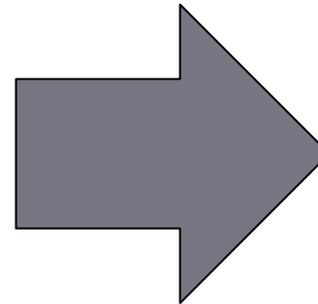


Open innovation today: learning lessons from academic research

Marko Torkkeli

Professor of Technology and Business Innovations
Director at International Society for Professional Innovation
Management

Potential goal?



• €

• £

• \$

• ¥

Examples of trials in US

- Telecommunications Systems v. Mobile 365, (federal jury returned verdict in Richmond on May 25, 2007 finding all asserted claims of patent on inter-carrier text messaging valid and willfully infringed, awarding \$12.1 million and 12% royalty; patent issued in January 2006, so future royalties could be \$150 million)
- Steven E. Byrne v. The Black & Decker Corporation, et al., (obtained noninfringement summary judgment dismissal of major patent infringement action against Black & Decker, involving damage claim of \$60 million on sales of more than \$300 million of accused string trimmer products)
- Muniauction v. Thomson Financial, et al., (jury awarded \$38.5 million to small Pittsburgh-based company founded by two inventors of a system for auctioning municipal bonds over the Internet)
- Black & Decker et al. v. Robert Bosch Tool, (obtained injunction after jury verdict awarding Black & Decker \$1,750,000 (which was increased to \$2,790,497.76) after a finding of infringement of two United States patents relating to radio chargers).
- F&G Scrolling Mouse v. Microsoft Corp., (after a six-day trial, on December 20, 2001, jury awarded two inventors of the concurrent point and scrolling mouse "IntelliMouse" \$16.5 million then increased the award to \$19.2 million; case subsequently settled)
-

Licensing deals done

- **PhoneTel Communications (digital telephone technology) -- \$55 million**
The company enforced the patents of Dr. Kazuo Hashimoto against the computer and telephony industries, resulting in more than 50 licensees and \$55 million in royalties.
- **IMS Technology Inc. (interactive machine control) -- \$50 million**
The company represented a subsidiary company for Hurco Companies, which was set up to enforce and license a patent on interactive control of machine tools against the machine tool industry.
- **Emhart (electrical component sequence verifier) -- \$35 million**
Value of settlement in patent enforcement against competitors was \$35 million.
- **Soundview (V-chip) -- Confidential**
Patent infringement suit and licensing effort on V-chip technology.
- **United Technologies (fiber lasers and fiber optic (FBG) filters and sensors) -- Confidential**
Have negotiated more than 30 licenses throughout the fiber optical industry.

What is Open Innovation?

- Open innovation means that companies (**COUNTRIES**) should make much greater use of external ideas and technologies in their own business, while letting their unused ideas be used by the other companies (**CROSS-BORDER**). This requires each company to open up its business model to let more external ideas and technologies flow in from the outside and let more internal knowledge flow to the outside.
 - Chesbrough, 2006 - modified

Why Open Innovation?

- New business opportunities
- Better understanding of the customers
- Community building around product or technology
- Potentially wider network of innovators
- Potentially faster profit growth

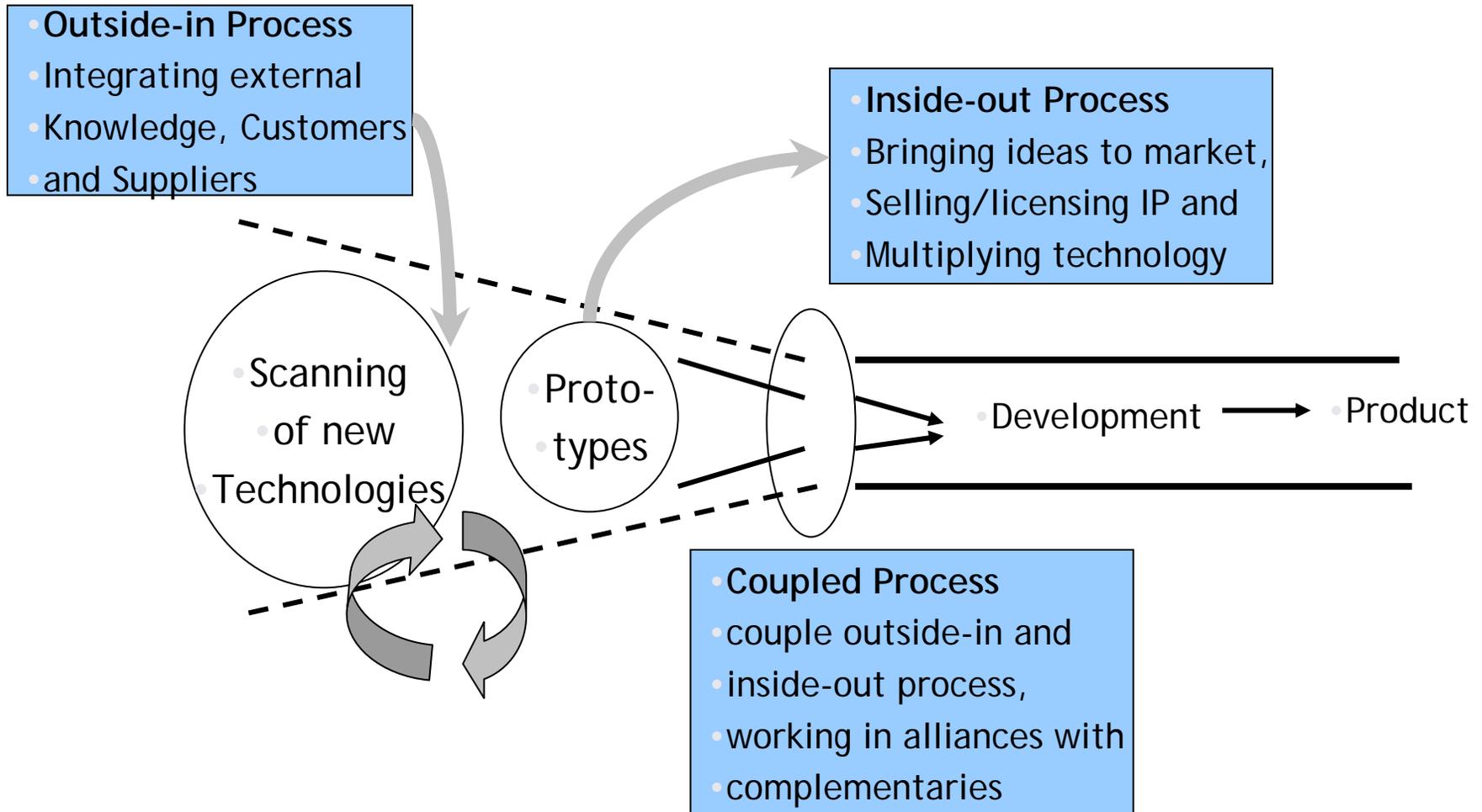
People power

Most significant sources of innovative ideas
% of respondents selecting up to three choices

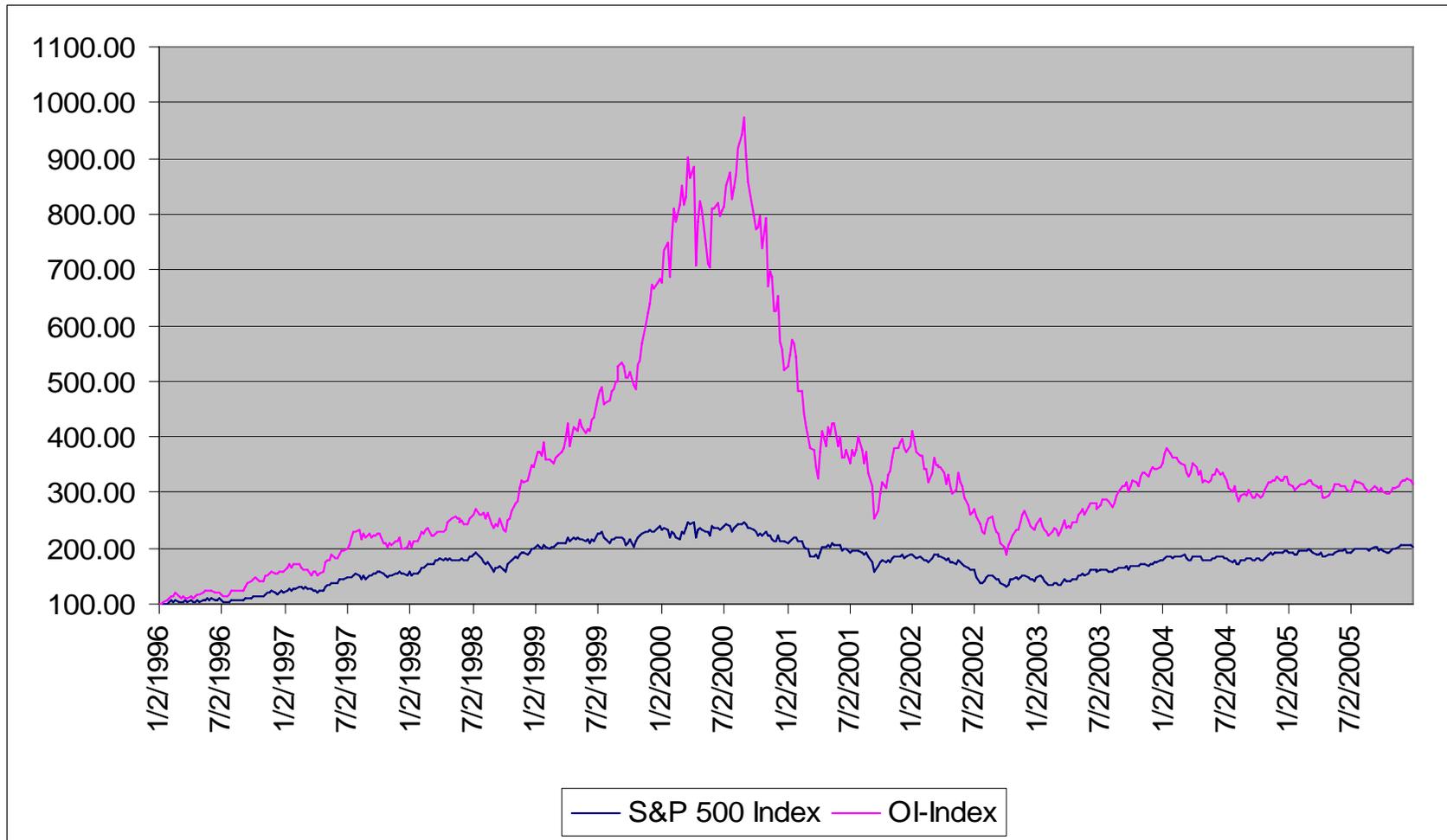


Source: IBM "The Global CEO study 2006", based on interviews with 765 CEOs and business leaders

Three archetypes of open innovation system



Open Innovation is over-performing



- Torkkeli et al (2007), Implementing Open Innovation in Large Corporations: Challenges and Financial Outcomes

Some cases & company examples



- Okmetic



Innovation intermediary

- An intermediary can provide an opportunity to economize on a critical area of efficient investments – the expertise to sort profitable and unprofitable ones.
- Innovation intermediaries are those who facilitate companies' access to external technologies and solutions.

Main functions of intermediaries (Howells, 2006):

1. Foresight and diagnostics
2. Scanning and information processing
3. Knowledge processing and combination/recombination
4. Gatekeeping and brokering
5. Testing and validation
6. Accreditation
7. Validation and regulation
8. Protecting the results
9. Commercialization
10. Evaluation of outcomes

The market in 2009



Conclusions

- Look for the periphery of the firm (beyond usual suspects)
- The division of labor
- All can play, not only lead users
- Traditional RTD helps
- How to collaborate?
- The book for cooking with 'local' ingredients is needed for success.