

Innovation & Entrepreneurship From Close to Open Innovation

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Innovation

Most innovations Fail. Companies that don't innovate die. True or False?

Innovating Innovation

The evolution of knowledge through paradigms (Thomas Kuhn) – commercialization of knowledge

- What is Innovation can you define it without using the word "new"?
- Distinguish it from making an ethical judgement

We Know Innovation is Important



"The most successful organizations cocreate products and services with customers, and integrate customers into core processes." IBM CEO Survey

"We need diversity of thought in the world to face the new challenges," Tim Berners-Lee

"When the rate of change outside an organization is greater than the change inside, the end is near" Jack Welch

Ralph Waldo Emerson (May 25, 1803 – April 27, 1882)



Ru Emerfor.

"People only see what they are prepared to see."

Some definitions and the paradigm shift

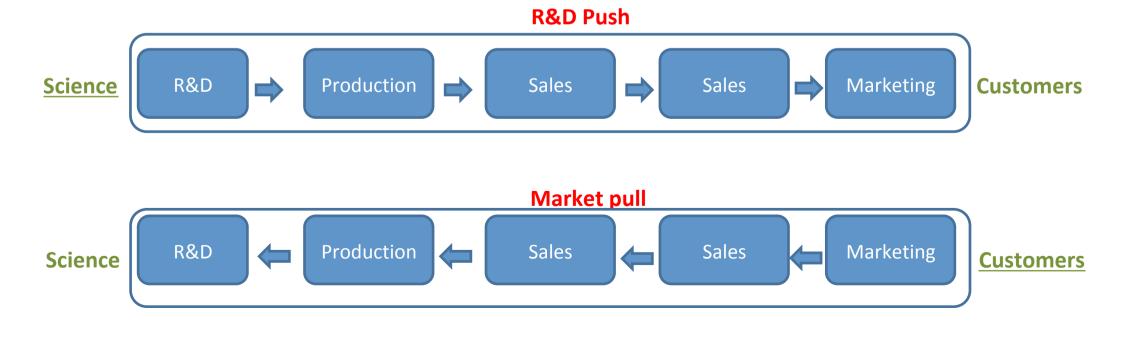
- Invention implemented and taken to market
- Create a reality that did not exist before
- Change, transforms the challenge into a solution

World views change and application to other spheres beyond science

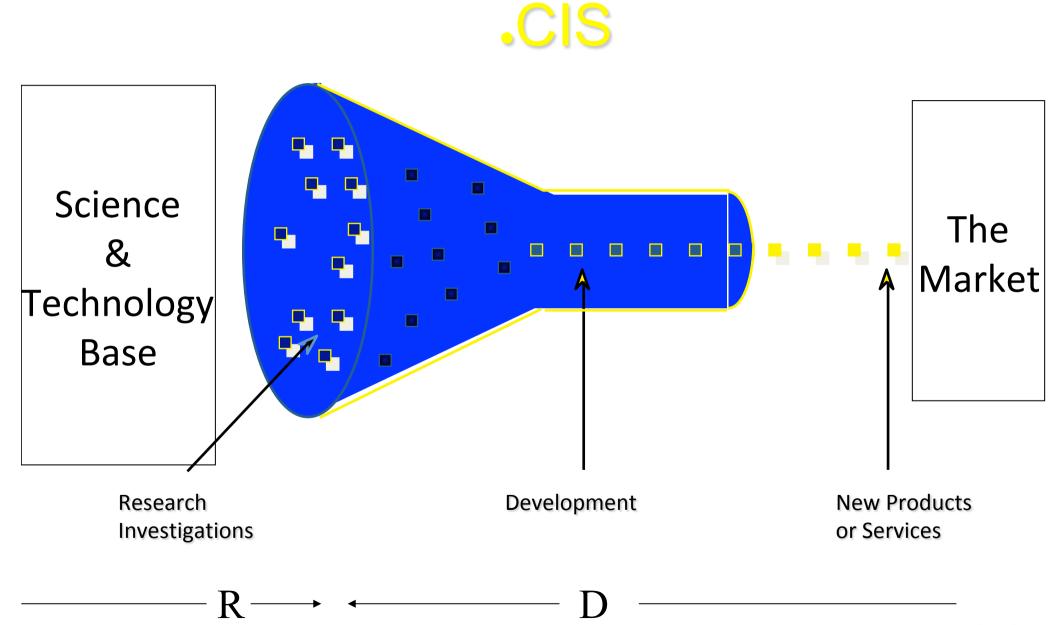
- When a new paradigm emerges, the world is seen and perceived differently
- According to him, we are passing through a paradigmatic shift in innovation and the way we do it....from close to open innovation
- And beyond innovation is ...disruptive innovation changes social practices

Closed innovation

- Innovation happens within the firm
- The logic is the one of "buy" knowledge or develop internally
- Resources can be easily recruited and the firm has enough critical mass
- Innovation is not systematic
- It follows a linear model that can be production push or market pull



A Closed Innovation System



Source: Henry Chesbrough

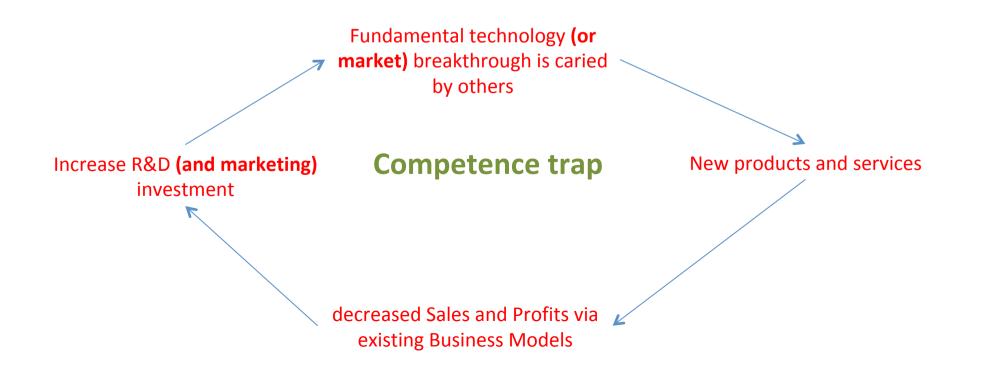
How the close paradigm works

- Recruit and buy the best, internalize or make
- We have to sort out what can be produced or what is wanted
- The goal is to be a first comer, the others are competitors or suppliers
- The winner takes all
- R&D leadership is key and we have to protect our intellectual property
- Our customers are passive buyers and we do not have to share with anybody else

Fundamental technology (or market) breakthrough Virtuous circle Increased R&D (and marketing) investment Existing Sales and Profits vie existing Business Models

Changing assumptions

- What if the needed knowledge and competence is not available?
- What if the critical mass of investments is too big?
- What if top managers know less than those "on the spot"?
- Can we always plan and predict what is good idea?

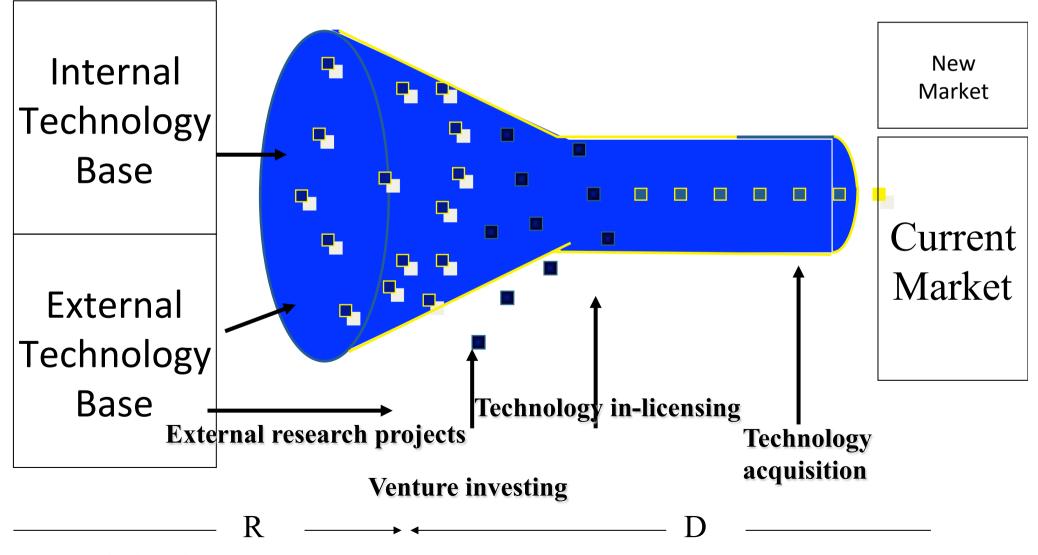


OI: The Virtuous Circle Broken

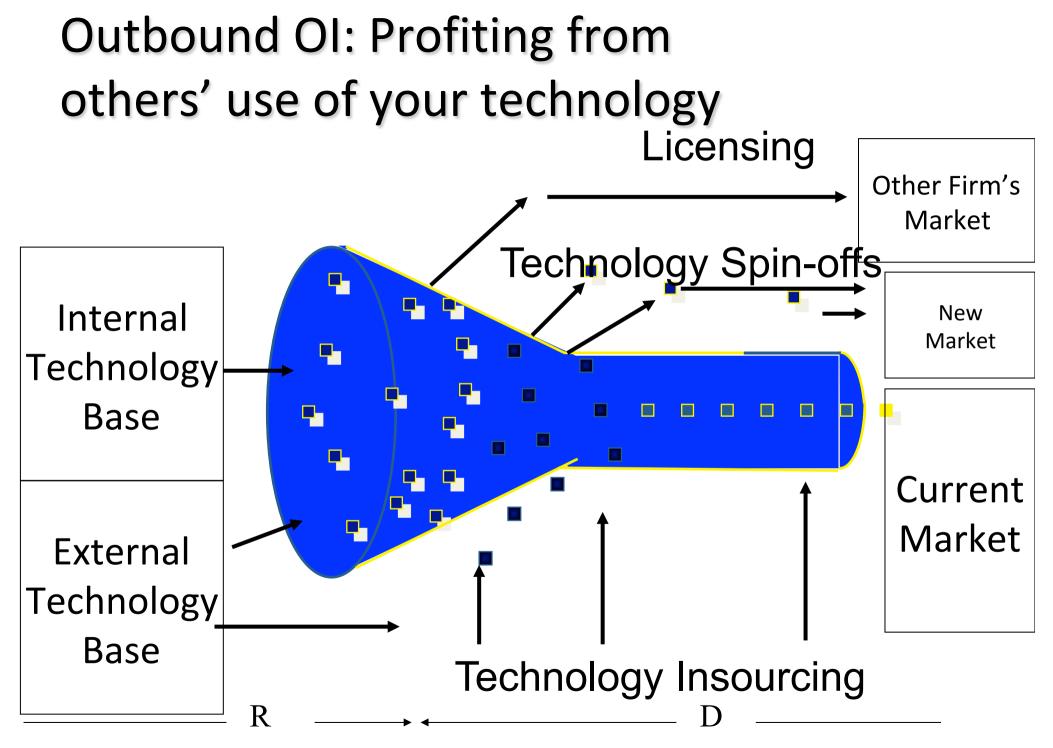
Fundamental Technology Breakthroughs The outside option **IPC** Increased Key engineers **New Products** or investment exit to form and Features acquisition in R&D new company **Increased Salés and Profits** Venture Capital helps team to focus on new market, new business model **RIP** Source: H.

Chesbrough

Inbound OI: Filling gaps with external technology



Source: H. Chesbrough



Source: H. Chesbrough

