



BIOSWITCH

OPEN INNOVATION AS A KEY TOOL TO SWITCH TO BIO-BASED

*Encouraging Brand Owners
to Switch to Bio-based*



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1. What is Open Innovation? Why is it needed?

Current situation

- **Innovation** is not an option anymore but a **need** to keep industrial competitive advantages and survive.
- The **Market changes** faster than the R&D capacity of departments to create innovations.
- The **competition in R&D projects is higher**, making it harder to obtain public funding, rendering it a must to improve innovation projects profitability.



New paradigm of innovation

- Better effectiveness
- Better efficiency



OPEN INNOVATION



What is Open Innovation?

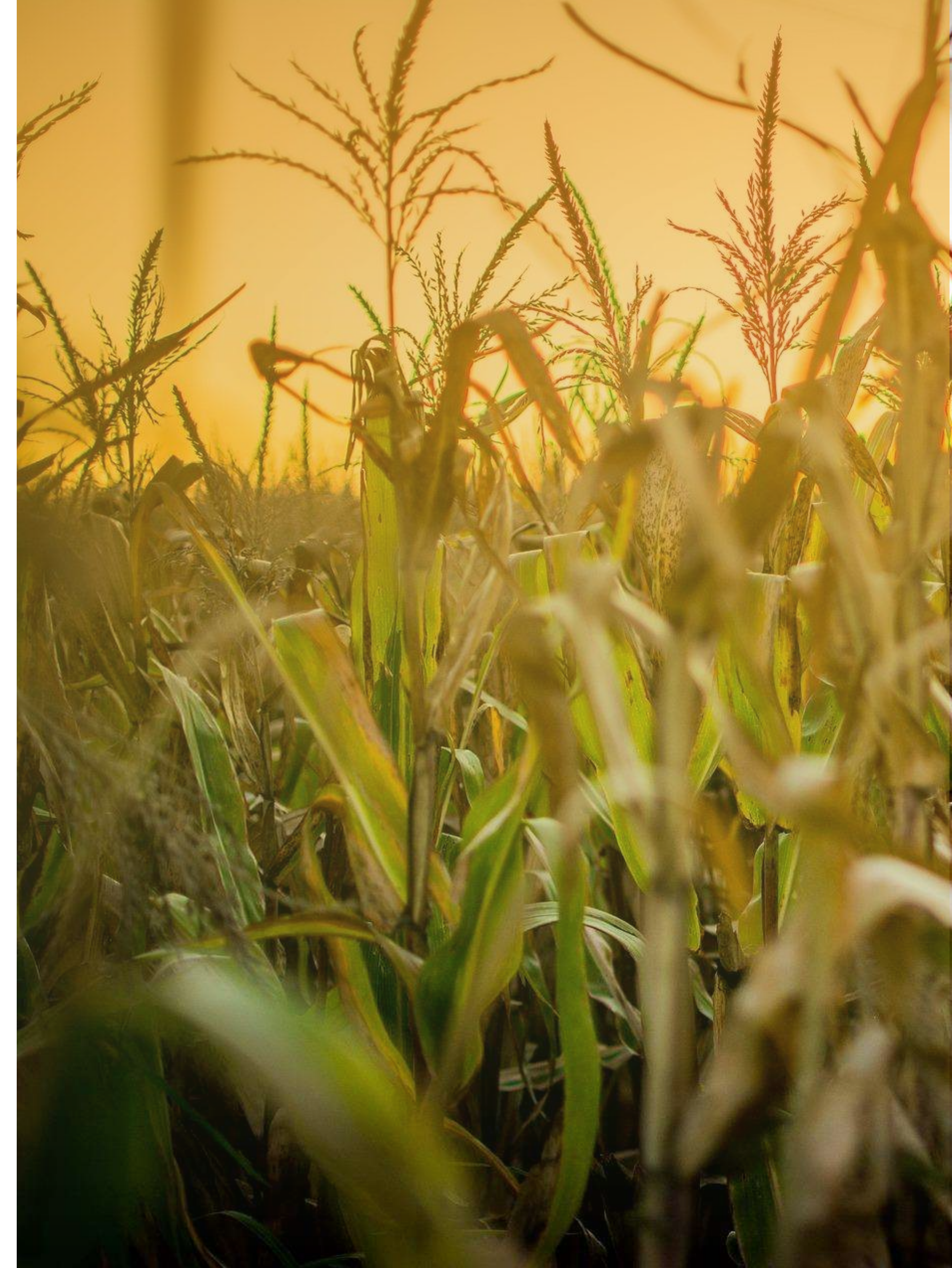
“Your R&D department is the best of the world”

vs

“The world is your R&D department”

“A paradigm where firms can and should use external ideas and internal ideas, as well as internal and external paths to market, as they look to advance their technology.”

The key to Open Innovation is to understand innovation as an open system in which internal and external actors of the organisation take part.



Internal Innovation

- Very limited by **available resources** (\$ and people).
- **Limited** by internal know how and technology availability.
- **R&D department and the rest of the organisation** may **collide** in cultural and organisational aspects.
- In some cases, there is a lack of motivation because of the **invisibility of R&D results**.

VS

Open Innovation

- **No limitation** because of resources availability.
- Openness to **multidisciplinary** knowhow through startups.
- **Access** to disruptive technologies.
- **Wide scope**, no restrictions due to objectives, culture or internal policies.
- **Extra motivation** ("we want to change the World!").

Why is Open Innovation essential?

- ❖ No business can invest the equivalent to **hundreds of teams** working on the latest trending technologies (even Apple, Pfizer or Amazon).
- ❖ No business can **cover every innovation** in all the areas of its sector/market.
- ❖ Only those businesses that use Open Innovation massively in their R&D are maintaining their **competitive advantages in the long term**, like pharmaceutical and technology companies.

IDEA TO
TAKE
HOME

Open Innovation allows to benefit from the best internal and external innovation, increasing the number of results exponentially.

Added value

Many advantages are offered by an Open Innovation Programme:



Efficient access to innovation

The organisations can avoid starting new research from scratch.



Acceleration of the innovation

Reduction of creation cycles, shortening of the “time to market”.



Cost reduction

Mostly in the idea generation phase, including the development phase.



Talent search

Companies are able to identify and attract human capital.

Added value

Many advantages are offered by an Open Innovation Programme:



Identification of **new business opportunities** and **access to new markets**



Improvement of the company network: restructuring of the external relationships of the organisation, new collaboration frameworks.



Increase of staff soft skills (creativity, proactivity, training, etc.).



Improvement of brand positioning



To sum up: **INCREASED COMPETITIVENESS**



2. How is it implemented?

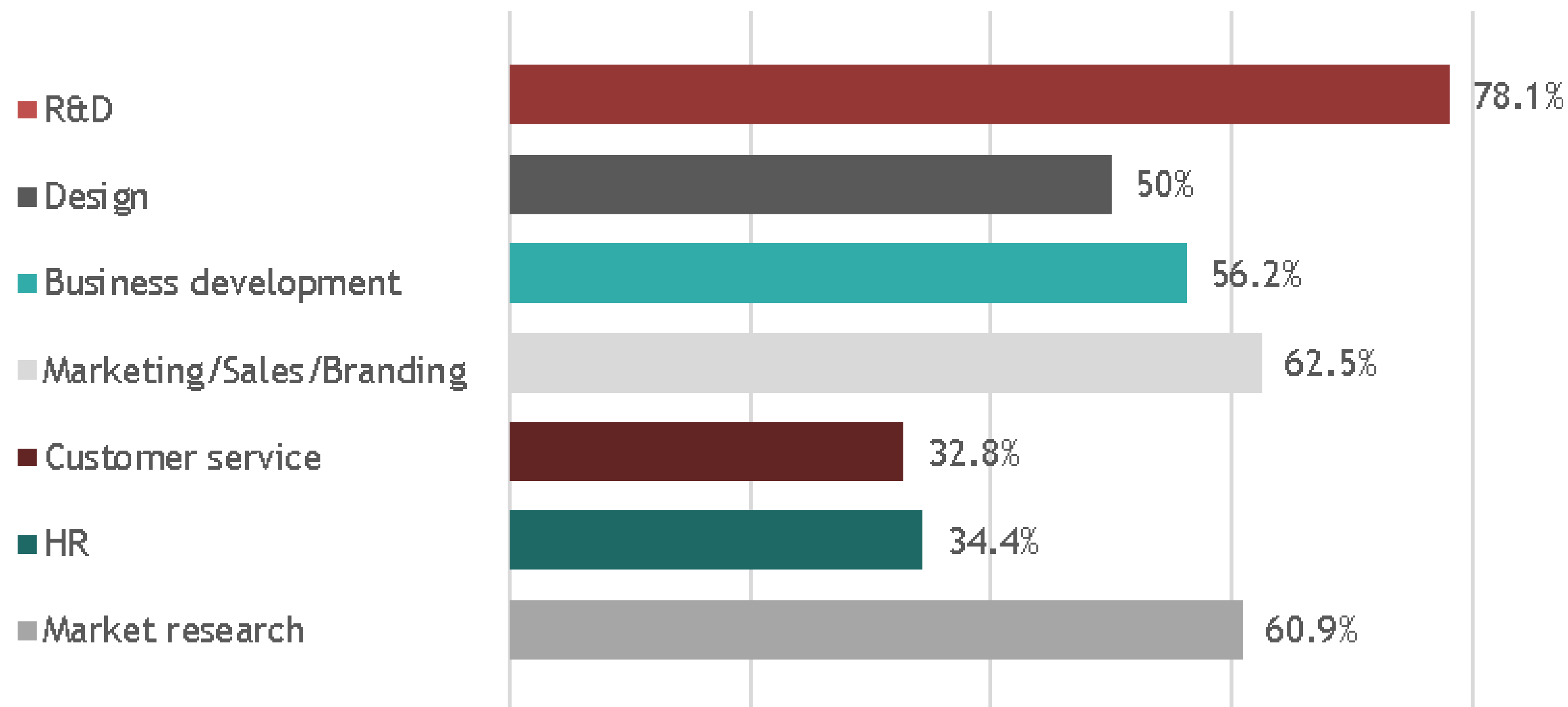


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Open Innovation application fields

Open Innovation services application fields





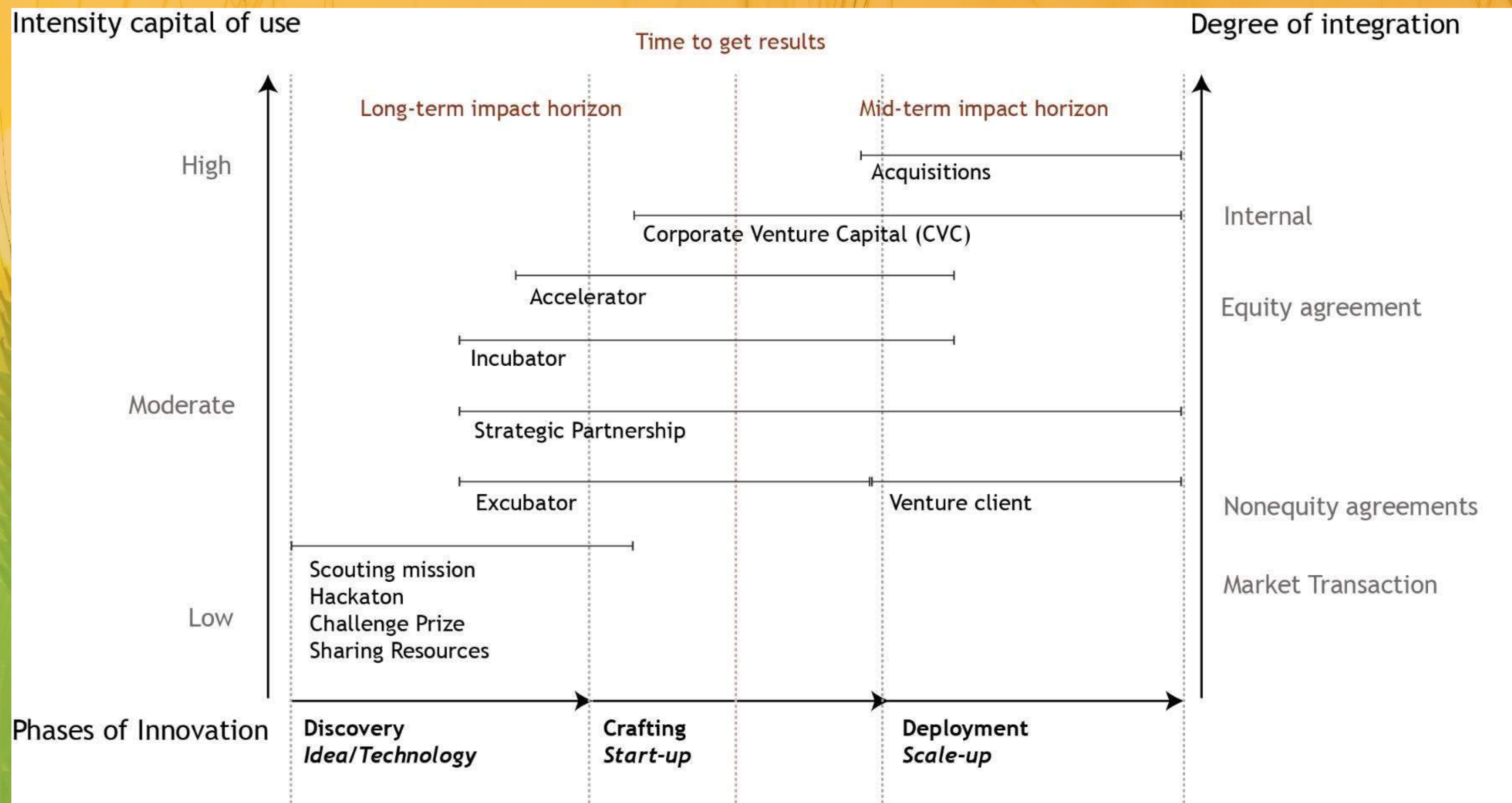
Open Innovation application fields



BIOSWITCH

Classification of OI tools
by cost of capital, time
frame to obtain results,
degree of integration
and phase of innovation

Source: IESE





Firms adopting Open Innovation approaches

facebook

amadeus

Sacyr



amazon

P&G



endesa

 **REPSOL**



Google

enagas

 **vodafone**

DHL

Telefonica

LEGO



Some key figures:

➤ **WAYRA – The OI programme from Telefónica**

- ❖ It has already involved more than 400 start-ups.
- ❖ 100 of these start-ups are directly working with Telefonica in joint developments.
- ❖ +160 mill€ invested with 1.200 mill€ from other investors/business angels triggered.

➤ **Biopharma industry:** according to Deloitte's analysis, probability of success when drugs are sourced via Open Innovation.

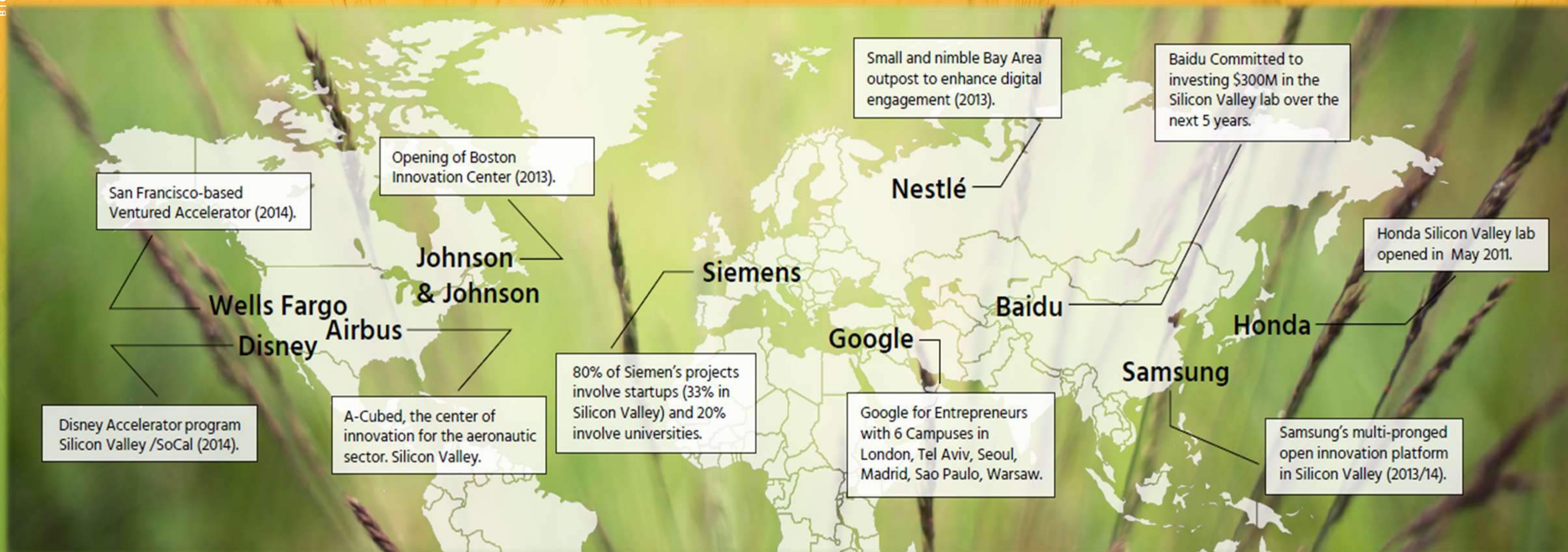
➤ Through the **InventionQuest™ contest**, **STAPLES** was able to obtain over 8,300 application submissions for ideas.



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Open Innovation nowadays

Companies all around the world are strongly linked to the main, worldwide focal points of innovation and entrepreneurship to face strategic issues.

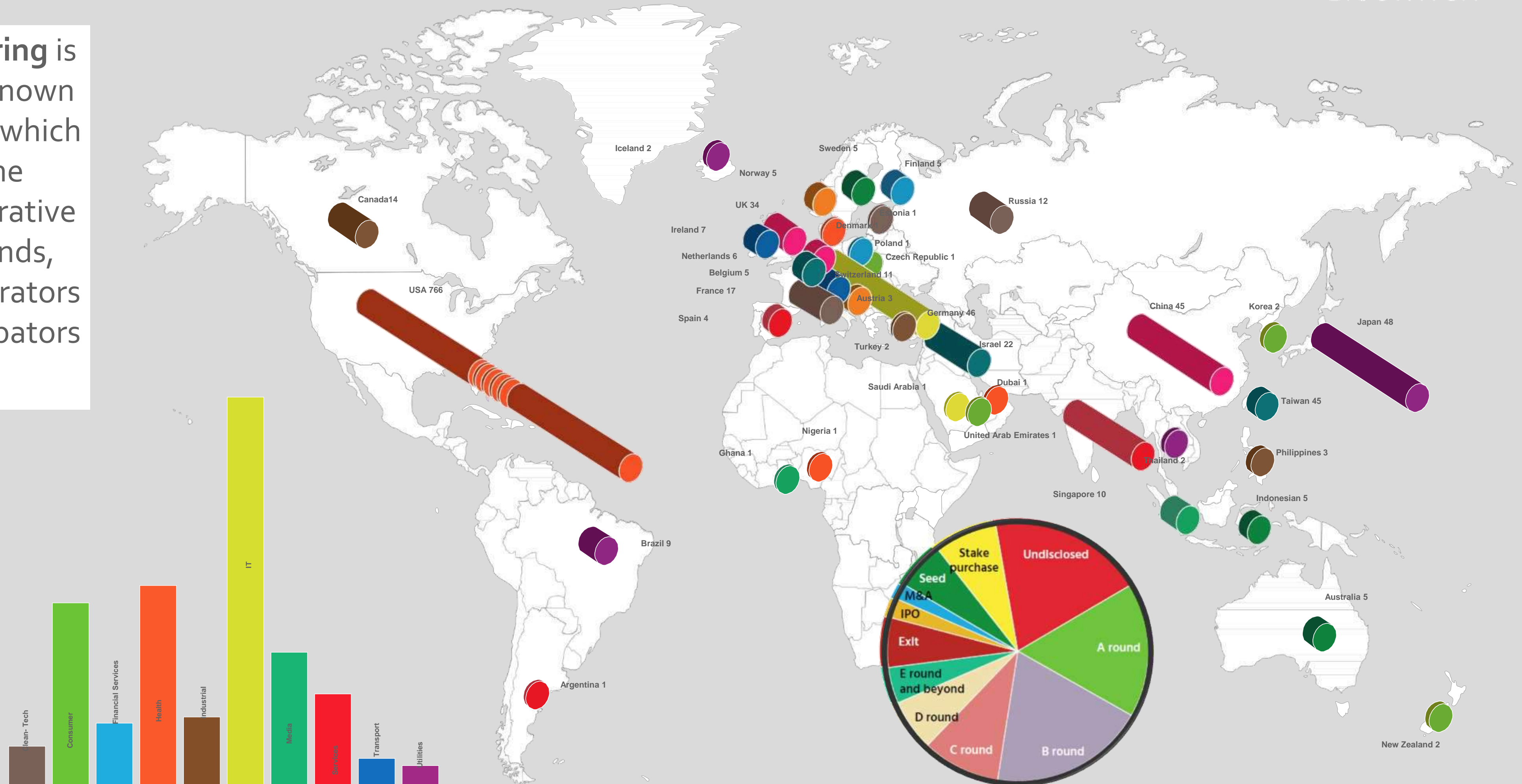




Corporate venturing, an instrument of OI



Corporate venturing is one of the most known approaches of OI, which coordinates the creation of corporative hedge capital funds, enterprises accelerators and business incubators





3. Open Innovation in the bio-based area



OI players in the bioeconomy field

Leo Pharma Open Innovation (Denmark) is looking for small molecules that could be relevant for business collaboration, science and disease exploration, or provide a starting point for a collaborative project. There are no limiting business terms attached to the contract and the external partner always retains IP rights, as well as the decision to continue the collaboration or not.

OI mechanism: Joint partnership + Acquisition.

Bayer Grants4Leads (Germany) has an Animal Health programme that offers financial support to assess and promote the exploration for new compounds with an initial reward of 5,000 EUR.

OI mechanism: Challenge prize.

UNILEVER Foundry (UK) collaborates with mature start-ups to solve challenges across product, marketing, digital innovation, ecommerce, customer insight, sustainable growth and enterprise tech.

OI mechanism: Corporate accelerator.



OI players in the bioeconomy field

Plug and Play-Fashion for Good (NT). Programme aimed at accelerating sustainable innovations in the textile industry, scouting innovative companies with the potential to disrupt the current apparel and textile value chain, bringing a positive environmental and/or social impact.

OI mechanism: Corporate accelerator.

Agrostart in collaboration with **ACE accelerator** have been named best Start-up Accelerator of Brazil and Latin America. Today, it counts on two acceleration programmes: ACE Start, oriented to validation phase start-up, and ACE Growth, to scale-up companies.

OI mechanism: Corporate incubator + accelerator.

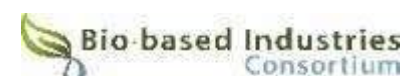
Food Acelerator (IT), H-FARM in partnership with Cisco have create this programme dedicated to early-stage start-ups that are developing innovative solutions that are disrupting the food and agriculture industry.

OI mechanism: Corporate accelerator.





4. Conclusions



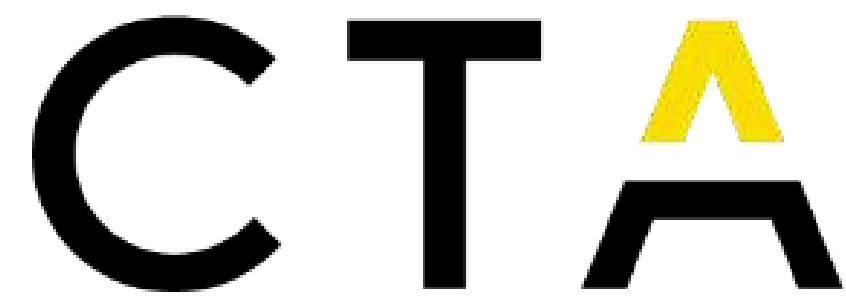
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Conclusions

- ❖ Open Innovation (OI) is a **powerful tool** to increase an organization's **competitiveness** thanks to joint cooperation, involving the whole innovation ecosystem.
- ❖ **Quick way to solve challenges** (e.g. bio-based transition related ones).
- ❖ There are **a lot of OI tools**, find the most suitable for your organisation!
- ❖ Once the most suitable OI tools are identified, it is recommended to define an **OI strategy for the organisation**, which is aligned with the RDI strategy and the organization's strategy.
- ❖ Some organisations from the bioeconomy are already implementing OI. Others are still unfamiliar with OI strategies. However, most of them are already doing OI actions without calling them OI as such, mainly strategic partnerships.

Contact information



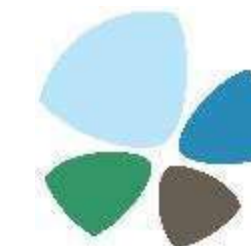
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Partners



Food & Bio Cluster
Denmark



MTU

Ollscoil Teicneolaíochta na Mumhan
Munster Technological University



FLANDERS'
FOOD



Sustainable
INNOVATIONS



Bio-based Industries
Consortium



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