

# Theory of Open Innovation - possibilities and potential limits

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# Potential goal?



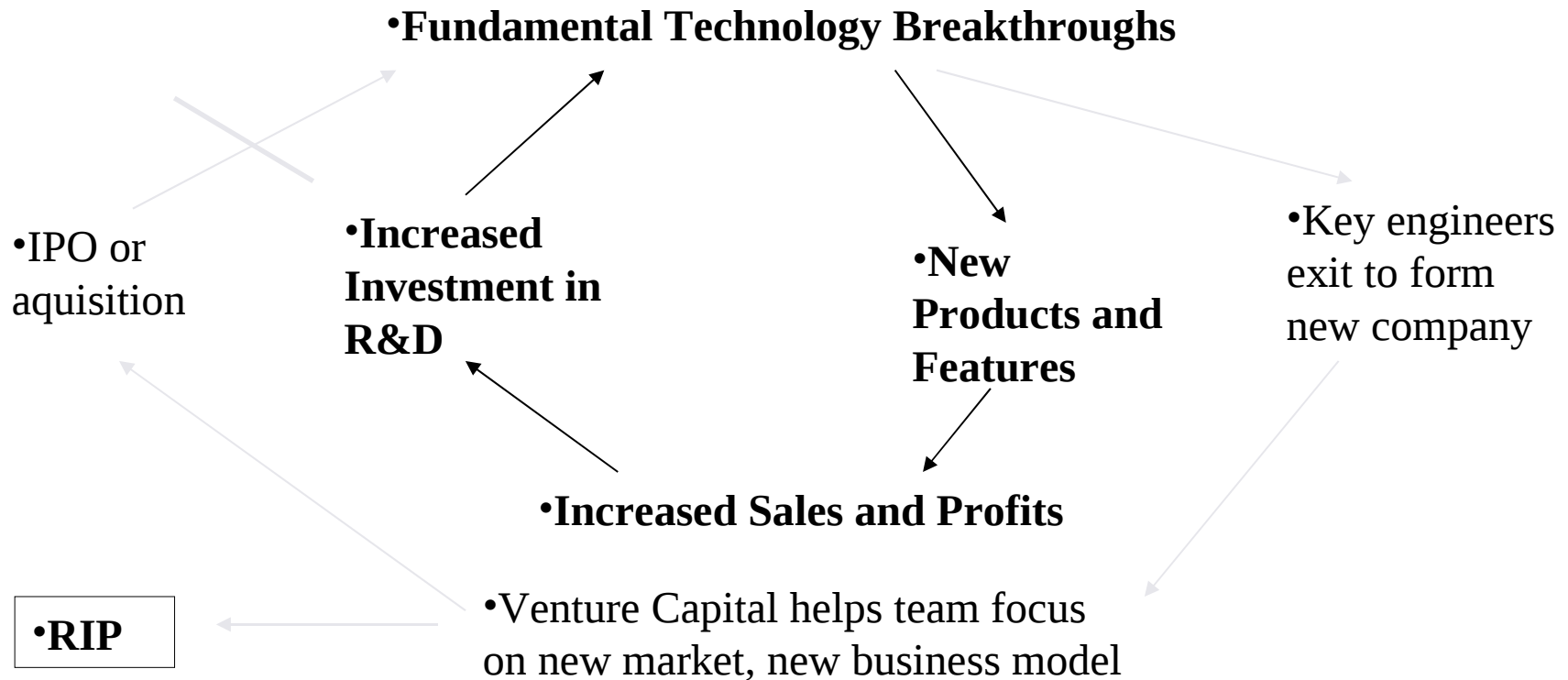
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# The Virtuous Circle Broken



# 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

# Open Innovation

- ...the opening of firm boundaries to share & exchange knowledge (e.g., Chesbrough, 2004, 2006; West & Gallagher, 2006; Gassmann, 2006), including
  - ...“buying” external knowledge
  - ...“selling” internally generated knowledge (e.g., “research waste” – Chesbrough, 2006)
- seems to be a superior, if not the only way for firms to achieve long-term success
- **But, are there limitations?**

# Playing Chess, vs. Playing Poker

## • Chess: Type I errors

- Plan several moves ahead
- No new information needed
- You know what you've got, what opponent has

## • Poker: Type II errors

- Pay to play
- Pay for new information
- You discover what you've got, what other players have

# 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

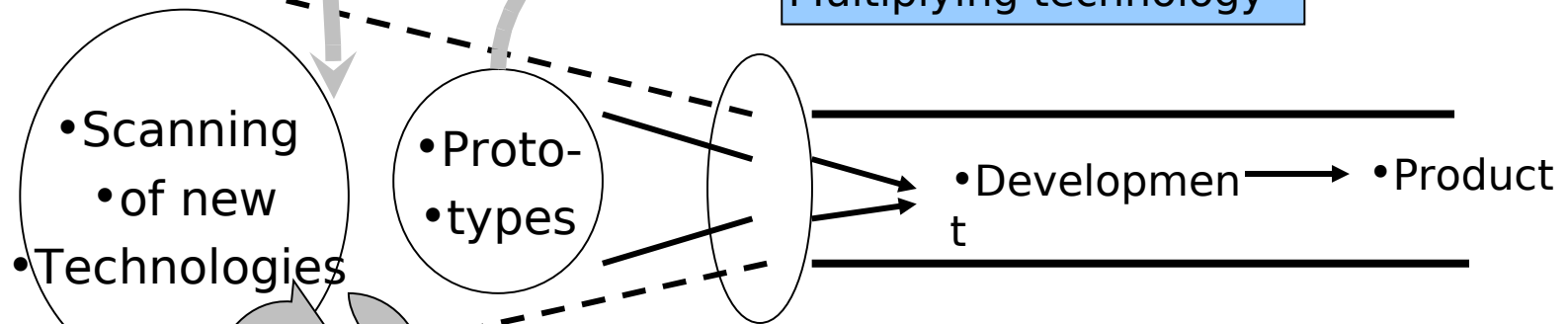
# Three archetypes of open innovation system

## • **Outside-in Process**

- Integrating external
- Knowledge, Customers
- and Suppliers

## • **Inside-out Process**

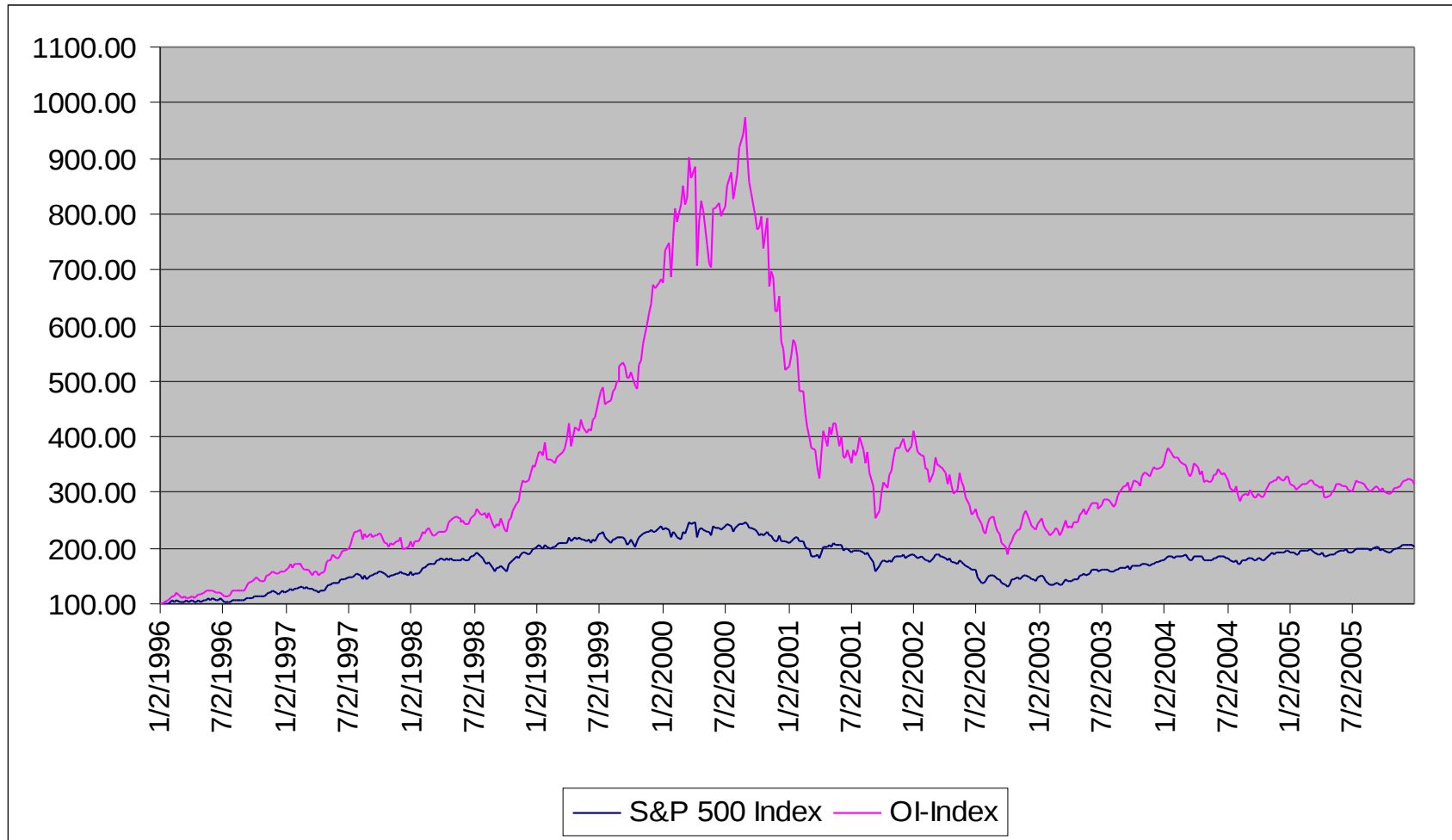
- Bringing ideas to market,
- Selling/licensing IP and
- Multiplying technology



## • **Coupled Process**

- couple outside-in and
- inside-out process,
- working in alliances with
- complementaries

# Open Innovation is over-performing



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

# Some cases & company examples

ABB



3M

Okmetic

P&G

PHILIPS  
sense and simplicity



Teknia

OMRON  
Sensing tomorrow™

NOKIA  
Connecting People

MIT



niServices  
Auckland UniServices Limited

CISCO

STORAENSO

UPM

VTT

LICENTIA

# Conclusions

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

# Summary

- Open Innovation has some boundaries when applied
  - Both in theoretical discussions and in practice
- Complementary assets, scale and learning effects, absorptive capacity, network externalities, game theory, exploitation vs. exploration are good tools on analyzing ‘Openness’ in companies
- But still, the OI is the only way to sustain in the long run