



The Duality of University/Industry Technology Transfer:

Opportunities for novel collaboration and value creation

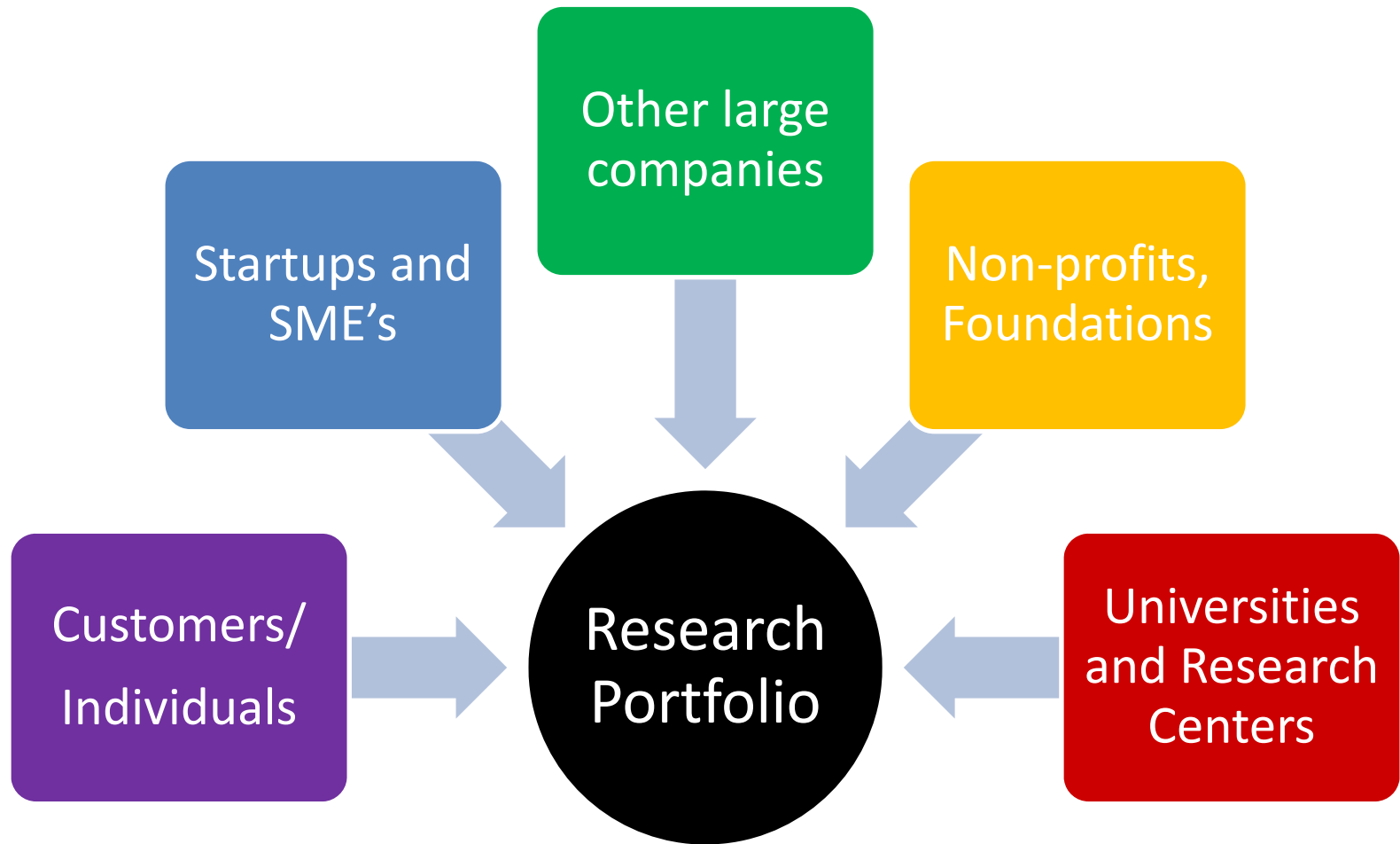
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The innovation ecosystem – Where do companies find the best ideas, particularly for *brand new* businesses?



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Where

Customers/individuals



Why

Sustaining innovations, alternative applications, service opportunities

Startups and SME's



Acquisition targets, disruptive innovations

Other large companies



Primary competition (partners) – product features, pricing, etc.

Nonprofits, foundations



IP licensing (ex. OS software), funding

Universities, research centers



IP licensing, recruiting, consulting, basic research



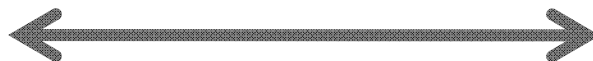
But why look to universities for ideas and collaboration?

After all, universities are slow, unfocused, have too much bureaucracy, nothing is proprietary, negotiating takes too long, ideas often are overvalued by TTO's and aren't developed enough for product development...

Why do universities partner with industry?

After all, companies are cut-throat, only about the money, want to take advantage of faculty and students, business managers don't understand anything technical, have too much bureaucracy, everything is proprietary, and they undervalue our IP...

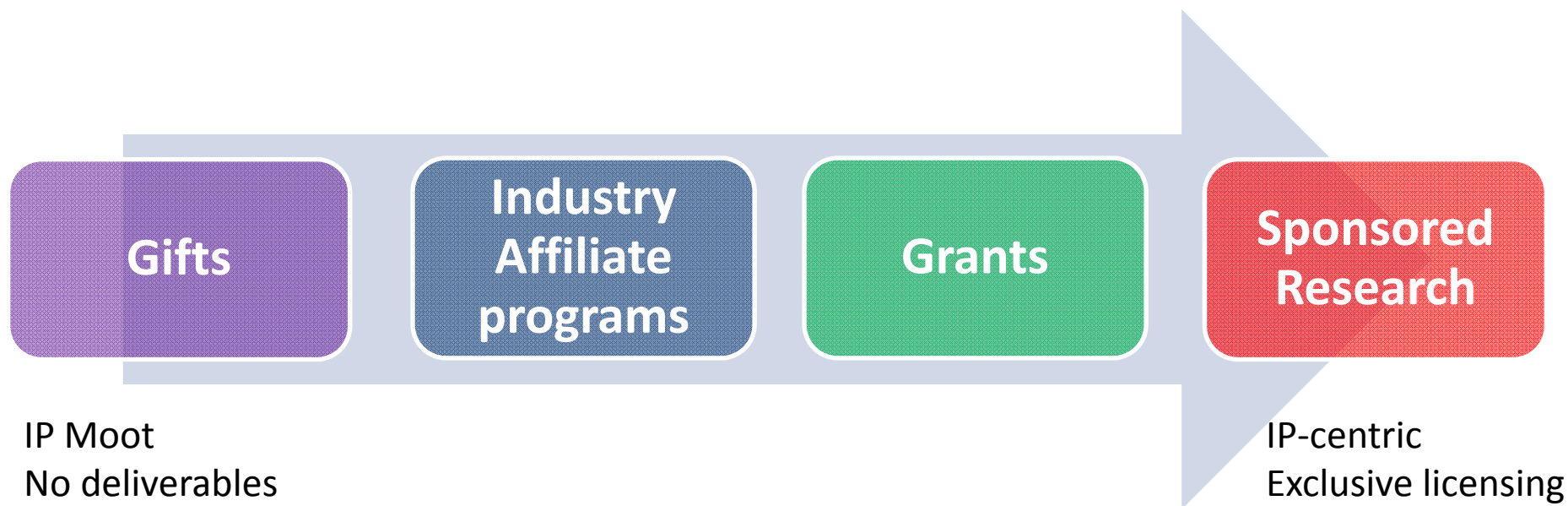
“The risk isn't worth the investment!”



“Why don't you see the potential?!”



In fact, a continuum of research relationships exists based on the nature of the IP agreement



IP Moot
No deliverables

IP-centric
Exclusive licensing

Corporate expectations:

Public relations,
Access

Access, Facilitated
recruiting

Access to ideas,
Training

Productive research,
IP, Access to expertise

*Disclaimer: Continuum reflects the Berkeley model of tech transfer, which focuses on social impact, innovation acceleration, enabling technologies, collaboration, sharing, PPP's, etc. (remember, IPIRA reports to the VC of Research here)



Berkeley and Intel: a 17-year love affair



Over the course of the relationship, Intel and Berkeley had gone through the full continuum of U/I trysts:

Gifts

Faculty Consulting

Extensive graduate student recruitment

Subscribed to reports of all IT activity on campus

Membership in affiliate programs/consortia

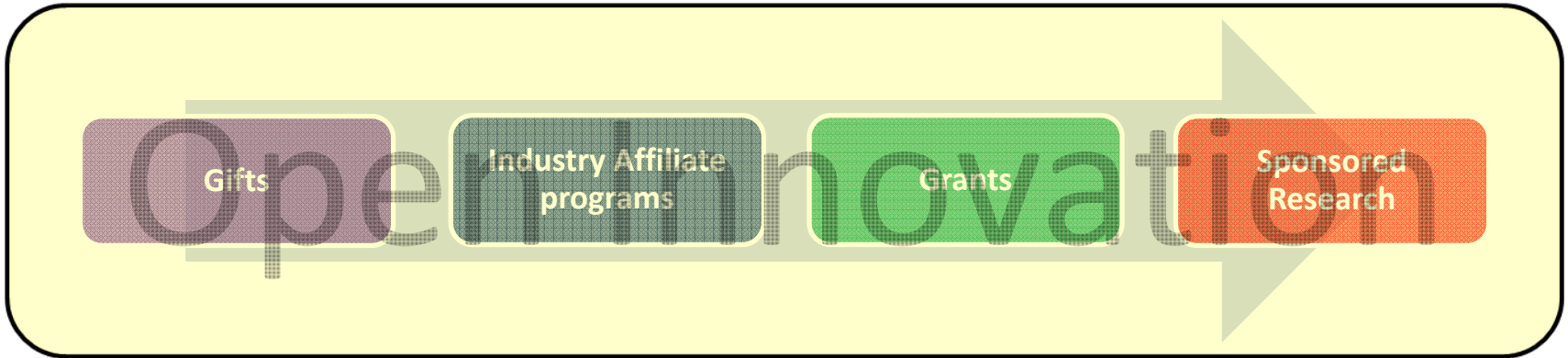
IP Licensee

Traditional sponsored research

But something was still lacking in the relationship....

Open Collaboration!

But where does Open Innovation fit in the continuum?



Answer: It depends.

What is the definition of “open” to the university and to an interested industrial partner?

Openness, flexibility, accessibility, sharing, collaborating

Intel wanted to conduct high risk, bottom-up research with its staff side-by-side with Berkeley researchers



The Intel Lablets follow an Open Collaborative Research Agreement

Intel

Universities

Motivation:

Exploring future markets, blue-sky research; redundancy (opened 4 Lablets) ; recruiting

Access to Intel resources, conducting cutting-edge academic research

IP/"Outputs":

Little anticipated IP, NERF if patents resulted; publish findings

Publications, conferences, ownership of Berkeley-generated IP, FTO

Incentives:

Early access to and expertise in the latest and leading ideas in the field

Access to Intel resources, opportunities to test research with experts on the commercial side, employment for students

Financing:

Free from short-term profit pressures; rental space

Berkeley finances its own research; *Guests in Intel's space*

Staffing:

50/50 Intel/Berkeley researchers (scientists, faculty, and students)

Berkeley graduate students and faculty paid

Management:

Co-director, responsible for day-to-day management and reporting back to Intel

Official director, sets research agenda, responsible for hiring and protecting the interests of the University



But what does all of that really mean?

Intel wants highly speculative, blue-sky research, “non-competitive”

Read: Lablets do NOT work on microprocessors. The goal is to expand the ecosystem.

The Lablet project timeframe aligns well with Intel’s *off-roadmap* projects (8-10 years). Consequently, IP is pretty moot.

Berkeley wants to preserve the integrity of academic research and to prevent the perception of “selling out.”

No problem: A Berkeley faculty member is the top of the Lablet foodchain and maintains the culture of “publish early, publish often.”

Intel’s costs stay down by not footing Berkeley’s bill, and Berkeley doesn’t have to pay for access to Intel’s toys (drool), which enables projects never before possible.

The Intel Lablet model: A singular alignment of the stars, or a template for other U/I collaborations?

Not all love lasts: Intel Cambridge closed in 2006

No one else is playing in the sandbox

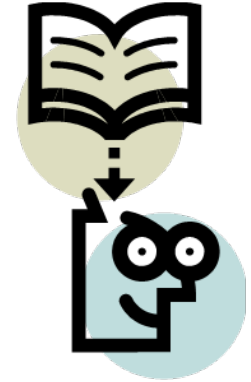
My current work:

1. Identifying and describing key OCRA success factors and deal breakers
What features must companies and universities possess to make this kind of relationship work sustainably?
2. Finding standard outputs to measure. Open Innovation metrics of “success” are tough. What can be measured to keep the powers that be happy?
3. Identifying industries outside of IT as possible suitable (or terrible) candidates

So why aren't more companies attempting OCRA's?

What does a good OCRA candidate company look like?

- ✓ Large, extremely high market share
- ✓ Significant R&D budget
- ✓ Fearful that key techs could be disrupted
- ✓ Pursues entirely new businesses
- ✓ Willing and able to explore off-road map technology
- ✓ Experience in partnerships involving a high degree of trust



Acknowledgements

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Useful Reading:

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