP-focused interchange must enhance the relationship ...
- And accelerate mutual collaborative efforts ...
- And be generative in its ability to catalyze further interactions and synthesize the perspectives of multiple players.
- Going forward, we want to:
 - Broaden our understanding across different industry spaces.
 - Develop additional collaborative models.
 - Instantiate learnings and experience in additional demonstration projects.

