GIOVANNA CAMPOPIANO
Associate Professor
University of Bergamo

STRATEGIC MANAGEMENT IN THE DIGITAL ECONOMY

Internal strategic change

Agenda

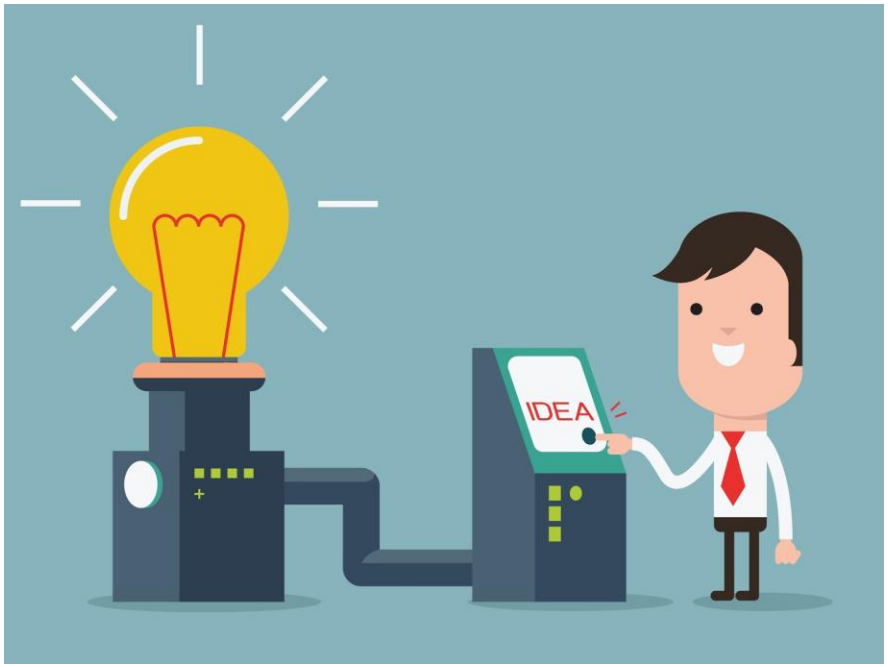
- Entrepreneurship and intrapreneurship
- Corporate entrepreneurship
- Corporate innovation strategy
- Business model innovation
- Innovation in family business

ENTREPRENEURSHIP/INTRAPRENEURSHIP

Entrepreneurship and intrapreneurship

- An **entrepreneur** is a person who 'habitually creates and innovates to build **something of recognized value** around perceived opportunities' (Bolton and Thompson, 2000)

- Entrepreneurs can be identified in starting organizations, running organizations and working in organizations as **employees**. In the latter case they are typically called ***intrapreneurs***, i.e. **internal entrepreneurs**.



- Future developments might concern **new products (or services) or new markets or both**, and they might involve diversification
- For different alternatives the magnitude of the change implied and the risk involved will vary
- For both areas the changes that take place can be **gradual or incremental**, or they can be more **dynamic** or **individually significant**

Discontinuous change requires **visionary leadership**, which Mintzberg (1973) summarizes as follows:

- Strategy making is dominated by the **active search for new opportunities**
- Power is centralized in the hands of the **chief executive officer** – certainly as far as corporate strategy changes are concerned
- Strategic change is characterized by **dramatic leaps forward** in the face of uncertainty
- **Growth** is the dominant goal of the organization

Entrepreneurship

- Entrepreneurial behaviour is characterized by high **achievement** motivation, supported by a **power** motive
- Achievement motivation is characterized by concern to do a job well, or better than others, with the **accomplishment of something unusual or important**, and with advancement
- Entrepreneurs need both **creativity and confidence** if they are to seek out and **exploit new ideas**; and they must be willing to **take risks**

Intrapreneurship

- Intrapreneurship is the term given to the establishment and fostering of **entrepreneurial activity within large organizations**

- Many new ideas for **innovation**, for product or service developments, can come from managers within organizations if the **structure and climate encourage** and allow them to contribute
  - Special task forces and development groups
  - Allowing individual managers the opportunity, freedom and, if necessary, the capital to try new ideas

"*In times of discontinuity and **accelerated change**, survival depends on **flexibility**, on our ability to **learn to adapt**. Organizations which learn fast will survive.*
*Management must take the lead. We must **mobilize our greatest asset, our people**, invest in their training and orchestrate their talents, skills and expertise. Their commitment, dedication, quality and care will build the competitive advantage of a winning team. Only they can provide our customers with the best product and service in the industry.*
*The **management of change** takes tenacity, time, talent and training*."

J.F.A. de Soet, President (1986-1990), KLM Royal Dutch Airlines

Intrapreneurship

- Businesses need to become '**living organizations**' if they aim to enjoy long and **sustained success**

- Five criteria are found in successful, entrepreneurial businesses:
  - **focused** on essential core competencies and long-term values
  - **flexible** – searching for new opportunities and new internal and external synergies
  - **friendly** – recognizing the power of alliances in the search for new competencies
  - **fast** and able to act at the right time to get ahead and stay ahead of competitors
  - **fun** – creative and with a culture which features some irreverence in the search for ways to be different; people feel free to express themselves.

Intrapreneurship: Example

- Google allows **time for personal projects**. Some of Google's best projects come out of their "20-percent time" policy.

"*We encourage our employees, in addition to their regular projects, to spend 20 percent of their time working on what they think will most benefit Google*," co-founders Larry Page and Sergey Brin wrote in 2004, before the company's IPO. "*This empowers them to be more creative and innovative. Many of our significant advances have happened in this manner*."

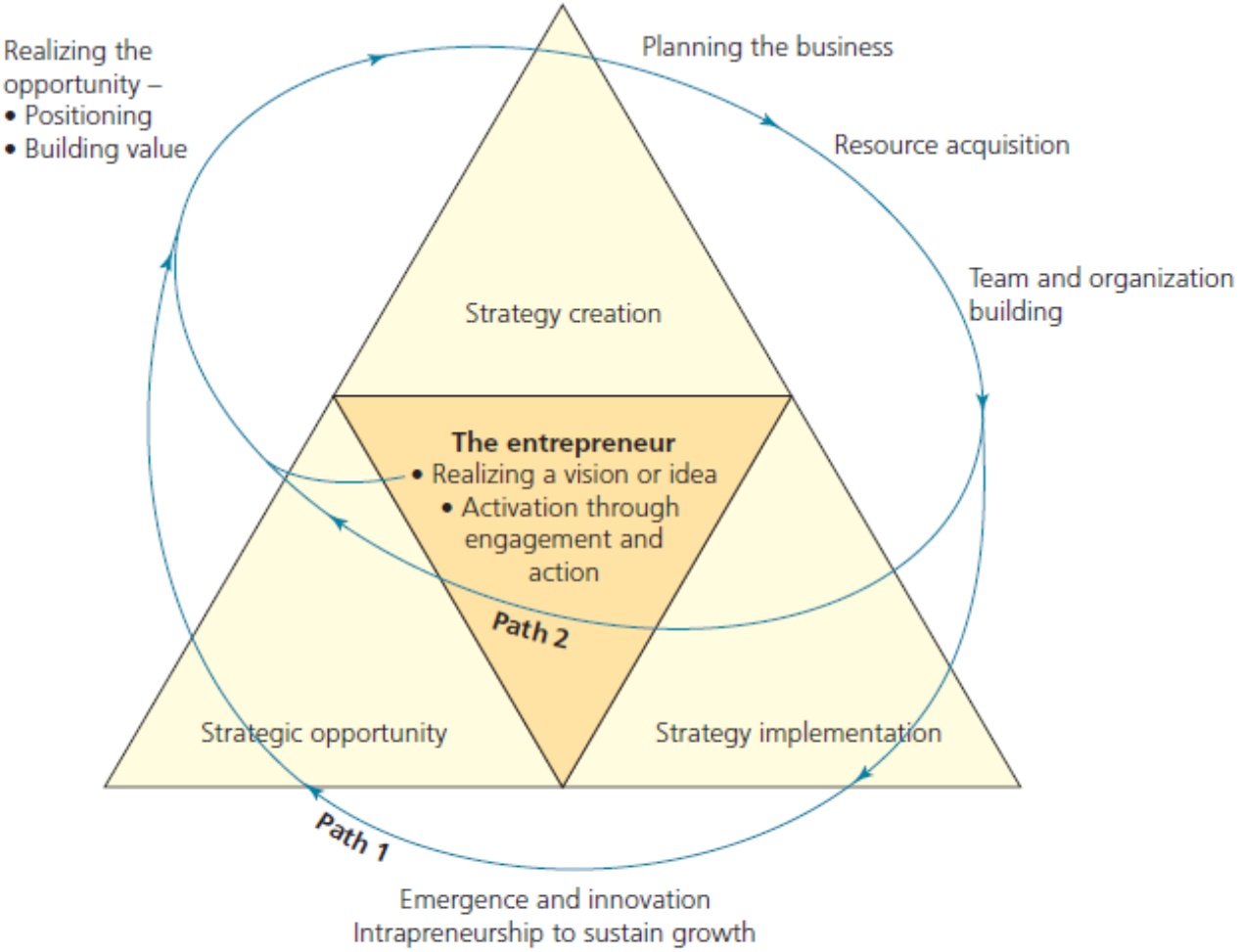
- One of these is something you probably use multiple times a day, **Gmail**: Paul Buchheit, the creator of Gmail, started on the project in 2001 and worked up to its launch on April 1, 2004 (April Fools but not really). Gmail became the first email with a successful search feature and the option to keep all of your email (1GB of storage) instead of frantically deleting to stay under your limit.

Intrapreneurship: Example

- £12.5 million was set aside to fund radically new ideas submitted by employees

- A group of key people would evaluate the ideas put forward by their peers. Consultants were brought in to run a series of creativity laboratories for volunteers; 72 turned up to the first one

Intrapreneurship

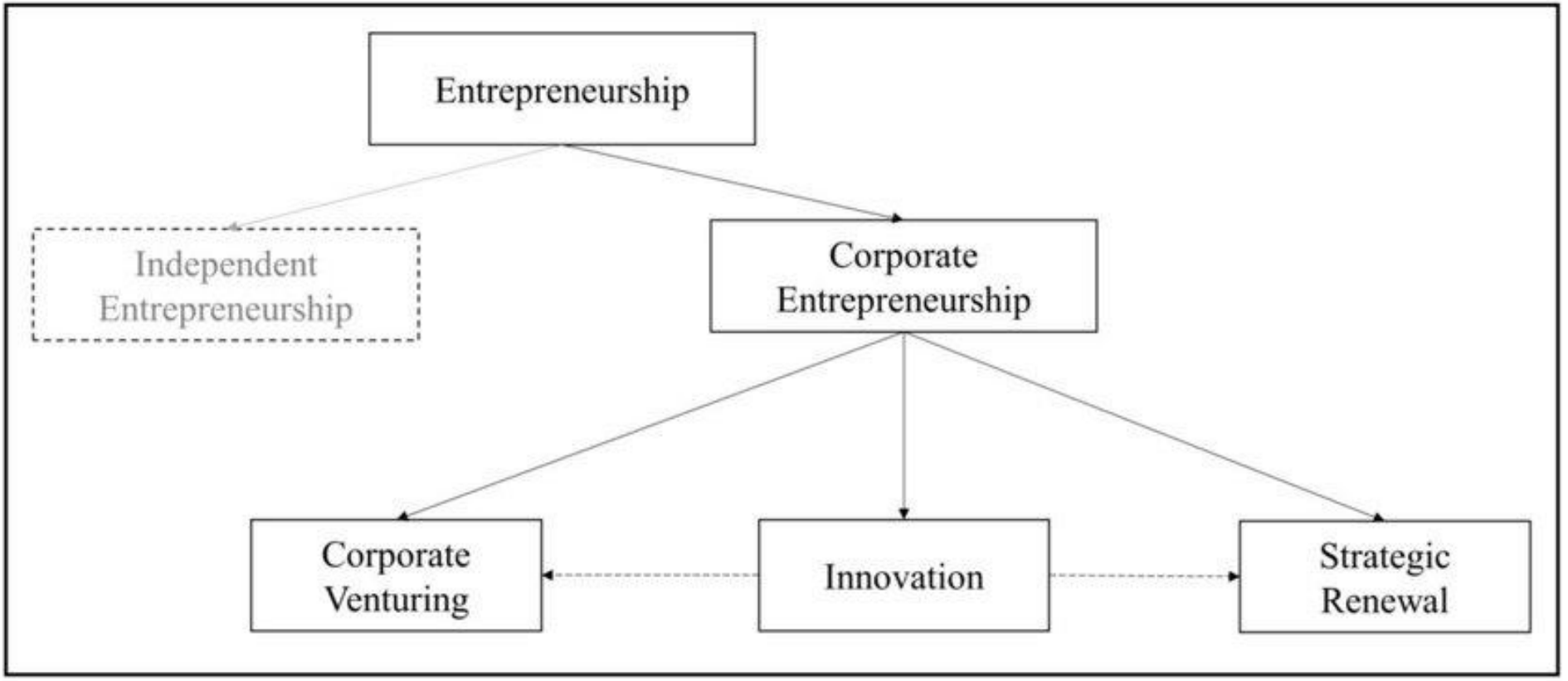


Path 1: Intrapreneurship/corporate entrepreneurship. A flow of ideas from inside the organization

Path 2: Fresh ideas from an entrepreneurial strategic leadership

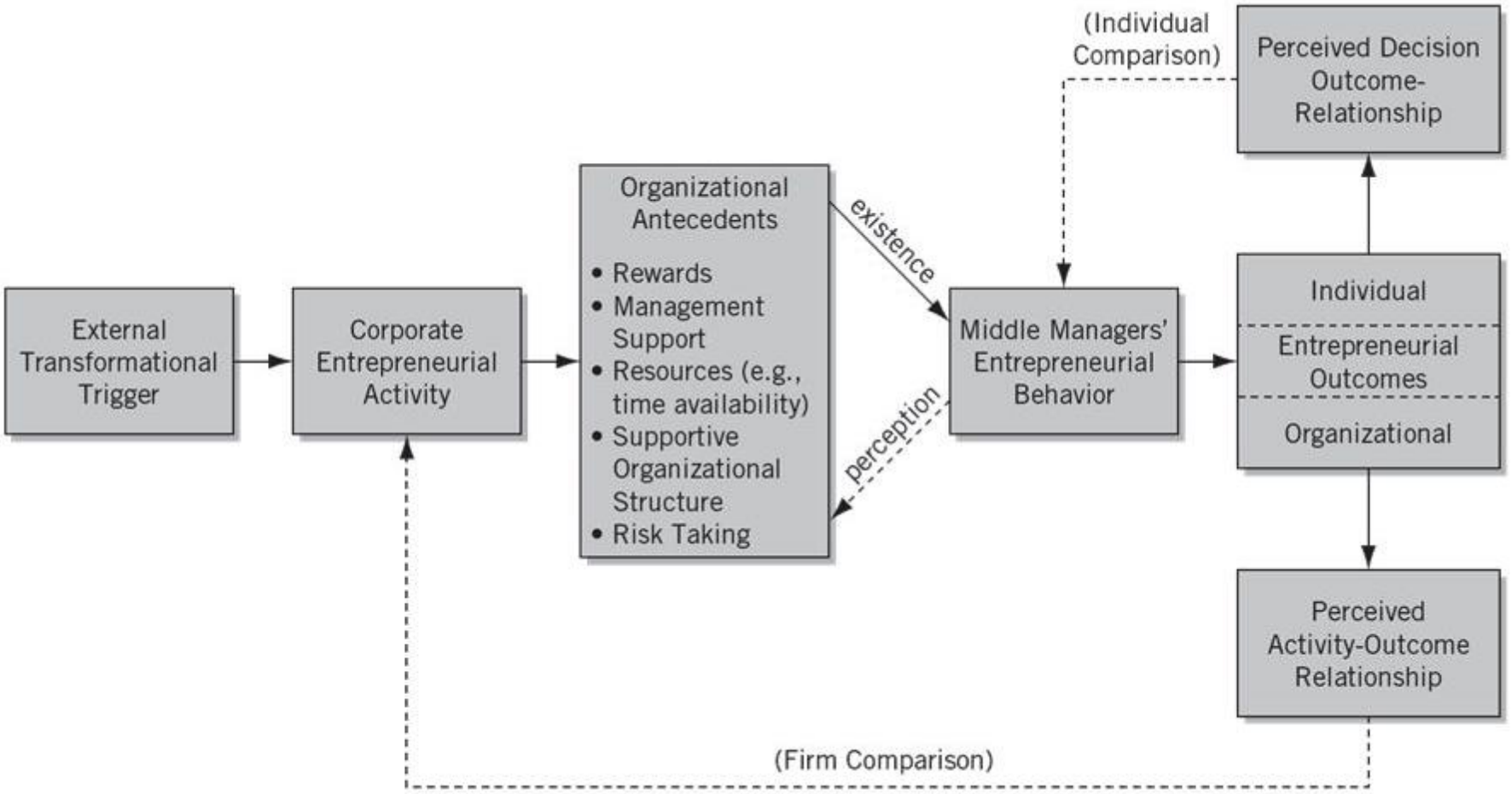
CORPORATE ENTREPRENEURSHIP

Corporate entrepreneurship



Sharma et al. (1999)

Corporate entrepreneurship

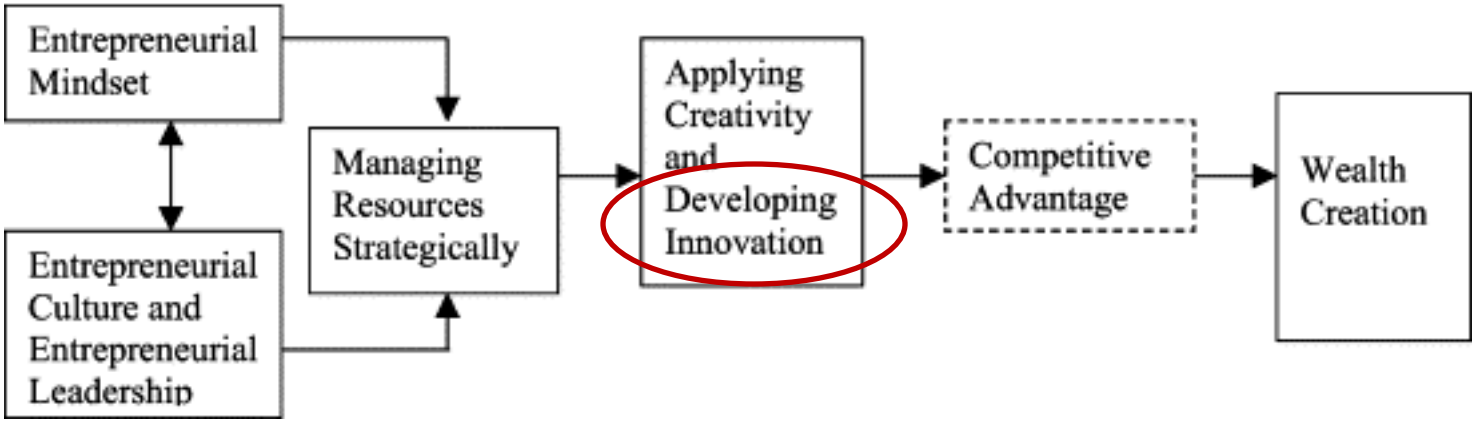


Kuratko et al. (2004)

- **Strategic entrepreneurship** combines strategy and entrepreneurship and includes both **advantage-seeking strategy activities** and **opportunity-seeking entrepreneurial activities** to create value.

- While strategy supports this by forming competitive advantages, **entrepreneurship contributes the identification of new opportunities in the market or environment**.

- The latter involves entrepreneurs that innovate by identifying and **exploiting new ideas and inventions that result in innovations**.



Ireland et al. (2003)

CORPORATE INNOVATION

Corporate innovation

- **Invention** involves the conversion of new knowledge into a new product, process or service.

- **Innovation** involves the conversion of new knowledge into a new product, process or service ***and*** especially it requires this new product, process or service to have ***actual commercial use***.

- There are **four main forms of innovation**:
  - **new products**, which are either radically new or which extend the product life cycle
  - **process** innovation leading to reduced production costs, and affected partially by the learning and experience effect
  - innovations within the umbrella of **marketing**, which increase differentiation
  - **organizational changes**, which reduce costs or improve total quality

- As a strategy it can imply the **replacement of existing products** with ones which are really new, as opposed to modified, and which imply a **new product life cycle**.

Corporate innovation

Innovation can **come about** in a variety of ways:

- Ideas can come out of **R&D departments**, where people are employed to come up with new ideas or inventions. Some would argue that there is a risk that departments such as this are not in direct touch with customers; however, while customers may sense that a product or service has drawbacks, they may have no idea how it might be improved. This requires a **technical expert**.

- People from various parts of an organization working on **special projects**.

- Employees being given **freedom and encouragement** to work on **ideas of their own**, e.g. the 3M approach.

- **Everyday events** as people interact and discuss problems and issues.

Corporate innovation: Technology-push

- In the *technology push* view, it is the new knowledge created by technologists or scientists that pushes the innovation process.

- Research & development laboratories produce **new products, processes or services** and then hand them over to the rest of the organisation to manufacture, market and distribute.

- According to this push perspective, managers should listen primarily to their scientists and technologists, let them follow their hunches and support them with ample resources

Corporate innovation: Market-pull

- *Market pull* reflects a view of innovation that goes beyond invention and sees the **importance of actual use**. In many sectors users, not producers, are common sources of important innovations.

- In designing their innovation strategies, therefore, organisations should listen in the first place to **users** rather than their own scientists and technologists.

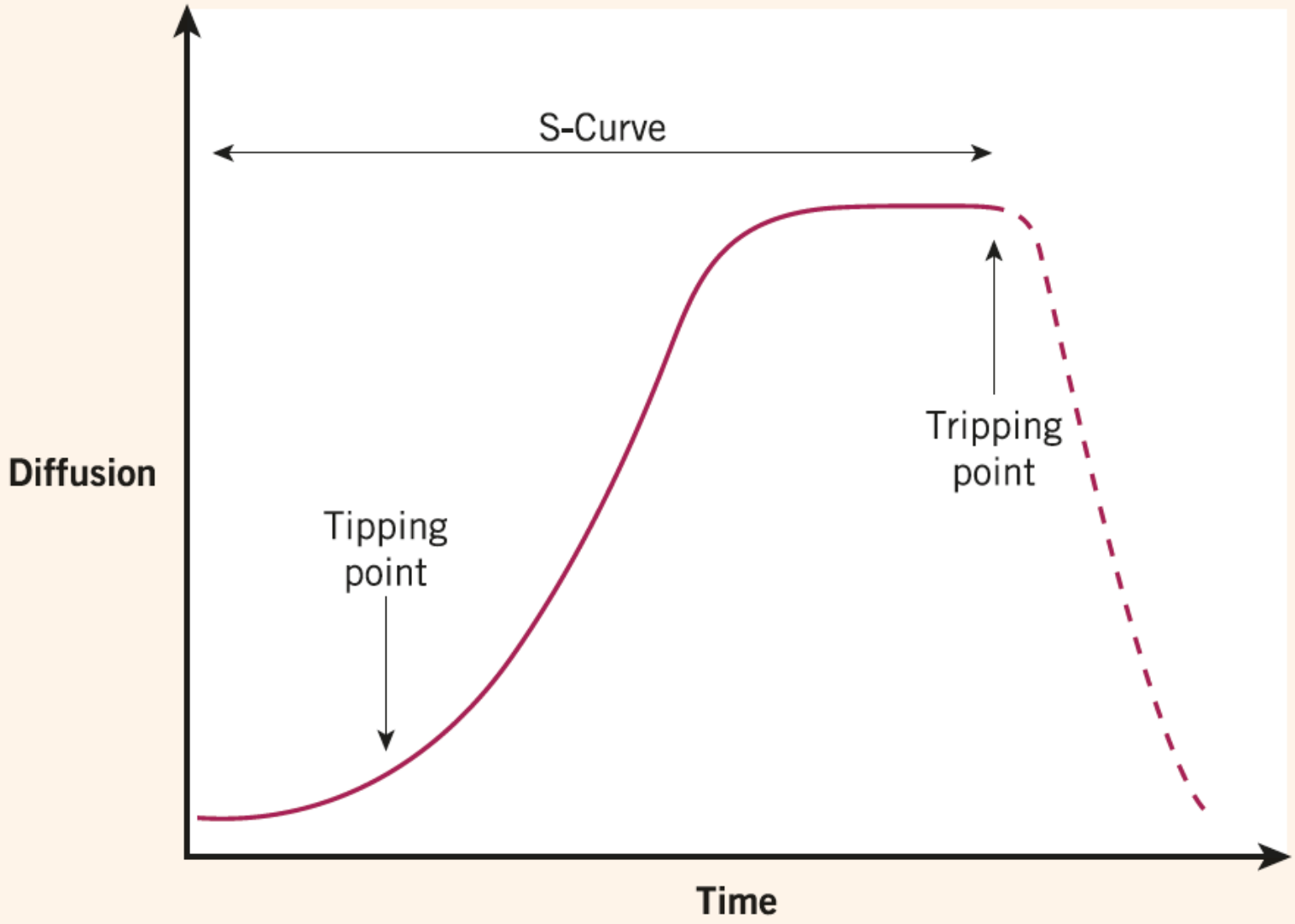
Lead users	*Frugal innovation*
• It is the pull of market experts that is responsible for innovation. • Marketing needs to identify the lead users.	• Sensitivity to poor people's real needs. • Emphasis on low cost, simplicity, robustness and easy maintenance.

Diffusion of innovation

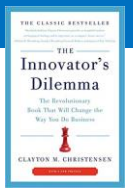
- **Diffusion** is the process by which innovations spread among users.
- Since innovation is typically expensive, its **commercial attractiveness can hinge on the pace** – extent and speed – at which the market adopts new products and services.

Supply side	*Demand side*
• Degree of improvement in performance • Compatibility with other factors • Complexity • Experimentation • Relationship management	• Market awareness • Network effects • Customer propensity to adopt

The S-Curve of diffusion



Challenges to radical innovation



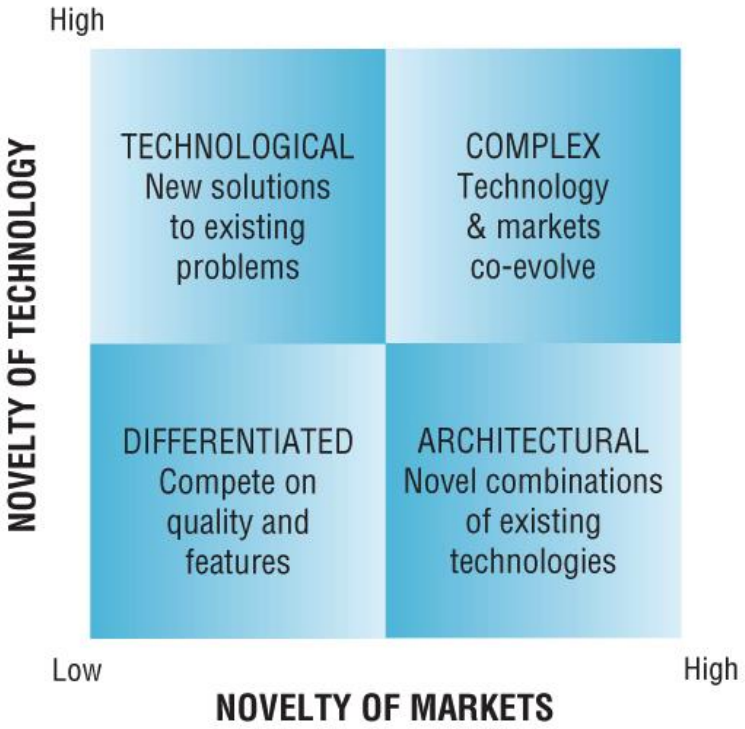
Four reasons why large companies find it so hard to successfully embrace and commercialize radical innovations:

1. *Industry Leaders Can't Afford to Embrace Radical Innovation:* The larger their market share, the more they feel they have to lose
   - First, leaders **cannot "see" the long-term potential** of the new technology because the very basis of competition changes
   - Second, even if an industry leader recognizes the fundamental shift, it is difficult for the company to **reallocate resources** fast enough to capitalize on the opportunity
2. *Structures and Cultures Discourage Bringing Big Ideas to Market:* Exploiting and commercializing radical new ideas, especially when they threaten to sweep away the old order of things, destabilizes the organization
3. *Relying Too Much on Internal R&D:* During times of rapid change, industry leaders who want to stay leaders need to place multiple bets on a wide range of promising innovations
4. *Large Companies Don't Attract or Retain Radical Innovators:* Large corporations may have their fair share of "inventors," that is, people who have new, creative ideas, but **they do not nurture or motivate "innovators,"** people who take creative new ideas and make them into commercially successful products

Stimulating Innovation in Large Companies

- Strategy #1: Make breakthrough innovation a strategic and cultural priority
- Strategy #2: Hire more creative and innovative people
- Strategy #3: Grow informal project laboratories within the traditional organization
- Strategy #4: Create “idea markets” within the organization
- Strategy #5: Become an “ambidextrous” organization

Commercialization of innovation



In this two-by-two matrix, each quadrant raises different issues and will demand **different techniques for development and commercialization**:

- **Differentiated**. Both the technologies and markets are **mature**, and most innovations consist of the improved use of existing technologies to meet a known customer need. Products and services are differentiated on the basis of **packaging, pricing and support**.

IDEO is one of the most successful design consultancies in the world, based in Palo Alto, California and London, UK, it helps large consumer and industrial companies worldwide to design and develop innovative new products and services. Success factors are:

1. Understand the market, client and technology.
2. Observe users and potential users in real-life situations.
3. Visualize new concepts and the customers who might use them, using prototyping, models and simulations.
4. Evaluate and refine the prototypes in a series of quick iterations
5. Implement the new concept for commercialization.

- The first critical step is achieved through close observation of potential users in context. As Tom Kelly of IDEO argues, '*We're not big fans of focus groups. We don't much care for traditional market research either. We go to the source. Not the "experts" inside a (client) company, but the actual people who use the product or something similar to what we're hoping to create … we believe you have to go beyond putting yourself in your customers' shoes. Indeed we believe it's not even enough to ask people what they think about a product or idea … customers may lack the vocabulary or the palate to explain what's wrong, and especially what's missing*.'

- The next step is to develop prototypes to help evaluate and refine the ideas captured from users. '*An iterative approach to problems is one of the foundations of our culture of prototyping … you can prototype just about anything – a new product or service, or a special promotion. What counts is moving the ball forward, achieving some part of your goal*.'

- **Architectural**. **Existing technologies** are applied or combined to create novel products or services, or new applications. Competition is based on serving specific market niches and on close relations with customers. Innovation typically originates or is in collaboration with potential users.

- **Technological**. **Novel technologies** are developed which satisfy known customer needs. Such products and services compete on the basis of performance, rather than price or quality. Innovation is mainly driven by developers.

- **Complex**. **Both technologies and markets are novel**, and co-evolve. In this case there is no clearly defined use of a new technology, but over time developers work with lead users to create new applications. The development of multimedia products and services is a recent example of such a co-evolution of technologies and markets.

Leader or follower?

- A key choice for managers is whether to lead or to follow in innovation
- First-movers get the easy sales of early fast growth and can establish a dominant position. There are plenty of examples: Coca-Cola in drinks and Hoover in vacuum cleaners are powerful century-old examples.
- On the other hand, many first-movers fail. Microsoft failed with its first tablet computer launched in 2001. Nine years later, Apple swept the market with its iPad tablet computer.

- A **first-mover advantage exists where an organization is better off than its competitors as a result of being first to market with a new product, process or service**
- The first-mover is a monopolist, theoretically able to charge customers high prices without fear of immediate undercutting by competitors.

First-mover advantages

- *Experience curve benefits* accrue to first-movers, as their rapid accumulation of **experience with the innovation** gives them greater expertise than late entrants still relatively unfamiliar with the new product, process or service
- *Scale benefits* are typically enjoyed by first-movers, as they establish earlier than competitors the **volumes necessary for mass production and bulk purchasing**
- *Pre-emption of scarce resources* is an opportunity for first-movers, as late-movers will not have the same **access to key raw materials, skilled labour or components**, and will have to pay dearly for them
- *Reputation* can be enhanced by being first, especially since **consumers have little 'mindspace' to recognize new brands** once a dominant brand has been established in the market
- *Buyer switching costs* can be exploited by first-movers, by **locking-in their customers** with privileged or sticky relationships that later challengers can only break with difficulty. Switching costs can be increased by **establishing and exploiting a *technological standard***

Late-mover advantages

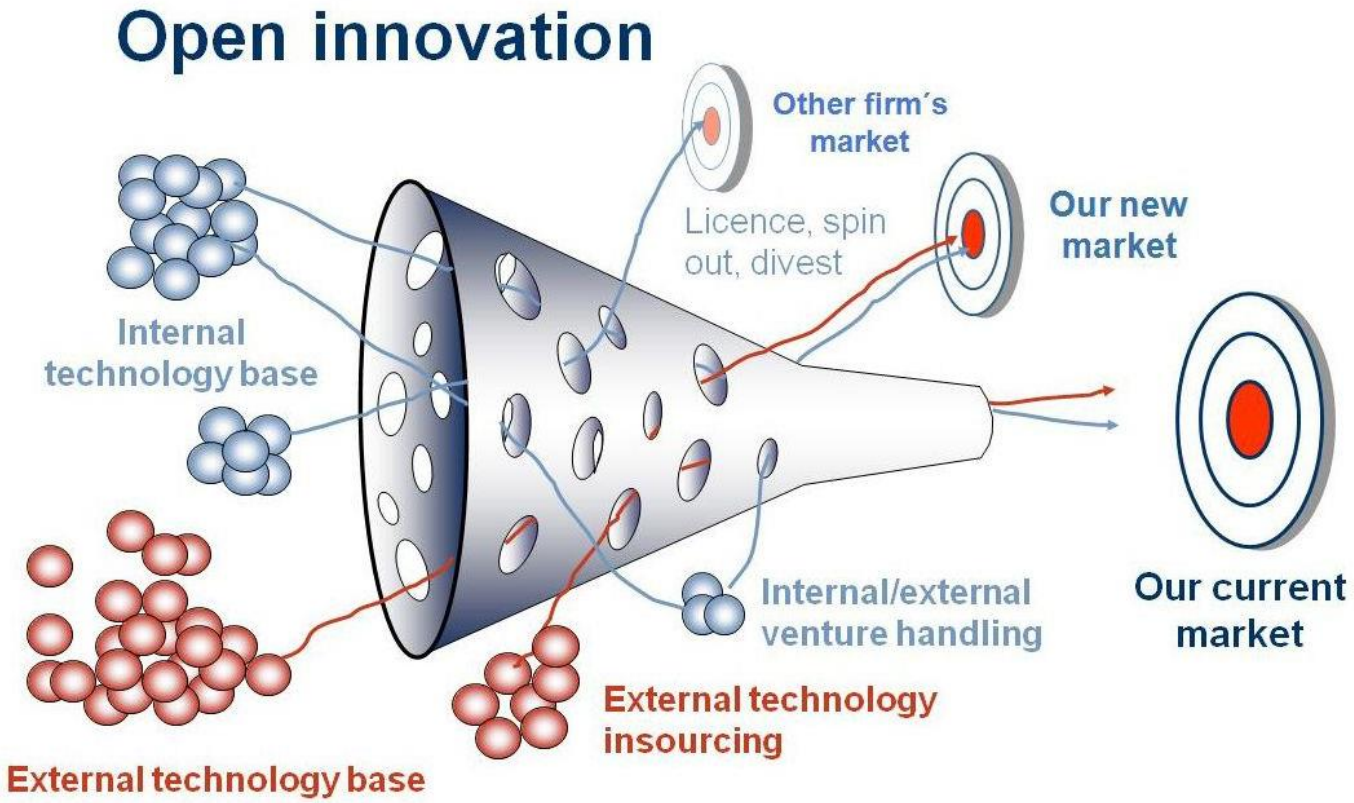
However, the experience of Microsoft with its tablet computer shows that first-mover advantages are not necessarily overwhelming. Late-movers have two principal potential advantages:

- *Free-riding.* Late-movers can **imitate technological and other innovation at less expense** than originally incurred by the pioneers. Research suggests that the costs of imitation are only 65 per cent of the cost of innovation

- *Learning.* Late-movers can observe what worked well and what did not work well for innovators. They may **not make so many mistakes** and be able to get it right first time

- Markides and Geroski (2004) argue that the most appropriate response to innovation, especially radical innovation, is often not to be a first-mover, but to be a '***fast second***'

Chesbrough (2003) provides a model for open innovation, to commercialize intellectual property



Open innovation

	Closed innovation principles	Open innovation principles
i	The smart people in our field work for us.	Not all of the smart people work for us so we must find and tap into the knowledge and expertise of bright individuals outside our company.
ii	To profit from R&D, we must discover, develop, produce and ship it ourselves.	External R&D can create significant value; internal R&D is needed to claim some portion of that value.
iii	If we discover it ourselves, we will get it to market first.	We don't have to originate the research in order to profit from it.
iv	If we are the first to commercialize an innovation, we will win.	Building a better business model is better than getting to market first.
v	If we create the most and best ideas in the industry, we will win.	If we make the best use of internal and external ideas, we will win.
vi	We should control our intellectual property (IP) so that our competitors do not profit from our ideas.	We should profit from others' use of our IP, and we should buy others' IP whenever it advances our own business model.

Source: Chesbrough (2003).

External knowledge and technology

The acquisition of external knowledge and technology

- consists of establishing **contractual arrangements** (e.g., R&D outsourcing, in-licensing, joint ventures) with competitors, suppliers, or other organizations to access their knowledge and technology base

- allows other parties to **participate in product innovation** by developing functions or subsystems to be implemented in the final product

- has become a **key strategic decision** in technological innovation (short product life cycles, rising R&D costs, risk sharing)

Benefits

- Discovery of new combinations of product characteristics
- Increased innovation (ROI, lower costs, flexibility, access to specialized expertise)

Drawbacks

- Weaker property rights on new technology
- Limited ability to appropriate value
- New entrants, imitation of core competencies
- Lower Control Domains

Engagement models between corporations and startups

Equity involvement	Direction of innovation flow: Outside-in	Direction of innovation flow: Inside-out
Yes	**Coporate venturing** Participate in the success of external innovation and gain strategic insights into non-core markets.	**Corporate Incubation** Provide a viable path to market for promising corporate non-core innovations
No	**Startup program (Outside-in)** Insource external innovation to stimulate and generate corporate innovation	**Startup program (Inside-out)** Spur complementary external innovation to push an existing corporate innovation

Weiblen & Chesbrough (2015)

https://www.merckgroup.com/en

Task: Are there any corporate entrepreneurship initiatives as strategic options?

- Considering the analysis you have done, go back to the TOWS framework and **add any strategic options among the corporate entrepreneurship ones that you deem relevant for the company considered**

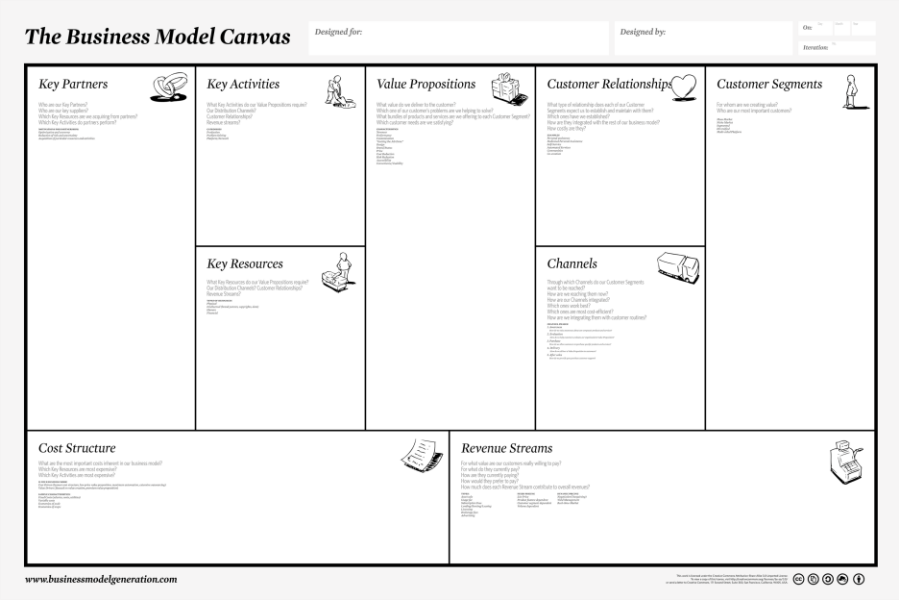
BUSINESS MODEL INNOVATION

BMI

- Business model innovation (BMI) centers on **renewal and rejuvenation** through opportunity creation, development and exploitation

- New and innovative business models explain how **new entrants disrupt incumbents**, and offer a way for these **incumbents to invigorate their firms** and mitigate the effects of disruption

- The business model has become an important lever for enhancing a firm's **"ecological fit" – namely for improving the fit with a continuously shifting technological and product-market environment**



Business model innovation strategy refers to the choices entrepreneurial leaders must make with respect to:

- Design of a new system of activities (**What? How? Who? Why?**)
- Processes by which a new activity system is created
- Implementation and ongoing adaptation of the new activity system to ensure coherence (internal, external, and strategic fit) with the objective of sustaining and improving the focal organization's key performance metrics

Digital platforms

Digital multi-sided platforms offer alternative ways of monetizing the traffic on the digital platform:

- Subscription-based revenue model (New York Times, Netflix)
- Advertising-based revenue model (Google, Yahoo)
- Commission-based revenue model (BlaBlaCar, Uber); they can be C2C, B2B, B2C

INNOVATION IN FAMILY BUSINESS

Innovation vs. tradition

- The **values and beliefs** of the founding family are handed down from generation to generation
- Organizational **culture and identity** closely reflect the way the firm has operated in the past
- **Family history** pervades business practices, creating a close link between the family's and the firm's tradition

Conventional thinking in innovation management:

- The past is a cause of **path-dependence, inertia and inflexibility** (Sydow et al., 2009)
- The past as a source of **resistance to change**, an organizational excuse to perpetuate the **status quo** (Strebel, 1996)
- Innovation managers are advised to create a corporate sense of urgency and obtain a mandate to **dismiss the old and make way for the new** (Miller & Wedell-Wedellsborg, 2013)

Such approach, however, may proof inadequate or even counterproductive in family firms.
Instead, tradition may represent a powerful and unique source of competitive advantage for innovative family businesses.

Recency bias?

Does the **value of knowledge** really diminish over time?

By giving **too much weight to the latest knowledge**, companies risk **neglecting the potential benefits of old knowledge**

Instant is back!
How polaroid saved itself from certain death.

«the 75-year-old company found a way to use their brand recognition and founding technology to stay resilient» (FastCompany)

Nobel Prize for Medicine 2015: Tu Youyou
A drug based on ancient Chinese herbal medicine has reduced the mortality rate of malaria patients

The importance of tradition

Tradition refers to the **stock of knowledge, skills, materials, manufacturing processes, signs, values and beliefs that belong to the past**:

- Know-how
- Symbolic and cultural content
- Micro-institutions of practices passed down through generations

Tradition shapes the identity of individuals, organizations and territories

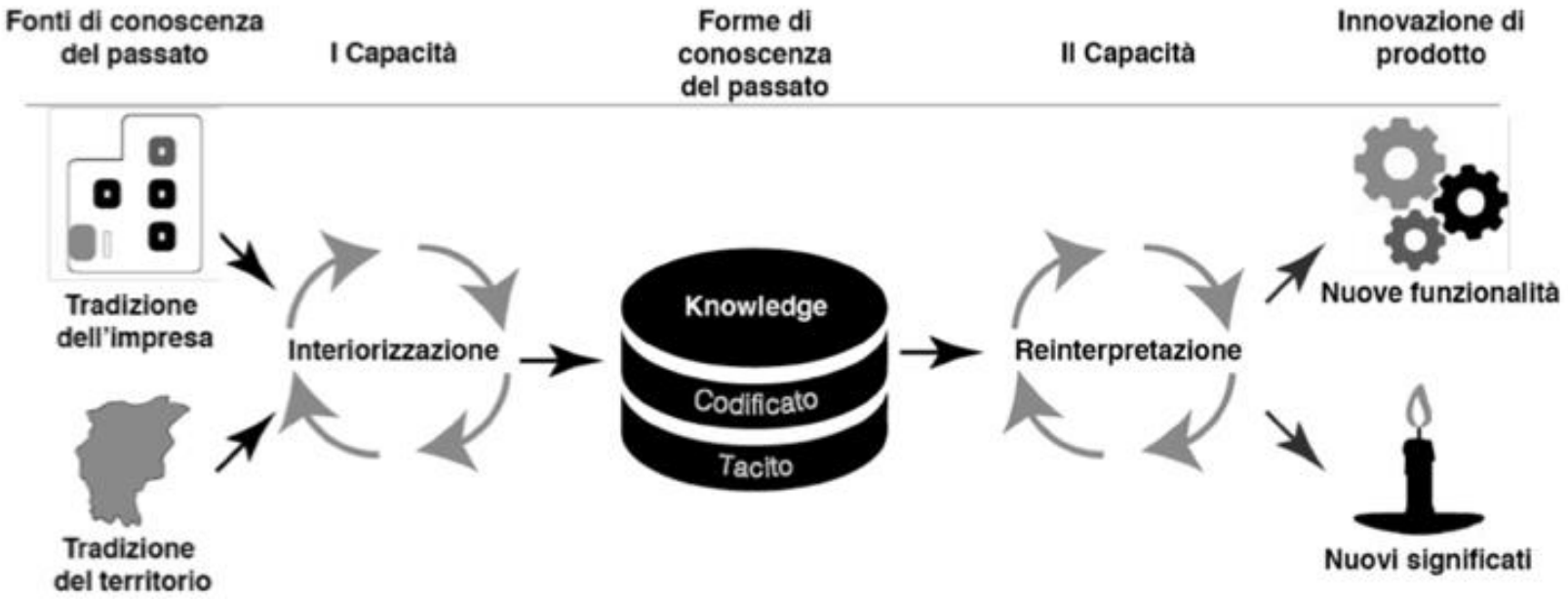
Creating value

- Tradition arouses strong and positive feelings
- Increased legitimacy
- Increased reliability

Capturing value

- Tradition cannot be easily replicated by others
- Uniqueness allows you to appropriate the income from innovation

Strategie di «Innovation through tradition»



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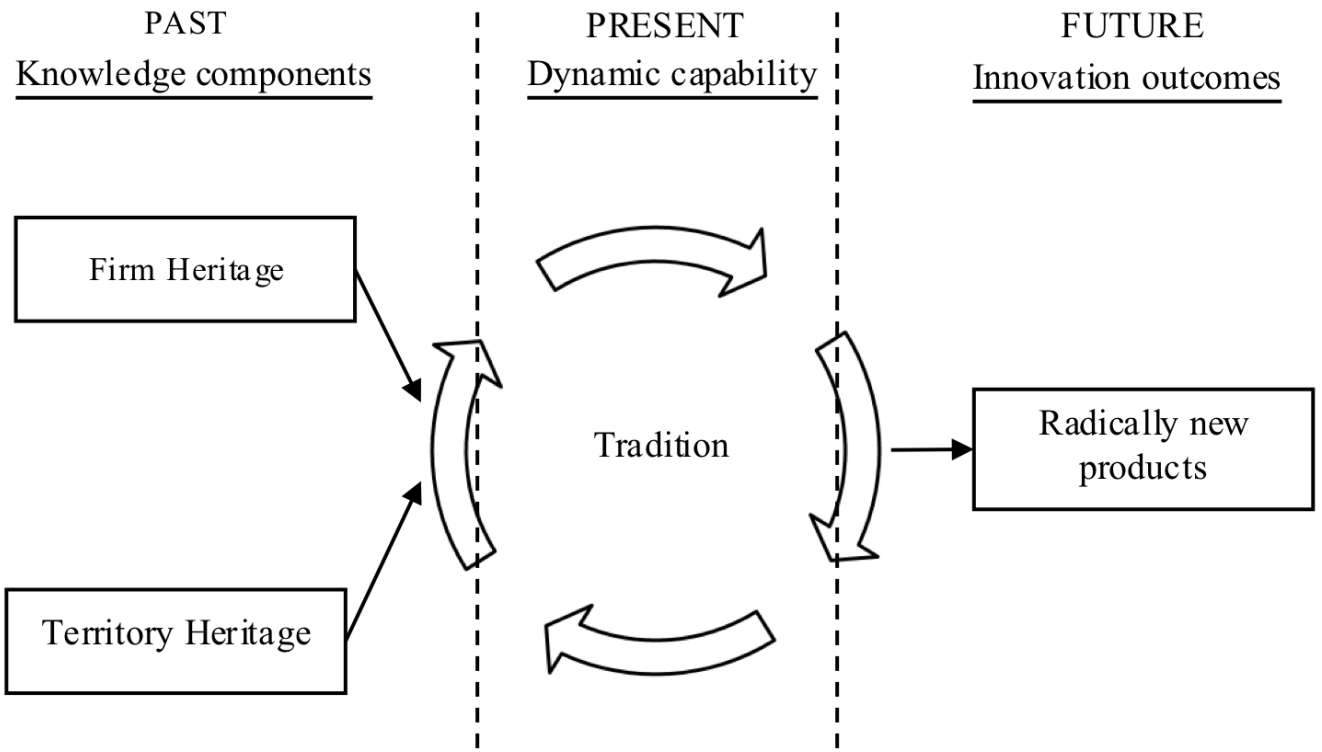
Innovation through tradition (ITT)

ITT is a product innovation strategy that leverages and recombines temporally distant knowledge components of the **firm's and/or its territory's heritage** to develop radically new products.



De Massis et al. (2016)

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