

Strategical partnerships in local innovation ecosystems
a catalyst for the competitive growth



POLITECNICO
MILANO 1863

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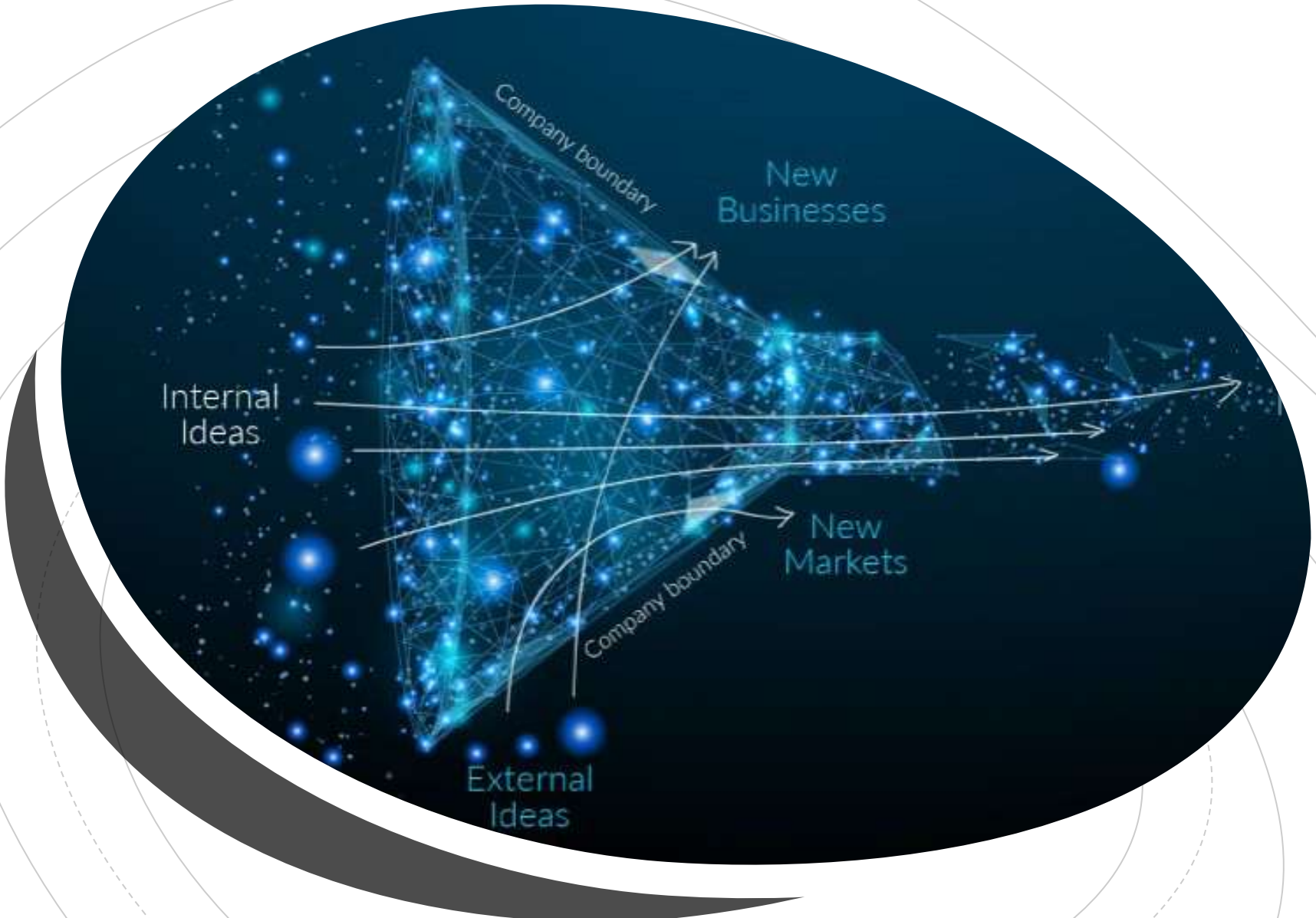
The university

- Politecnico di Milano
 - 46 324 students
 - 1 400 faculty staff
 - 1 200 administrative staff
- Lecco Campus of Politecnico di Milano is experimenting innovative actions with SMEs



Lecco Territory

- More than 4900 manufacturing firms
- Great capability for innovation
- SMEs with higher profitability rates WRT larger companies



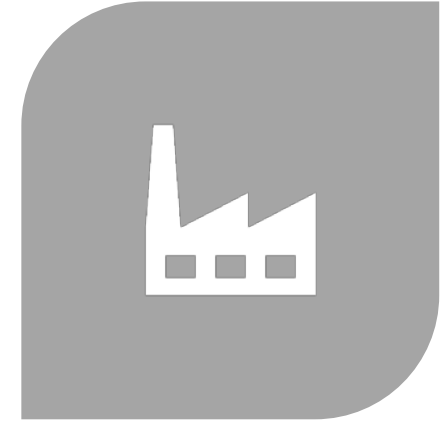
Open
Innovation
Playground



Issues to address



IDENTIFICATION OF BEST
CONDITIONS FOR COLLABORATION



INSTRUMENTS TO COLLABORATE
WITH MANUFACTURING SMES



Absorptive capacity and proximity



Absorptive capacity

- The scientific knowledge of university researchers is not sufficient to promote the collaboration
- The company must be in the right condition to absorb knowledge from the innovation partner
- The compulsory condition for the success of an open innovation process is the absorptive capacity
- How to reach the final stage (exploitation) in the shortest possible time?

Awareness

Acquisition

Assimilation

Transformation

Exploitation

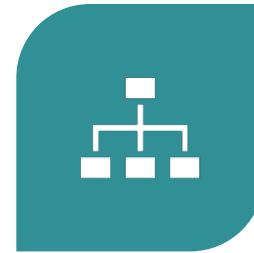
Proximity



GEOGRAPHICAL



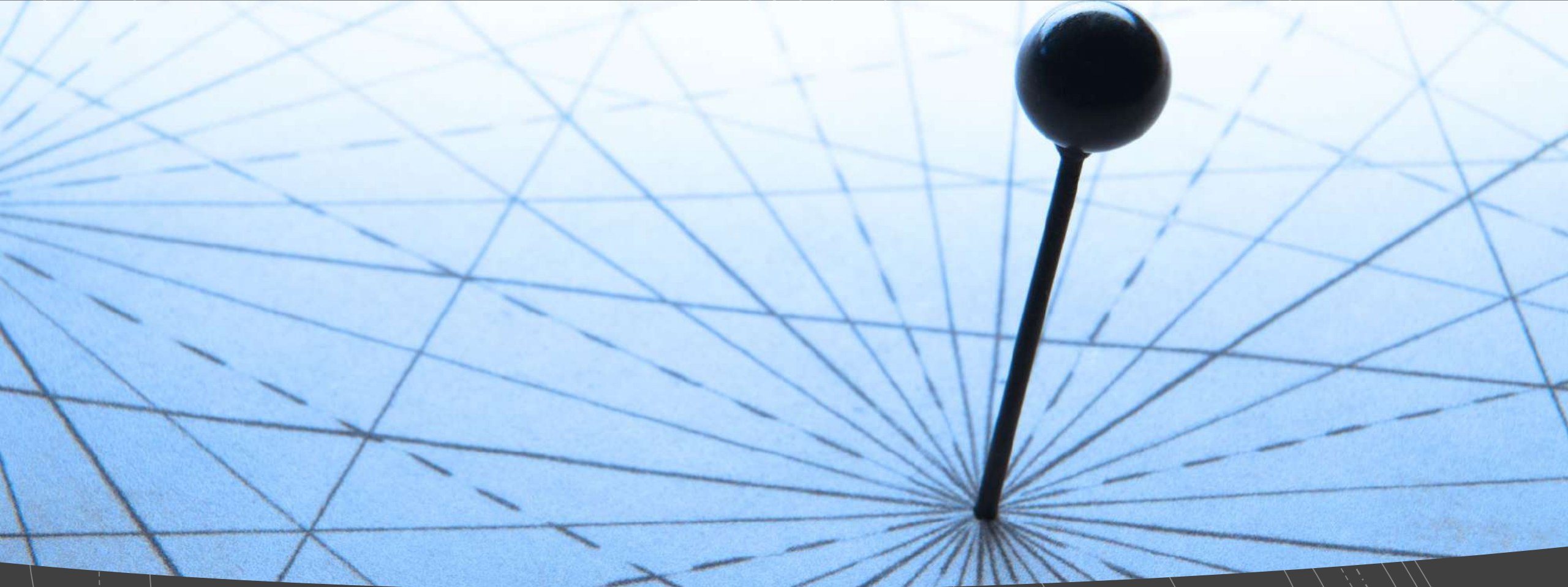
SOCIAL



ORGANIZATIONAL



COGNITIVE



The double approach of PMI Network



Pull mechanism: questionnaire

PMI - Network: Innovation Checkup

Il questionario è composto da un numero variabile di domande (al massimo 52) divise in 7 sezioni. La compilazione richiede circa 30 minuti

* Required

Mercato di riferimento

0% completato

1. Partita IVA *

Enter your answer

2. Nome dell'intervistato *

Enter your answer

3. L'azienda è iscritta ad una associazione di categoria? *

AITI

Confapi

Confartigianato

Confcommercio

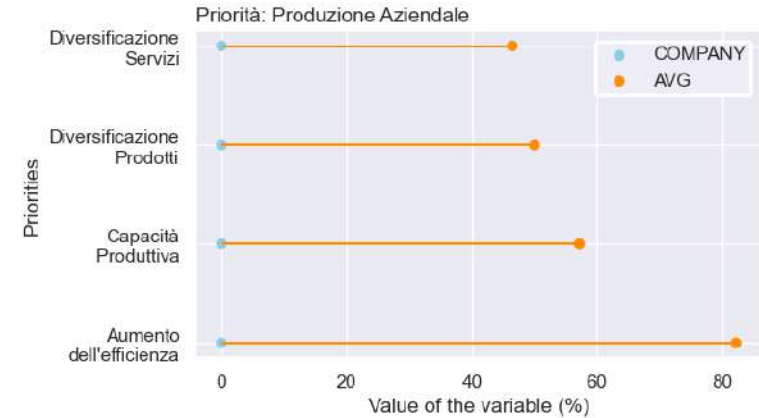
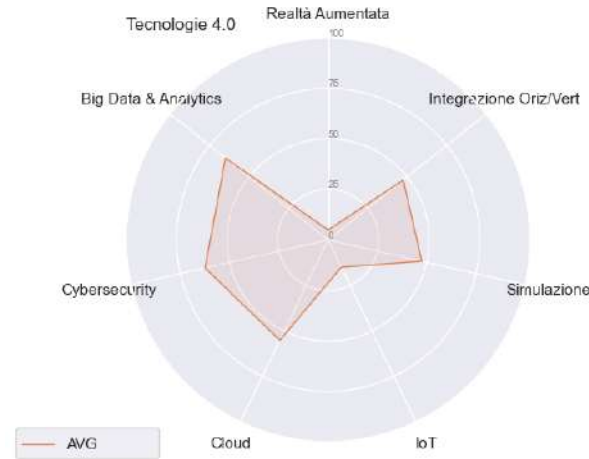
Confesercenti



The questionnaire structure

- 7 sections
 - Company profile
 - Company dimension
 - R&D Capabilities
 - Organization and management
 - Industry 4.0 skills
 - Intellectual Property Management
 - Innovation strategies
- 52 questions
- Psychological profiling
- <https://www.16personalities.com/>

Results: company profile



Descriptive statistics

Comparison with other companies' performances

Identification of **absorptive capacity** and the **proximity dimensions**



Push mechanism: tech talks

TECH TALK

Recording of "Measurements, IoT and condition based monitoring"

Temperature and vibration measurements have always been used to describe the state of machineries and the paradigms of I4.0 (wireless sensors, machine learning, big data and cloud-based analysis) increase the [...]

Mechatronics, Metalworking

TECH TALK

Recording of "Circular economy business models - towards sustainable production and consumption"

High-sounding and inspiring, the concept of Circular Economy to date is still poorly integrated into industrial practice. The goal of the webinar is to provide a clear definition of the [...]

Chemical-plastic, Life science, Mechatronics

TECH DAY

TECH DAY "Digitization in SMEs: technologies and new opportunities"

The team of the project "PMI-NETWORK" promotes a Tech Day as a moment of meeting and confrontation on topics related to product innovation, process and supply chain, with a focus [...]

Chemical-plastic, Life science, Mechatronics, Metalworking

TECH TALK

Recording "The impact of COVID-19 emergency on PMI: economical and financial aspects"

As the trend statistics show, the shutdown of activities due to the COVID-19 emergency has generated a worrying impact on the income and liquidity situation for Italian companies, especially for [...]

General topic

TECH TALK

Recorded event "Collaborative robotics for SMEs: an accessible and flexible solution"

In a context where uncontrollable pandemics are disrupting production systems around the world, we have a weapon that can allow us to remain operational and flexibly adapt production to changing [...]

Mechatronics

EVENT

PMI Network presentation during APITech on "Internet of Things data and Machine Learning analysis"

During the online seminar organized by API for May 21, 2020 on the potential of IoT and Machine Learning in industrial production (See the poster), the project Interreg Italia-Svizzera PMI [...]

General topic

TECH TALK

Recording "EU funding for SMEs: opportunities and challenges"

EU funding for SMEs is both an opportunity and a challenge. Firms can access resources to fund applied research and innovation initiatives and at the same time join international networks. [...]

General topic

TECH TALK

Recording of "Measuring environmental impacts for more sustainable products and processes"

In response to the increasing pressure to which companies are subjected by the market and the supply and distribution chain, the seminar introduces the issue of measuring environmental impacts at [...]

Chemical-plastic, Life science, Mechatronics, Metalworking



Results

4 months of PMI Network

- 12 tech talks
 - 312 companies
 - 432 contacts
- 44 questionnaires
- 3 new collaborations

No correlation between tech talk participants and new contacts

Best results with uniform audience (only for R&D, only for CEO, ...)

A large, bold black question mark is centered on a white rectangular panel. The panel is part of a row of three similar panels, each separated by a vertical grey pillar. The background behind the panels is dark, suggesting an outdoor setting at dusk or night.A large, bold black question mark is centered on a white rectangular panel. The panel is part of a row of three similar panels, each separated by a vertical grey pillar. The background behind the panels is dark, suggesting an outdoor setting at dusk or night.A large, bold black question mark is centered on a white rectangular panel. The panel is part of a row of three similar panels, each separated by a vertical grey pillar. The background behind the panels is dark, suggesting an outdoor setting at dusk or night.

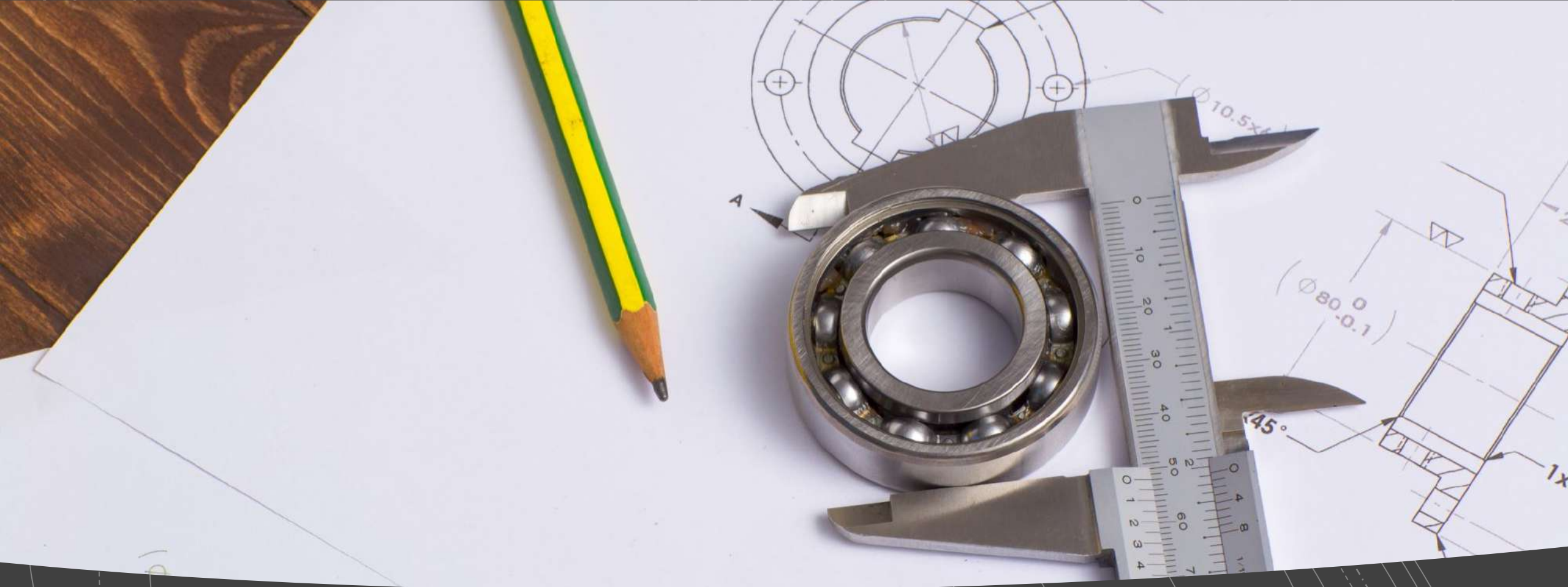
What are companies looking for?



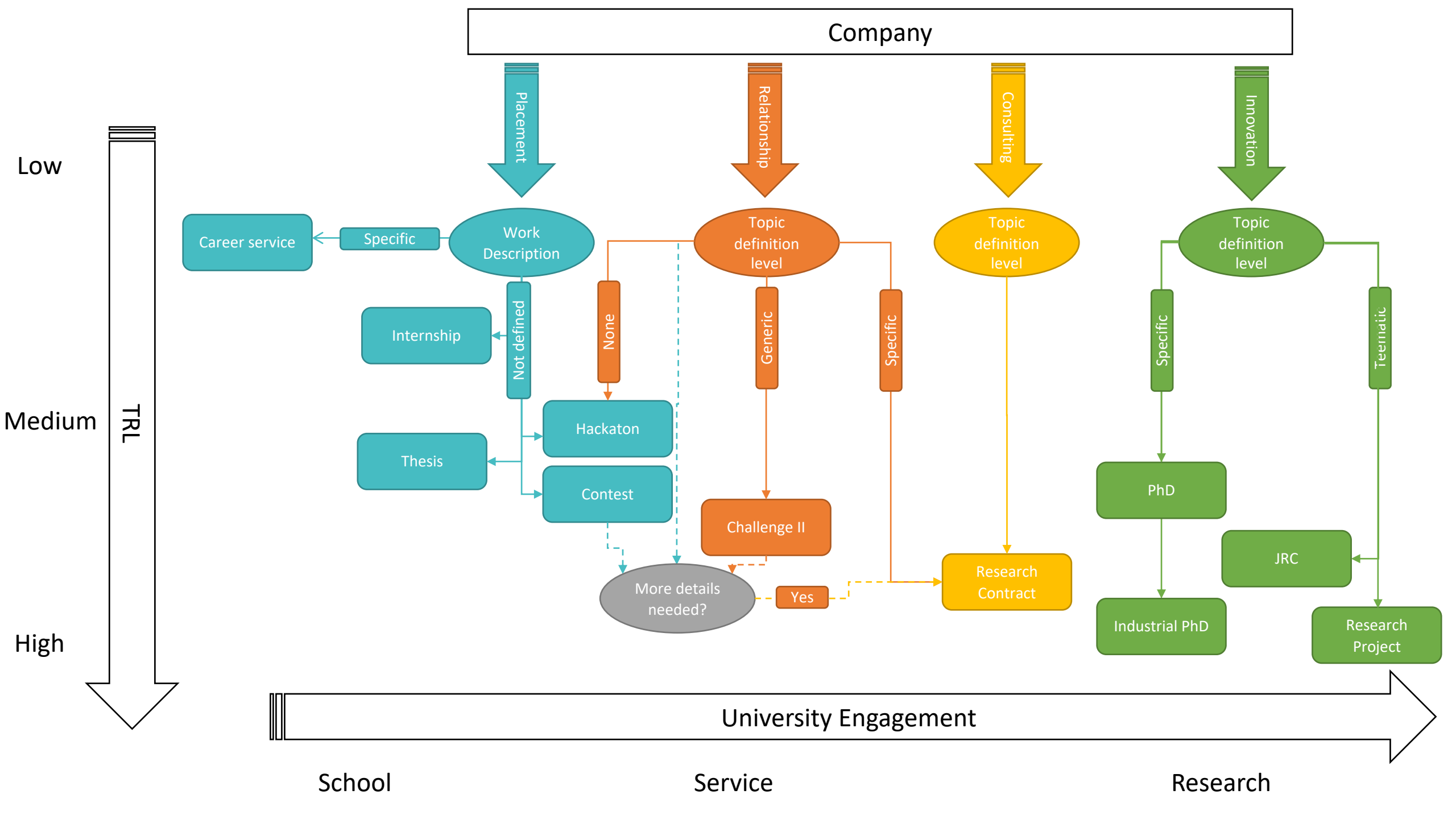
Company need VS expectations

Push-pull approach helps the university to clarify company **need**

- Technical/scientific competences
- Partnerships
- Long-term research projects
- Networking



The instruments





Conclusion

The success of an open innovation process does not only depend on the level of technical knowledge

Take home messages

- Create an innovation ecosystem in which trust and awareness allow increasing relationships
- Aim at cognitive proximity
- Focus on the open innovation instruments



Thanks for listening

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