

A Brief History and New Frontiers in Open Innovation

Innovation Conference in Luxembourg

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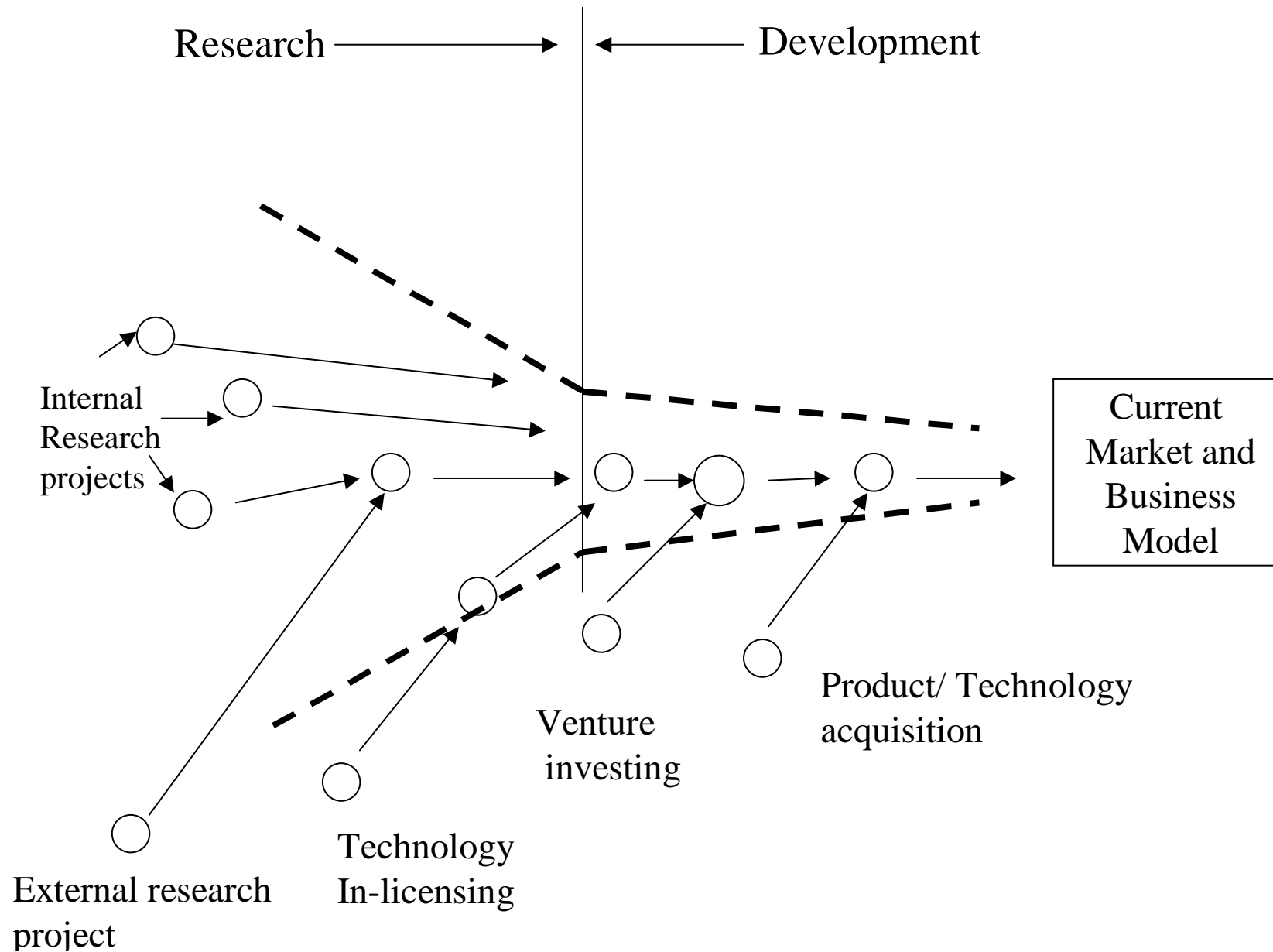
Origins of Open Innovation

- April, 2003: publication of Open Innovation
- Google search on “open innovation”: 200 links
- April, 2013: ten years later
- Google search on “open innovation”: 453 million links
- Obviously much more than any one person
- But I am privileged to have been present at the creation.

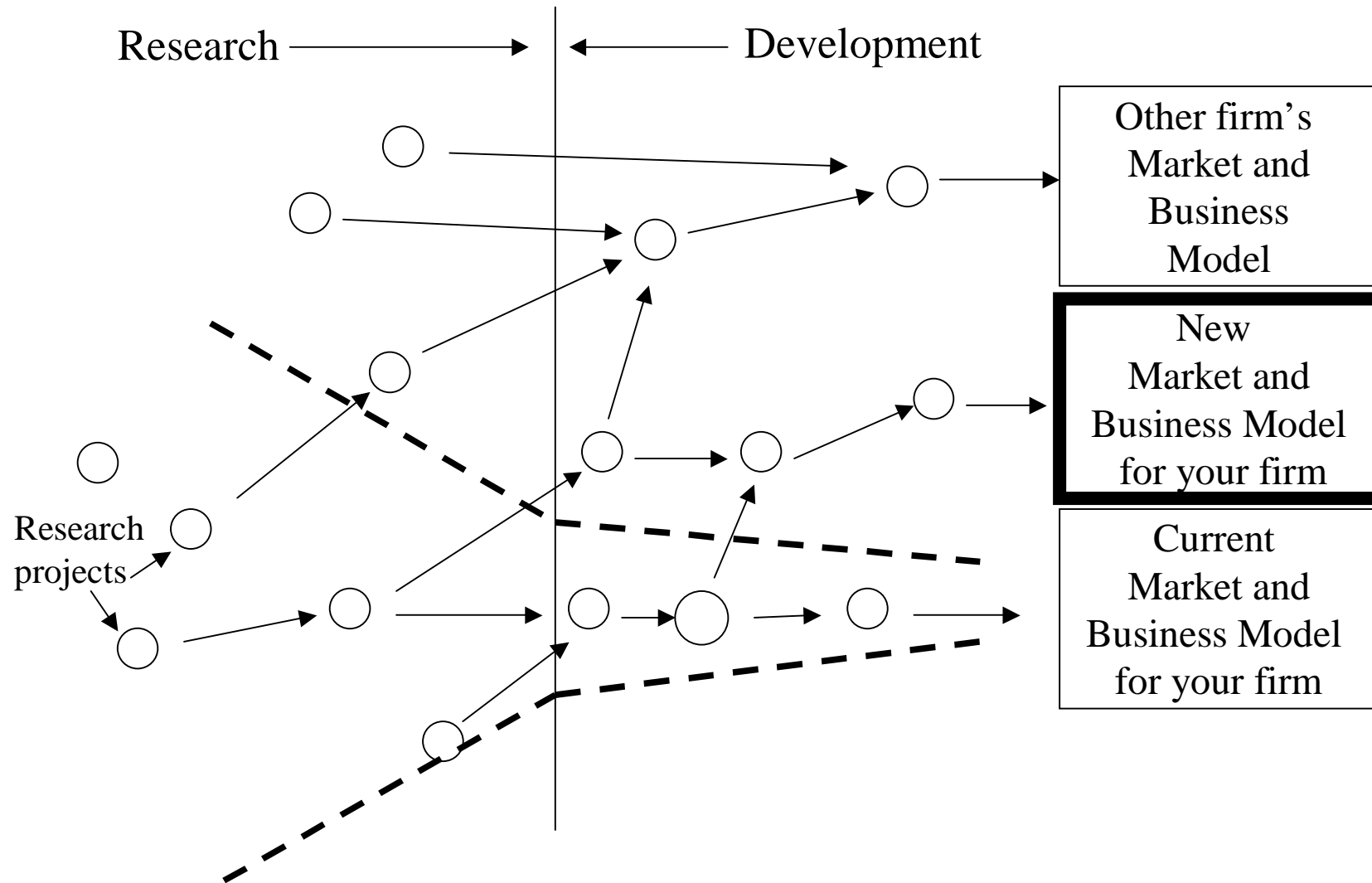
Points of Differentiation for Open Innovation, relative to prior theories of innovation

1. Useful industrial knowledge is abundant, not scarce
2. Equal importance of external knowledge to internal
3. Spillovers can be managed, not only unintended
 - a) Outside-in
 - b) Inside-out
4. The business model is central for commercializing R&D
5. Type I and Type II errors in R&D project evaluation
6. IP must be managed strategically for innovation
7. The rise of innovation intermediaries and crowdsourcing
8. New metrics needed to assess innovation performance

Job #1: Strengthening the Current Business



Job #2: Finding and Growing the New Business



Caution! Divergent Definitions of “Open Innovation”

Open innovation:

“... the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively.”

(Chesbrough, Vanhaverbeke and West, 2006: p.1)

Open collaborative innovation:

“An innovation is “open” in our terminology when all information related to the innovation is a public good—nonrivalrous and nonexcludable.”

(Baldwin & von Hippel, 2011: p. 1400).

More contrast

Chesbrough et al

- Ideas can come from anywhere
- Ideas must be commercialized through business models

Von Hippel

- Users are the source of many innovations
- Users benefit directly from sharing
- No need for a business model

Some Signs of Convergence: Dahlander and Gann, 2010

Inbound	Sourcing	Accessing
Outbound	Selling	Revealing
	Pecuniary	Non-Pecuniary

First Large Scale Survey of Open Innovation in Practice



Fraunhofer

Executive study
UC Berkeley and
Fraunhofer

- **Sampling among the largest firms in Europe and US**
 - **Firm criteria:** >1000 employees and >250 million USD in sales
 - **Key informants:** CEO, COO, or CTO at headquarter
- **Data collection**
October– December 2012
- **Sent to CEO, CTO if known**
- **125 responses received**
(5 % response rate)



**Adoption of open
innovation**

Abandonment

**Open innovation
experience**

**Management
support**

Intensity

Open Innovation in Practice



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Adoption of open
innovation

78% practice open
innovation today

Abandonment

No firm has abandoned
open innovation

Open innovation
experience

Median of **5 years**

Management
support

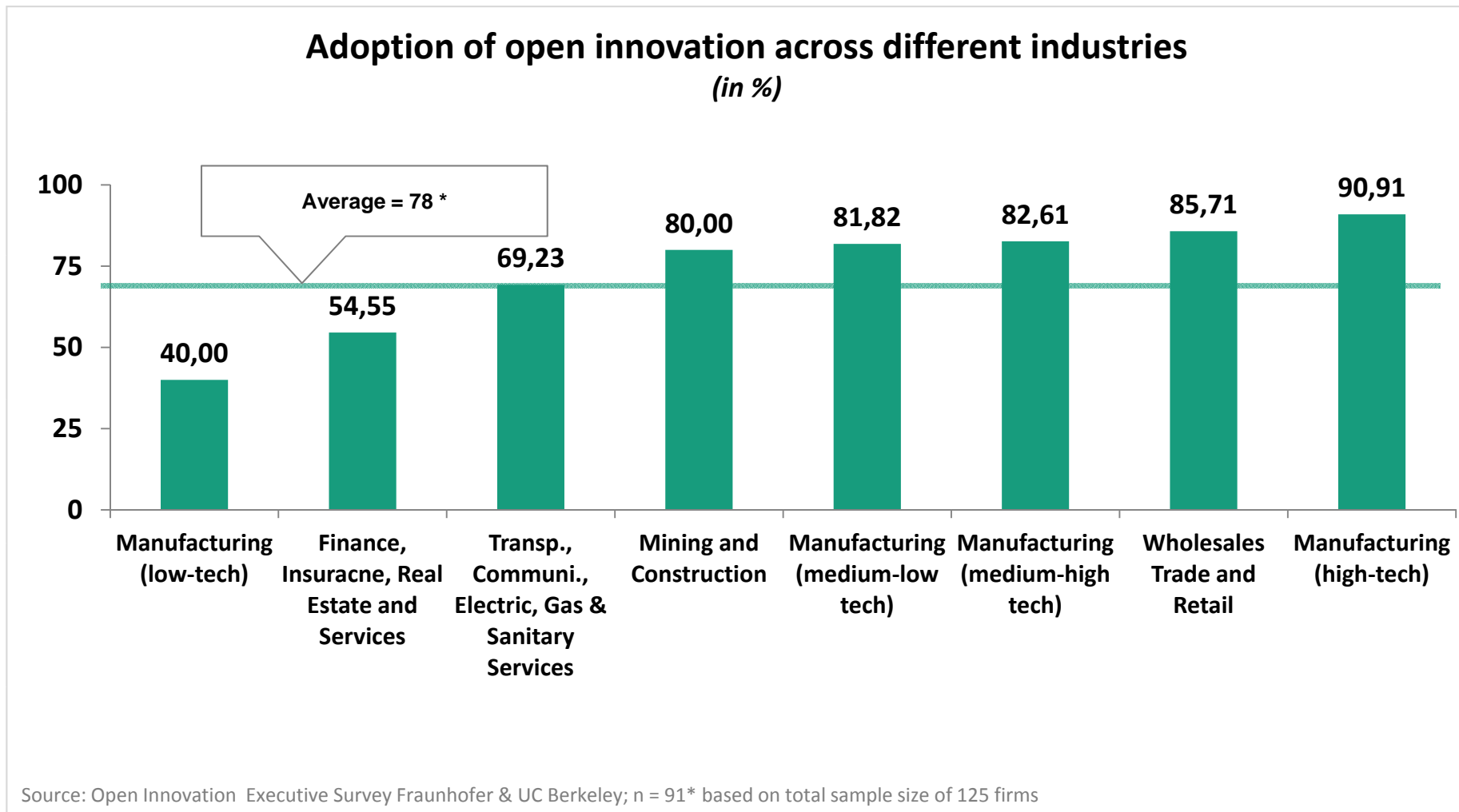
71 % have increased
management support

Intensity

82 % have increased open
innovation activity

Results 3.1.1 and 3.1.2

Figure 1



What is your annual budget for Open Innovation?

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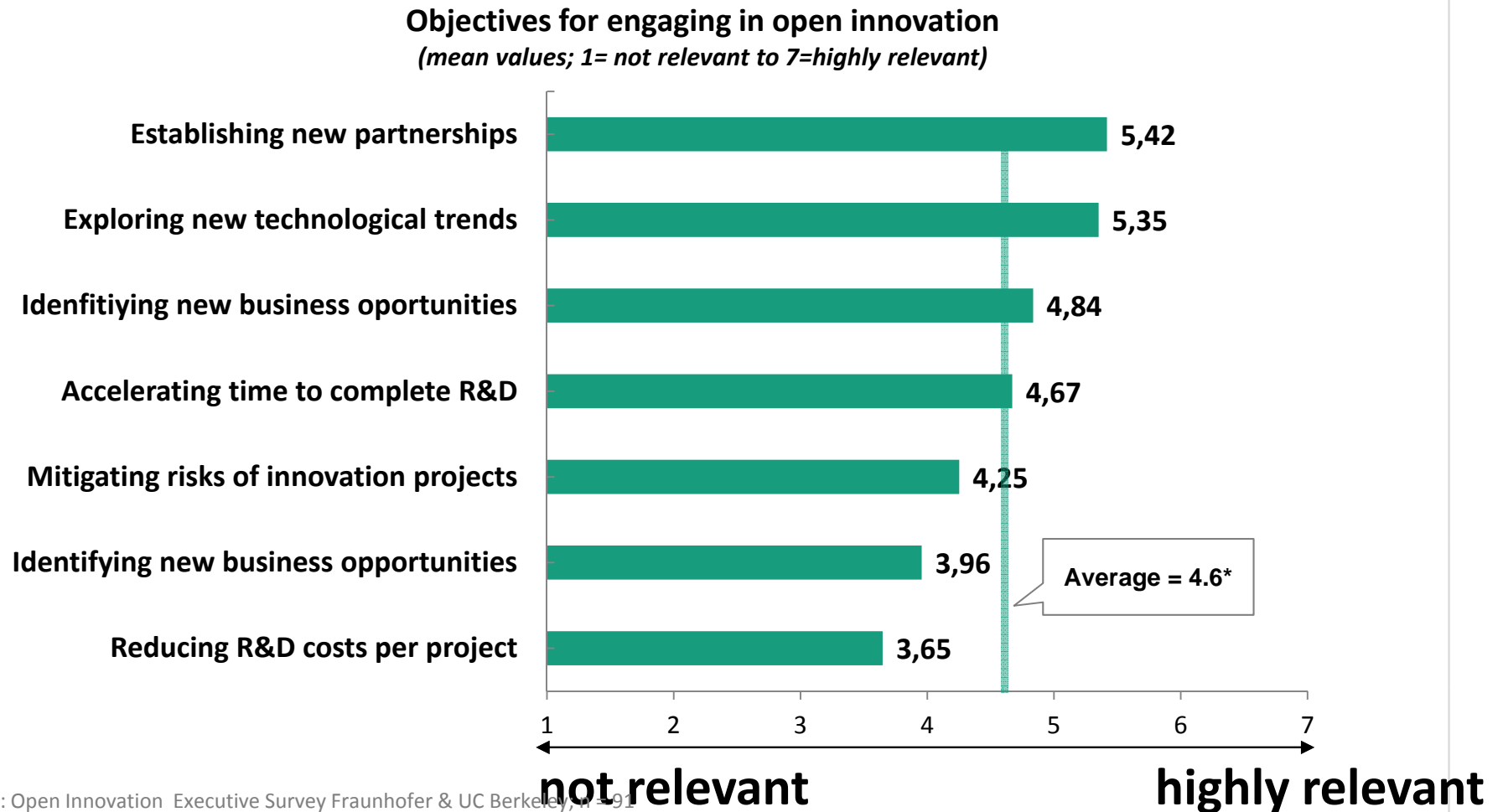
- US\$ 2 million
- ~ 10 FTEs

What are your objectives for OI?

- New Partnerships
- New Technologies
- New Business Opportunities
- Accelerate Time to Complete R&D
- Manage risks of innovation
- New revenue sources from R&D
- Reduce costs of R&D
- Other?

Results

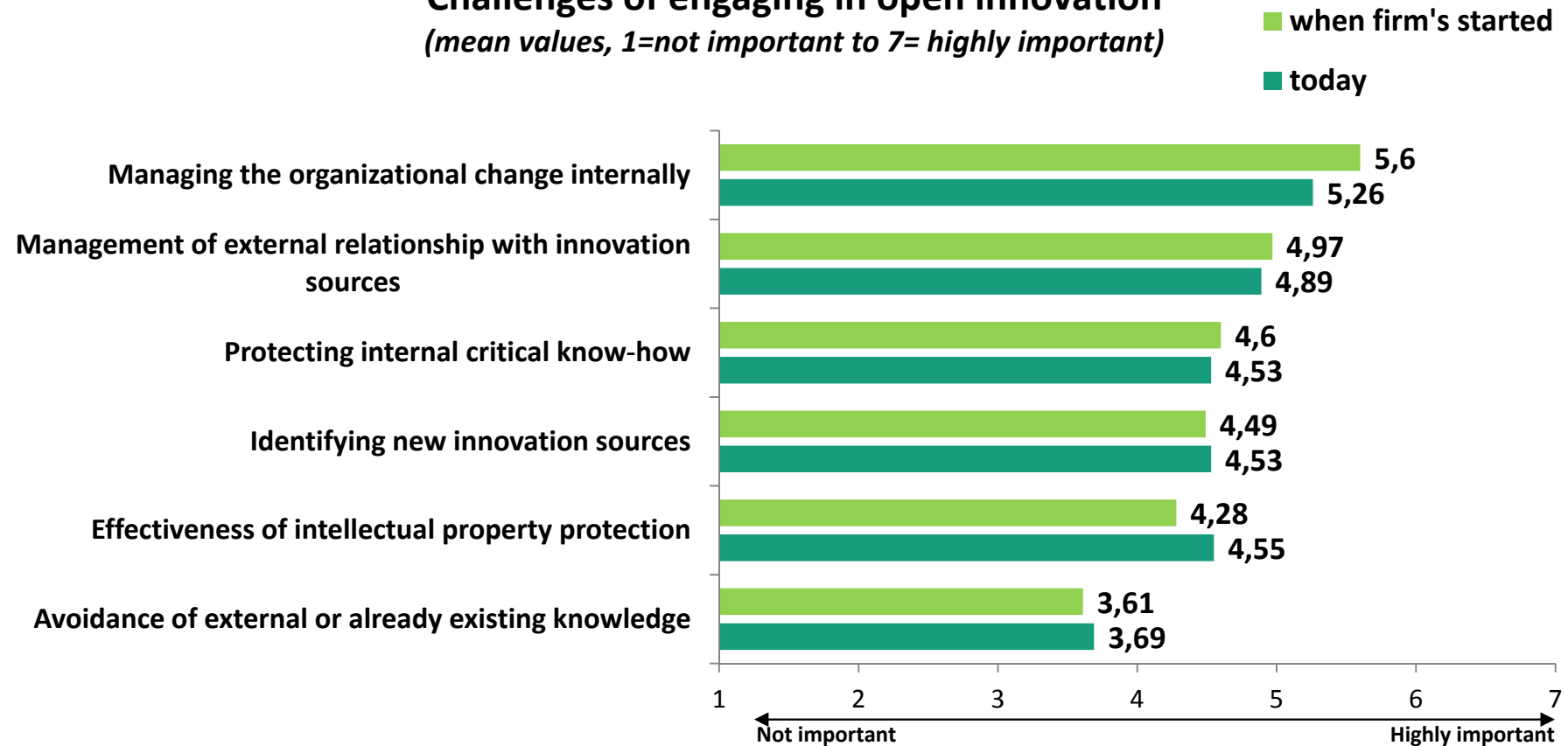
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What are the biggest organizational challenges with OI?

5.4.1

Challenges of engaging in open innovation (mean values, 1=not important to 7= highly important)

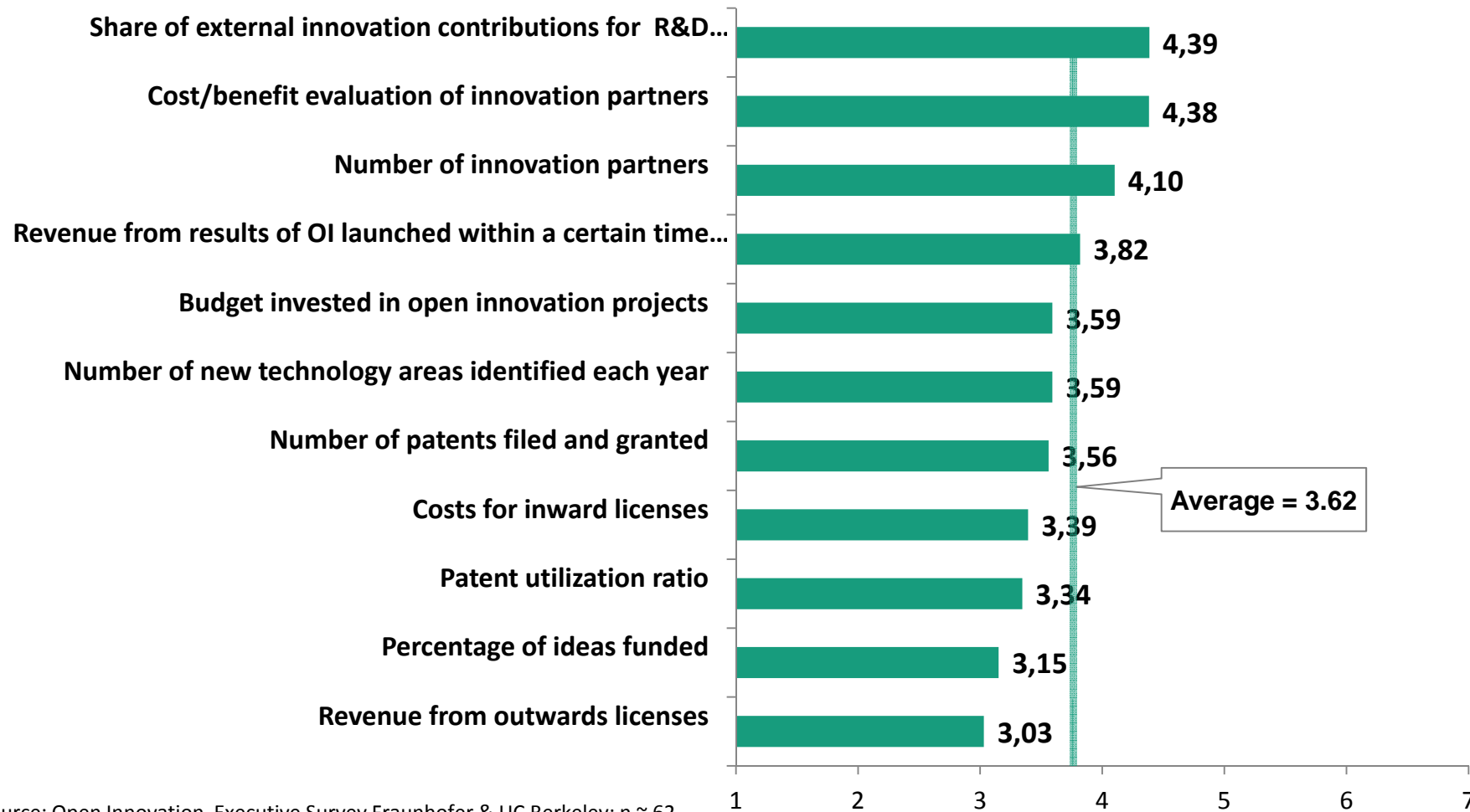


Source: Open Innovation Executive Survey Fraunhofer & UC Berkeley; n = 68

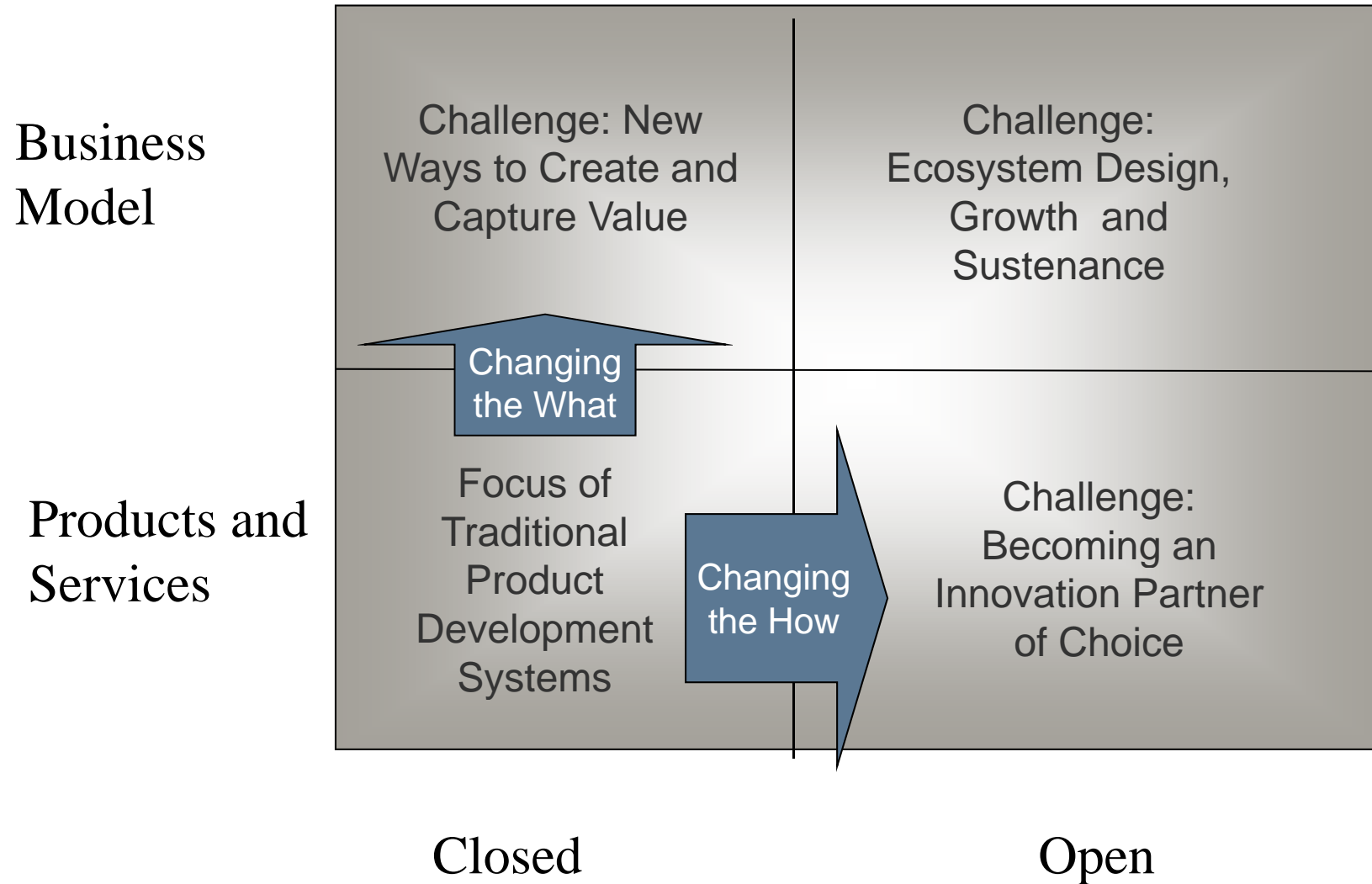
What Metrics Do You Use for Open Innovation? How Satisfied are You with these Metrics?

Satisfaction with open innovation measures

(mean values; 1 = highly dissatisfied to 7 = highly satisfied)



Sustaining Innovation Capabilities: *What You Innovate* and *How You Innovate*



Business Model Innovation vs. Technology Innovation

- Most companies have processes to advance technologies, and spend millions to do it
- Few, if any, of these same companies have processes and budget to explore business model innovation

No Business Model Lasts Forever

- Every business model has an expiry date
 - Alex Osterwalder
- If companies fail to find a new business model, they eventually become disposable.
 - Steve Blank

Discovering New Business Models

- Business models do not emerge from planning. They emerge from discovery.
- There is a robust, validated model of business model discovery from startups
 - Business Model Canvas
 - Customer Development
 - Agile Development
- How do these apply in a corporate context?

Barriers to Escaping the Business Model Trap

- Business Model Innovation Requires New Configurations of Assets (Amit and Zott)
 - Managers of these assets support the Status Quo
- Christensen – resource allocation processes drive behavior to support Status Quo
 - *‘Disruptive technologies is a misnomer. What it is, is trivial technology that screws up your business model’*. Andy Grove, Intel CEO
- Chesbrough and Rosenbloom – cognitive trap

Differing context for entrepreneurship

Startup

- High risk, high reward
- External focus
- Governance by owners
- Clean sheet of paper
- No initial assets to leverage

Corporate

- Lower upside, lower downside
- Internal and external focus
- Governed by managers as one of many corporate priorities
- Must not disrupt core business
- Try to leverage corporate assets

Source: H. Chesbrough, Designing Corporate Ventures in the Shadow of Private VC

Role of CEO

Startup

- Founder(s) is the creator of the business model
- CEO owns the business model
 - Pivots until a viable model is discovered
 - Then focuses on scaling it

Corporation

- Initial founder may be long gone
- Chief Execution Officer
 - Optimizes established business model
 - Drives away the misfits who challenge it



Who owns business model innovation in a large company?

Role of Board

Startup

- Engaged Owners
- High powered incentives
- Know the space
- Bring their own information to complement company info
- Meet every 4-6 weeks

Corporations

- Occasional Monitors
 - Often running their own company
 - Or sitting on many boards
- Rely on company info
- Modest incentives
- D&O insurance required
- Meet 4x/ year

Venture Financing

Startup

- Entrepreneurs must shop around
- Often takes 10 or more pitches to get initial financing
 - One Yes is enough to start
- Subsequent financing driven by performance vs. milestones

Corporate

- Entrepreneurs must go to a single place
 - Many must say Yes, only one No can stop the project
- Subsequent financing driven by performance vs. budget
 - May go up or down, depending on whether company is having a good or bad year

A Possible Future for Open Innovation

- From a tactic like crowdsourcing
 - To a new mindset for organizing innovation
- From a number of individual successes
 - To boundary conditions for success or failure
 - And management actions to increase success
- From for-profit organizations
 - To public and non-profits as well
 - And supportive public policies
- From dyadic relationships
 - To communities and ecosystems

1st Annual World Open Innovation Conference

- Where Theory Meets Practice Meets Wine -

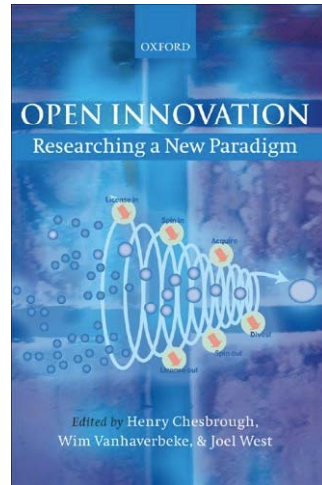


December 4th and 5th, Napa Valley, California

<http://corporateinnovation.berkeley.edu/woic2014/index.html>



2003



2006



2006



2011

New Frontiers
In Open
Innovation

Oxford
University
Press

Oct. 2014