









FONDO EUROPEO AGRICOLO PER LO SVILUPPO RURALE: L'EUROPA INVESTE NELLE ZONE RURALI

### Corso di Formazione a Distanza (FaD)



### I MODELLI DELL'INNOVAZIONE NEL CONTESTO DELL'ATTUALE COMPLESSITÀ a cura di

### **ALESSANDRO MINELLO**

Amministratore Unico - EconLab Reserach Network Adjunct Professor fo Economics – Unicversità Ca' Foscari Venezia

### **15 NOVEMBRE 2023**



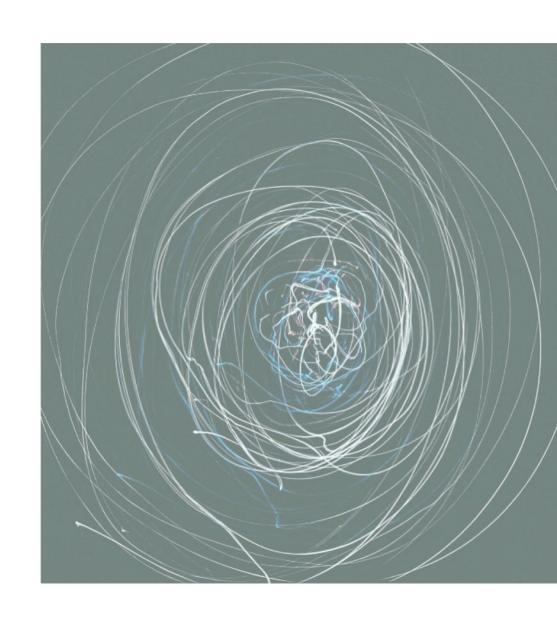
Iniziativa finanziata dal Programma di Sviluppo Rurale per il Veneto 2014-2020 Intervento 2.3.1 Formazione dei consulenti Organismo responsabile dell'informazione: Veneto Agricoltura

Autorità di gestione: Regione del Veneto - Direzione Adg FEASR Bonifica e Irrigazione

1

### **PREMESSA**

- La grande trasformazione che stiamo vivendo non è un semplice cambiamento, ma una metamorfosi
  - Ulrik Beck



# Questa metamorfosi che stiamo vivendo, genera un aumento della complessità del vivere e del fare impresa e nel lavoro

è dovuta a 5 fattori

1 2 3 4 5

Incertezza Rapidità Entropia Multidimensionalità Discontinuità

Questa metamorfosi cos'ha di nuovo?

Che è guidata dai giovani.

9 imprese su10 il 65% dei

I giovani stanno cambiando

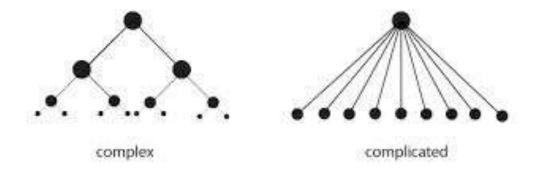
le regole del gioco.

bambini

che frequenta la scuola primaria svolgerà un lavoro che ancora non esiste

richiederanno nuove

competenze



# **COMPLESSO**

# VS COMPLICATO

- COMPLESSO (Corpo umano)
- Non si può scomporre
- Un problema complesso non si resolve mai definitivamente (crisi climatica)
- Causa ed effetti si influenzano a vicenda

- COMPLICATO (Aereo)
- Si può scomporre e ricomporre
- Un problema complicato si può risolvere
- Una causa può generare più effetti

### QUALE STRATEGIA? PER PROSPERARE NELLA COMPLESSITÀ

# RESILIENZA VS ANTIFRAGILITÀ

- Resisto in attesa di un ritorno allo stato iniziale
- Voglio semplificare la complessità

- Approfitto dello shock per migliorare la mia posizione
- Non voglio ridurre la complessità totale ma solo quella "cattiva"

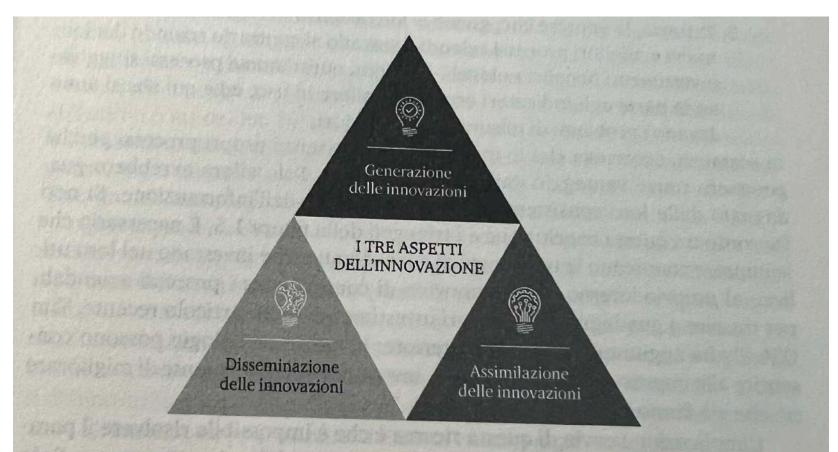


Figura 1.5. I tre aspetti dell'innovazione

### Modello di Porter



Il paradigma allora dominante: un sistema di innovazione chiuso

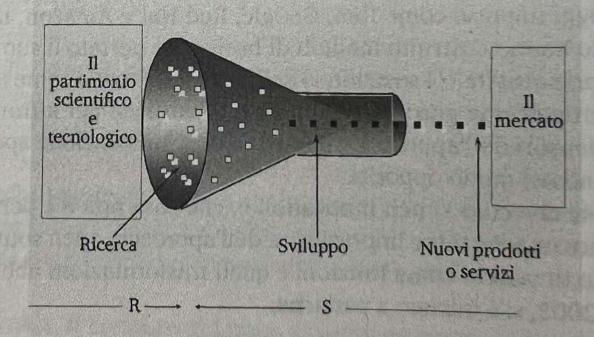


Figura 2.1. Il modello della closed innovation

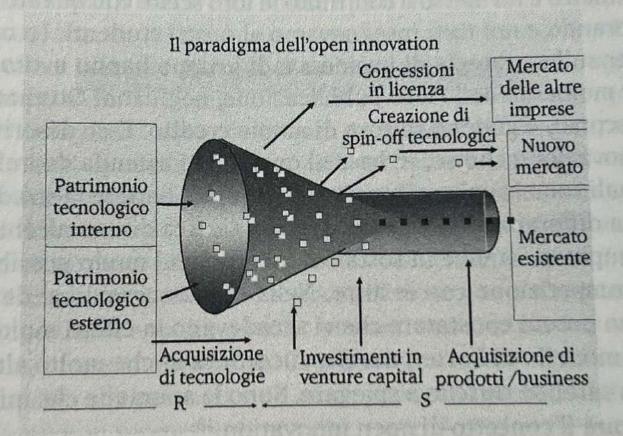


Figura 2.2. Il modello dell'open innovation

Business model				
Technology	Near to the existing	New		
New	Semi-radical	Radical		
Near to the existing	Incremental	Semi-radical		

Fig. 5. Innovation matrix.

Source: Davila, Epstein, and Shelton (2006, p. 39).

Low

### **Architectural**

A significant improvement on a product that aims to sustain the position in an existing market



Technology or new business model that disrupts the existing market

### Incremental

Gradual, continuous improvements on existing products and services



Technological breakthrough that transforms industries, often creates a new market

**TECHNOLOGY NEWNESS** 

High



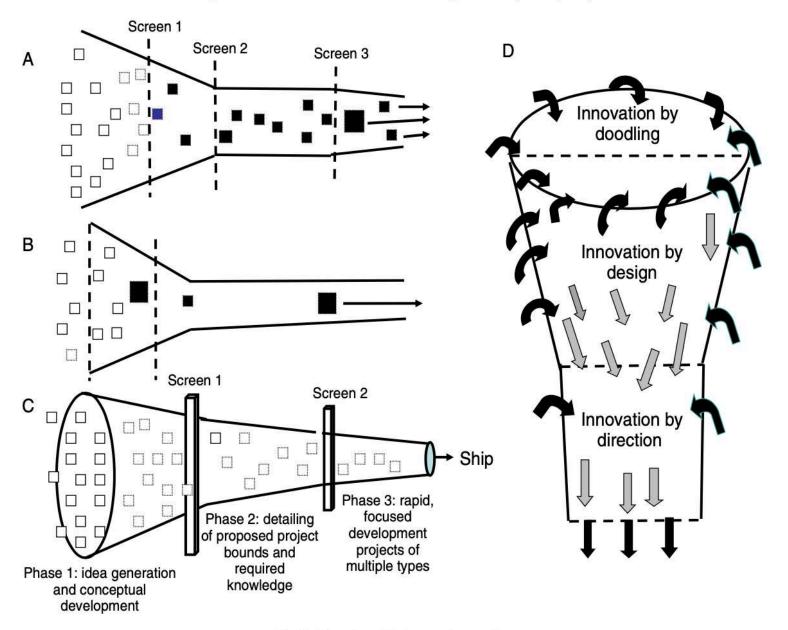


Fig. 6. Funnel model: types and example.

Source: Clark and Wheelwright (1993, p. 301 and 306) and Gundling (2000, p. 179).

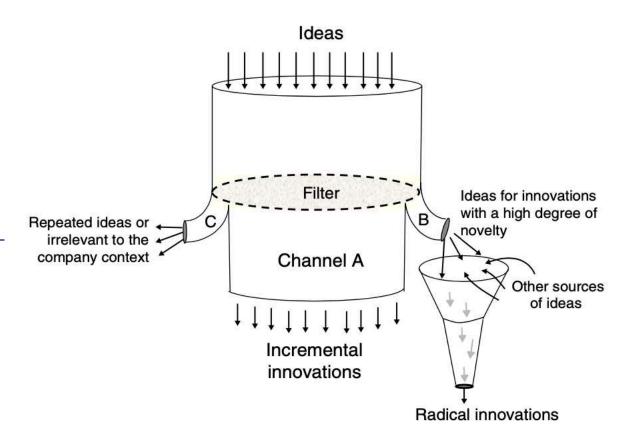


Fig. 7. Incremental innovation model.

# Which Innovation Model Is Right Company for Your

### Six Innovation Models

### **CREATOR** SOLUTION **LEVERAGER EXPANDER** DEFENDER FAST BUILDER **FOLLOWER** We We're We Seeking Protecting Ready do it share know listening to our best best to steal turf react Typically led by a Solution builders win Leveragers innovate Expanders use a core Defenders focus on Fast followers visionary, creators by understanding their core business capability to enter points of advantage optimize their disrupt markets and and delighting model to drive and dominate in mature or capabilities to react make focused, customers. ongoing advantage. adjacent markets. slow-changing rapidly to competibig bets. sectors. tive innovations. Key Characteristics A mandate · A closed innovation · Excellence in Concentration on Continuous · A focus on approach customer insight innovations that can for growth improvement to sensing and speed the expansion maintain edge of speed to improve · Deliberate life cycle · A focus on the full · A focus on one or of the model. current offerings on competitive management two advantaged purchase innovations and A focus on capabilities experience Rigorous · A limited number of lower risk continuous defensive big bets Centralized Consistent improvement of monitoring of Investment in governance to keep in-market core model potential go-to-market the customer experimentation disruptions excellence at the center Emphasis on · An open, of innovation transferring Use of M&A and · Flat organization empowering expertise and partnerships to to facilitate rapid innovation culture staff continuity keep pace decisions Examples Apple Nike • Zara Amazon · AIG Reckitt Benckiser Group Tesla Starbucks Toyota Motor Gilead Pfizer Netflix Tencent GoPro Costco Danaher Allstate Insurance JPMorgan Chase Lululemon Target Athletica Under Armour

Source: BCG analysis.

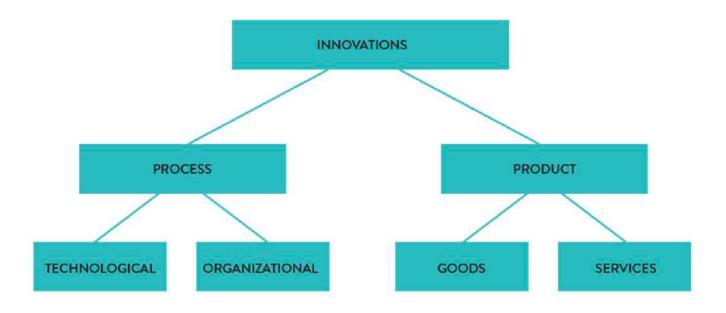


Figure 2.1 Taxonomy of innovation, Edquist (2001)

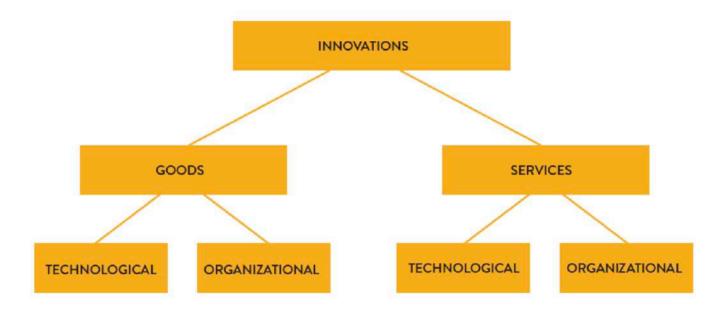


Figure 2.2 Taxonomy of innovation, Windeløv-Lidzélius (2016)

TYPE OF INNOVATION	DESCRIPTION					
PRODUCT INNOVATION	A GOOD OR SERVICE THAT IS NEW OR SIGNIFICANTLY IMPROVED. THIS INCLUDES SIGNIFICANT IMPROVEMENTS IN TECHNICAL SPECIFICATIONS, COMPONENTS AND MATERIALS, SOFTWARE IN THE PRODUCT, USER FRIENDLINESS OR OTHER FUNCTIONAL CHARACTERISTICS.					
PROCESS INNOVATION	A NEW OR SIGNIFICANTLY IMPROVED PRODUCTION OR DELIVERY METHOD. THIS INCLUDES SIGNIFICANT CHANGES IN TECHNIQUES, EQUIPMENT AND/OR SOFTWARE.					
MARKETING INNOVATION	A NEW MARKETING METHOD INVOLVING SIGNIFICANT CHANGES IN PRODUCT DESIGN OR PACKAGING, PRODUCT PLACEMENT, PRODUCT PROMOTION OR PRICING.					
ORGANIZATIONAL INNOVATION	A NEW ORGANIZATIONAL METHOD IN BUSINESS PRACTICES, WORKPLACE ORGANIZATION OR EXTERNAL RELATIONS.					

Table 2.1 OECD typology of innovation, 2005, adapted from Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data, 3rd Edition.

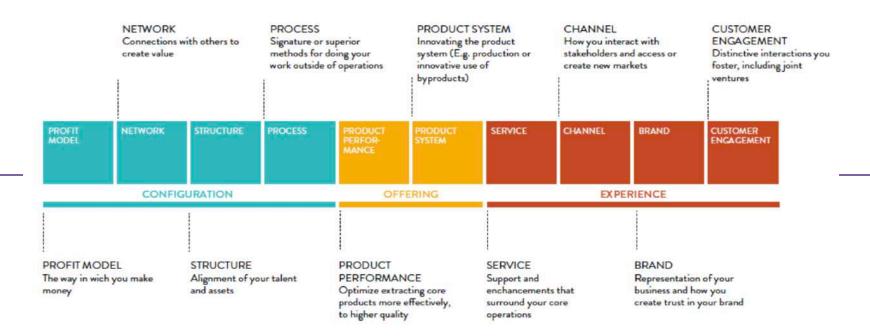


Figure 2.6 10 types of innovation, freely after Keely et al. (2013)

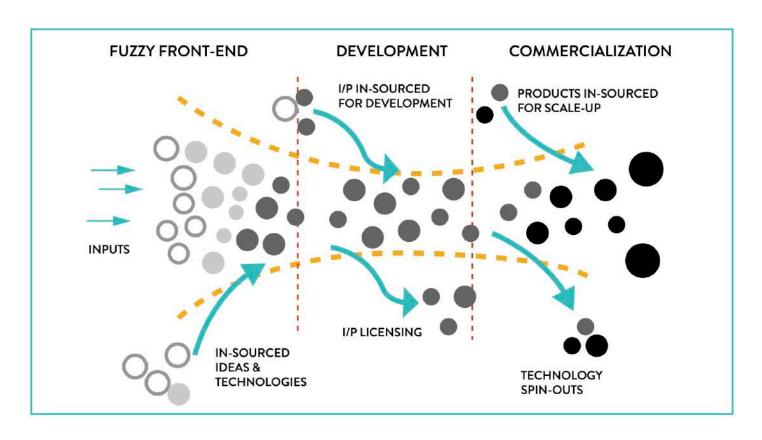


Figure 2.14 Open Innovation Model, freely after Chesbrough (2003)14



Figure 2.7 The linear technology push, loosely based on Godin (2006)



Figure 2.8 The linear technology push, loosely based on Savioz and Sannemann (1999)



Figure 2.9 The market pull model, loosely based on Rothwell (1994)

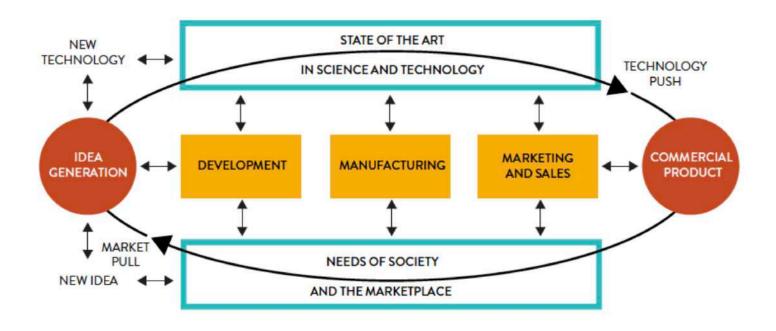


Figure 2.10 The coupling of R&D and Marketing model, loosely based on Rothwell (1992)

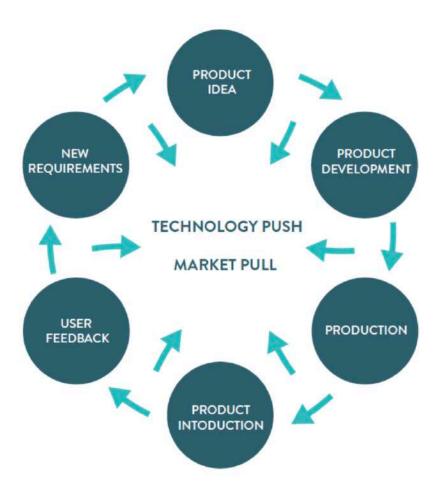


Figure 2.11 The coupling of R&D and Marketing model, Windeløv-Lidzélius (2016)

### NEW PRODUCT DEVELOPMENT PROCESS IN NISSAN

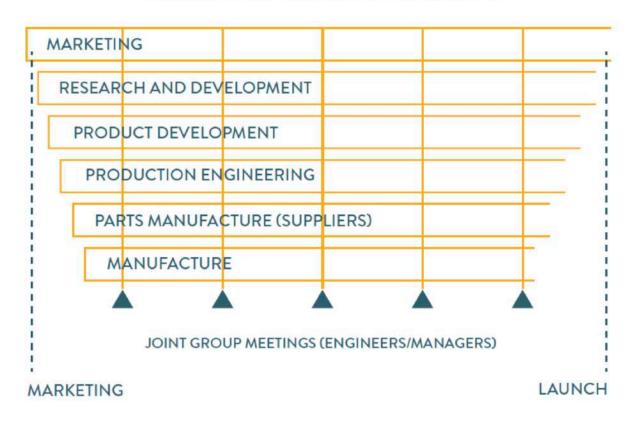


Figure 2.12 The integrated model, freely after Graves 1987

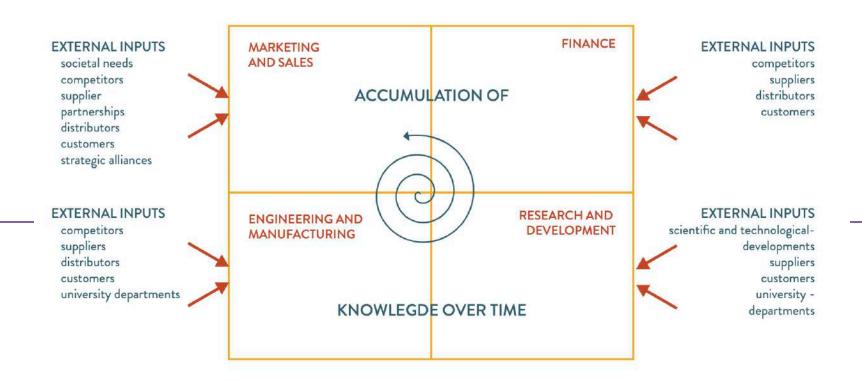


Figure 2.13 The systems integration and networking model, freely after Trott (2005)<sup>12</sup>

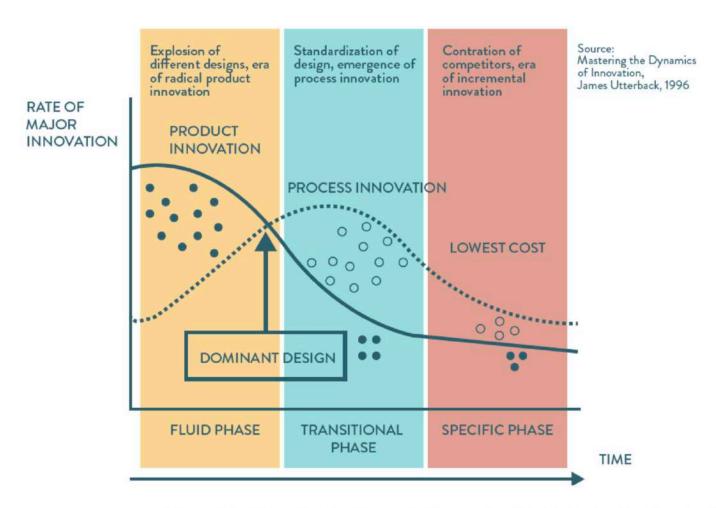


Figure 2.15 Mastering the Dynamics Innovation Model, freely after Utterback (1996)

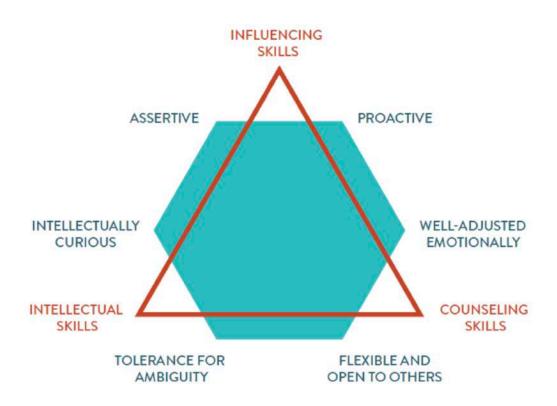


Figure 2.16 The Potential Competency Model, freely after Ridgeway and Wallace (1994)

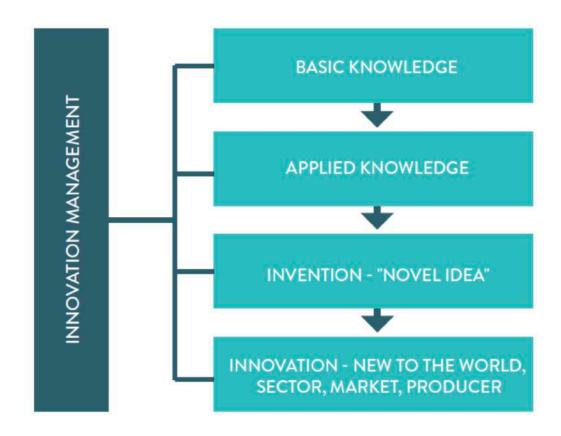


Figure 2.17 The innovation cycle Model, freely after Kaplinsky (2011)

Snowden and Boone (2007) believe the time has come to broaden the traditional approach to leadership and decision-making and form a new perspective based on complexity science. The Cynefin framework allows leaders to sort the issues they are facing into five contexts defined by the nature of the relationship between cause and effect. Four of these – simple, complicated, complex, and chaotic – require leaders to diagnose situations and to act in contextually appropriate ways. The fifth – disorder – applies when it is not clear which of the other four contexts is predominant.

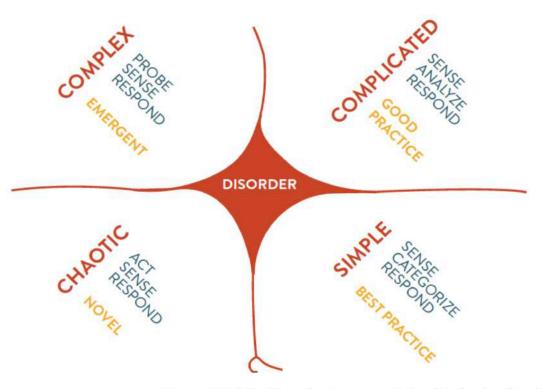
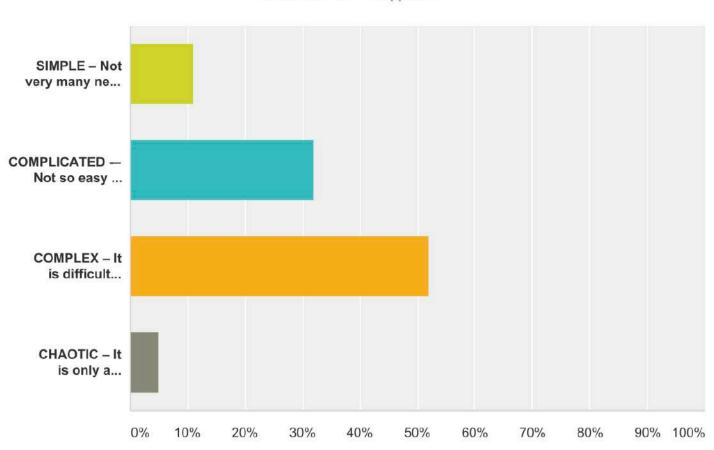


Figure 2.20 The Cynefin Framework Model, freely after Snowden (2007)

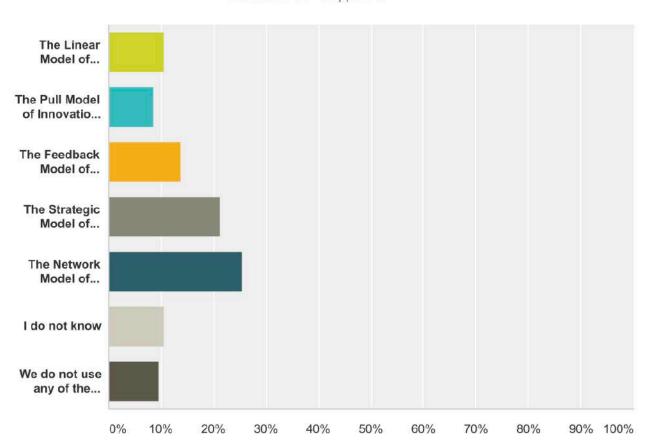
# Q11 I would characterise the competitive business environment for my organisation as:

Answered: 100 Skipped: 5



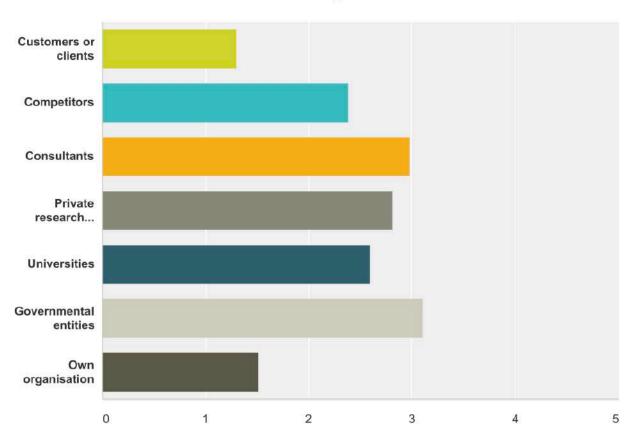
# Q13 What kind of innovation model does my organisation primarily follow:

Answered: 94 Skipped: 11



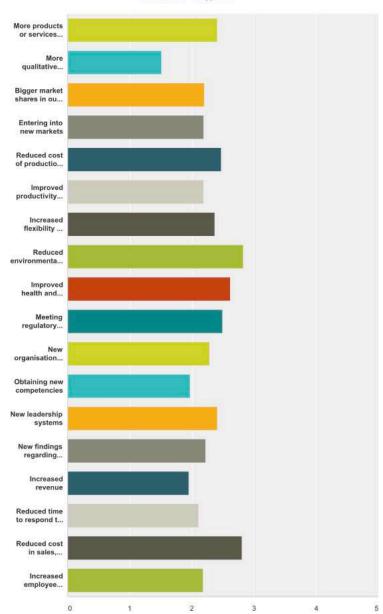
# Q14 Please indicate how important you find these sources to developing your innovation strategies:

Answered: 96 Skipped: 9



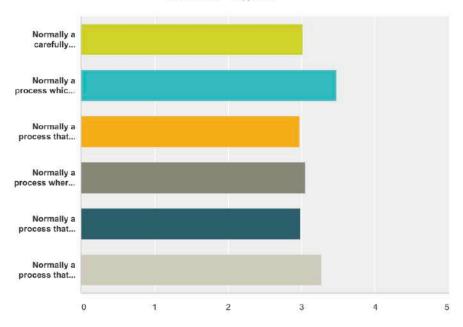
# Q15 In your opinion, how important are the following goals with respect to the innovation strategies of your company?

Answered: 96 Skipped: 9



### Q18 When we develop strategies for innovation, it is:

Answered: 80 Skipped: 25



	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Total	Weighted Average
Normally a carefully crafted process that includes all	8.75%	23.75%	27.50%	36.25%	3.75%		
relevant stakeholders	7	19	22	29	3	80	3.02
Normally a process which includes as much expertise as possible	3.75%	12.50%	25.00%	50.00%	8.75%		
	3	10	20	40	7	80	3.48
Normally a process that is done effectively within a short timeframe	6.25%	32.50%	21.25%	37.50%	2.50%		
	5	26	17	30	2	80	2.98
Normally a process where a few people write a suggestion which is then discussed and improved	5.06%	29.11%	22.78%	41.77%	1.27%		
	4	23	18	33	1	79	3,05
Normally a process that is preceded by a thorough and comprehensive analysis of the situation	8.75%	25.00%	31.25%	28.75%	6.25%		
	7	20	25	23	5	80	2.99
Normally a process that is approved on board level	1.25%	22.50%	36.25%	27.50%	12.50%		
	1	18	29	22	10	80	3.27

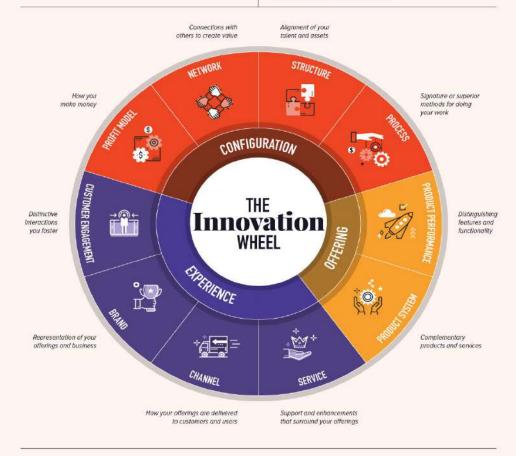
Table 4.8 Assessment of innovation strategy development

### **UNDERSTANDING THE**

# 10 Types of Innovation

New products are invented from scratch all the time, but this is merely one way to innovate.

According to innovation firm Doblin, most big breakthroughs in history comprise some combination of the following 10 types of innovation.



By tactically examining these 10 different types of innovation, you may uncover exciting new product opportunities - or you may change the business world forever.











### TRIPLE HELIX MODEL

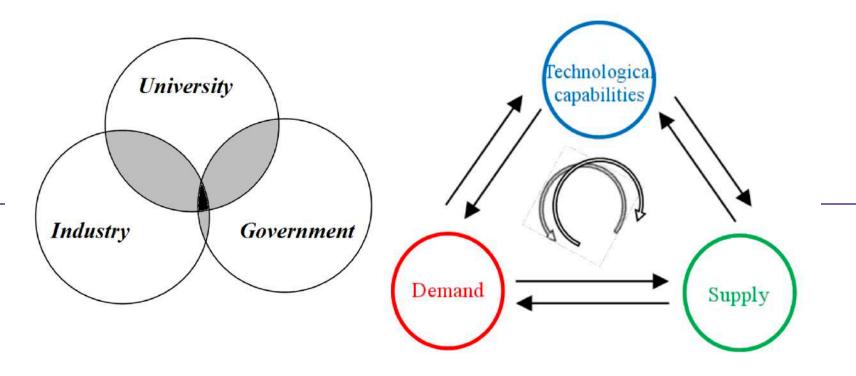


Figure 1: Representations of the Triple Helix in terms of a Venn diagram (Fig. 1a; source:

Etzkowitz & Leydesdorff, 2000, p. 111) or as a triangle (Fig. 1b; source: Petersen et al., 2016,

### Innovation labs

Physical environments focused on innovation are emerging in many major brands. Big players PayPal, Citigroup, Mastercard, Expedia, Microsoft, and IBM set up centers in the innovation-driven Asia Pacific. Samsung has also created its own Strategy and Innovation Center. Tencent opened Al innovation labs in Barcelona and Seattle.

These spaces emanate a startup-like atmosphere. They encourage out-of-the-box thinking and risk-taking. Key elements for accelerating the development of new projects and ideas. It's important not to equate innovation with creativity. Successful innovation requires creative ideas combined with sustainable and profitable business models. With clear direction on how to contribute to company goals, project schemes can be strategically aligned with corporate strategies.

In 2021, Alibaba announced its \$15 billion investment in its new Alibaba DAMO Academy initiative. It's a global initiative that aims to open seven innovation labs in Beijing, Hangzhou, Singapore, Moscow, San Mateo, and Bellevue in the US, and Tel Aviv. The focus lies in research ranging from data intelligence, the internet of things, fintech, quantum computing, artificial intelligence, and more. Alibaba is slowly but surely creeping up on Amazon, Apple, and Google by accelerating its innovation through this initiative.

### **Hackathons**

Companies organize Hackathons for three main reasons:

- Attracting talent
- Market their brand
- o Develop ideas for software solutions that solve their needs.

It's an approach that brings new talent and fresh ideas to your firm. Hackathons were born in Silicon Valley roughly a decade ago. Nowadays, especially in Asia, more and more companies are following suit. Tech giants Tencent and Baidu launched their first Hackathons in 2012 with tangible results. Since then, Baidu has endorsed numerous Hackathons to explore the possibilities in emerging industries and transfer those findings to its business.

Back in 2013, Baidu saw huge potential in the green tech industry. Seeking fresh product ideas, they challenged developers to make a digital product that satisfied a "green lifestyle" need. The human presence-detecting application Social Smart Home took the gold. Most people have a lazy tendency to leave on the lights and AC when they leave a room. This app controls the lighting and temperature conditions within the smart home in the most energy-efficient way possible.

Modern hackathons usually start online and end in real-life events. Hence, the term "O2O" or online to offline hackathons. Essentially this model is applicable to any business, sector, and problem.

The first steps are easy:

- Identify the aim.
- Choose the target communities to target as well as
- Find the right intermediaries

### **Intrapreneurship Programs**

Intrapreneurship programs empower employees to develop promising ideas. The right resources and support motivate them to solve company needs their way. These programs stimulate innovation, collaboration, and employer branding. The first step is working with specialists to find those creative, risk takers, that can handle ambiguous and complex situations that can manage the project. Teams are then formed and objectives set. What's important for this to work is the autonomy to operate as their own business.

One of the most successful intrapreneurship examples in an Asian company was the development of the **PlayStation**. Ken Kutaragi, a junior employee at Sony, revamped his daughter's Nintendo, planting the seed that became PlayStation. Executives at Sony immediately saw the potential in Kutaragi's design. He was given full responsibility to oversee the creation of the prototype. Thus, one of the most profitable consoles and greatest gift to gamers was born.

### **Hybrid innovation strategies**

The five innovation models mentioned each have their own value and create a competitive advantage over others when done well. However, most models are even more effective when they take place in a setting or culture of innovation that considers more than one approach. Different models can be adopted by one company, to experience the benefits of each entity and create a hybrid approach that leverages both internal and external parties in an ecosystem.

Airbus is one of the companies that has taken this route and sees great success. They have created a model that includes internal and external people, emphasizing a collaborative environment and alignment to bridge the gap between corporate and startup cultures. Their Head of Disruptive Research & Technology, Senior Vice President reflects on their model with Forbes, saying: "With the right balance of autonomy, oversight, and commitment to innovation, corporations adopting hybrid innovation models can revolutionize their approach to innovation and stay ahead in the ever–evolving business world."

If you want to succeed in any form of hybrid or mixed innovation approach, it's key to find a tool that acts as the central hub of all those efforts. Look out for a solution that helps you:

- Communicate to your entire ecosystem to boost engagement.
- Collaborate with internal stakeholders, whether they are C-level management, expert judges and mentors of ideas or colleagues that help run your programs.
- Measure progress of ideas in the funnel, program participation and project completion.
- Store all ideas, talents and projects from different programs, whether with startups, students, customers or employees.

