Focus

AI Technology forecasting
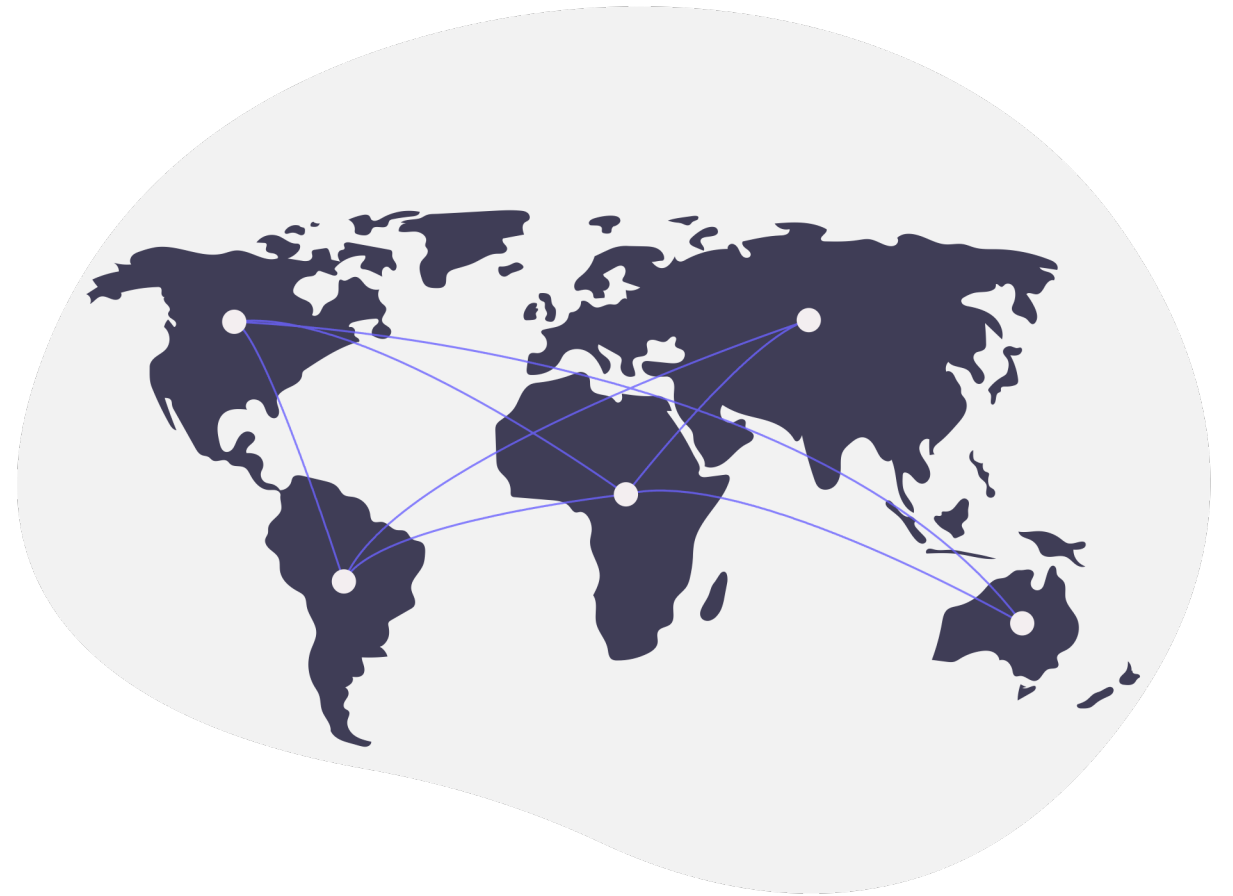
Focus empowers technology leaders with the most powerful tool of all, foresight into the future

What customers say about us

PHILIPS

Pradipto Kolay

R&D leader – Philips healthcare

"Focus provided the insights that we needed to take an important R&D investment decision. With Focus, we got an early heads up on where to invest."
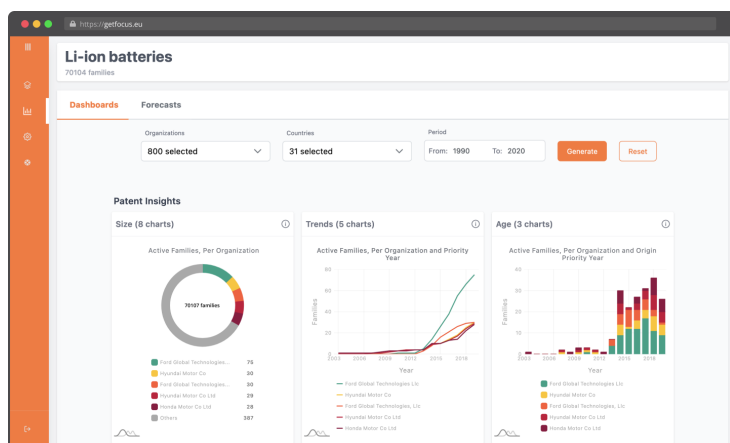
An uncomfortable truth

Your success depends on your ability to keep up with technological change

But doing so is harder than ever
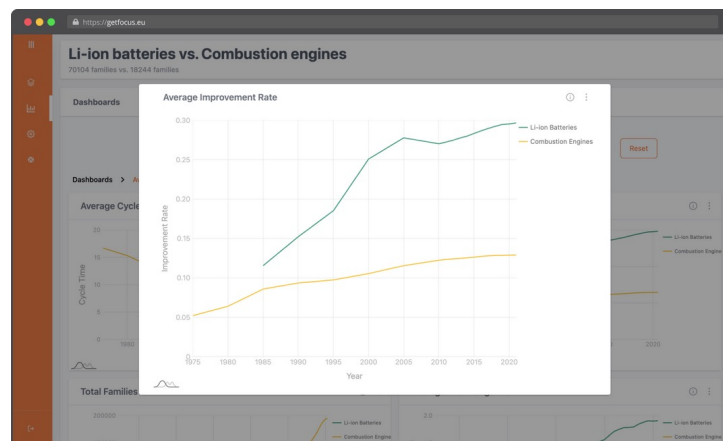
Focus helps you rise to the challenge

AI Technology tracking

Keep a strategic overview

Track any number of technologies and see who is betting on what tech
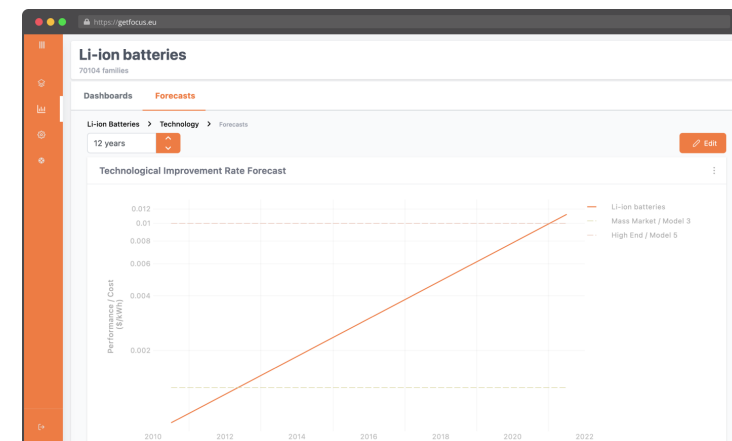
Predicts winners

Spot winning tech before anyone else

Winning technologies show clear and measurable patterns. Focus unveils these patterns and helps you predict the technological future

Time your investment

Strike at the right time

Focus helps you estimate when emerging technologies become competitive

Forecasting example, CCS technologies

Introduction
We created a technology forecast for 7 flue gas CCS technologies :

1. Chemical absorption,
2. Physical adsorption
3. Cryogenic
4. Oxy-fuel
5. Physical absorption
6. Calcium cycle looping
7. MOF's

The goal of the exercise is to determine which carbon capture technology is improving the fastest and is thus the most likely to dominate the future carbon capture market.
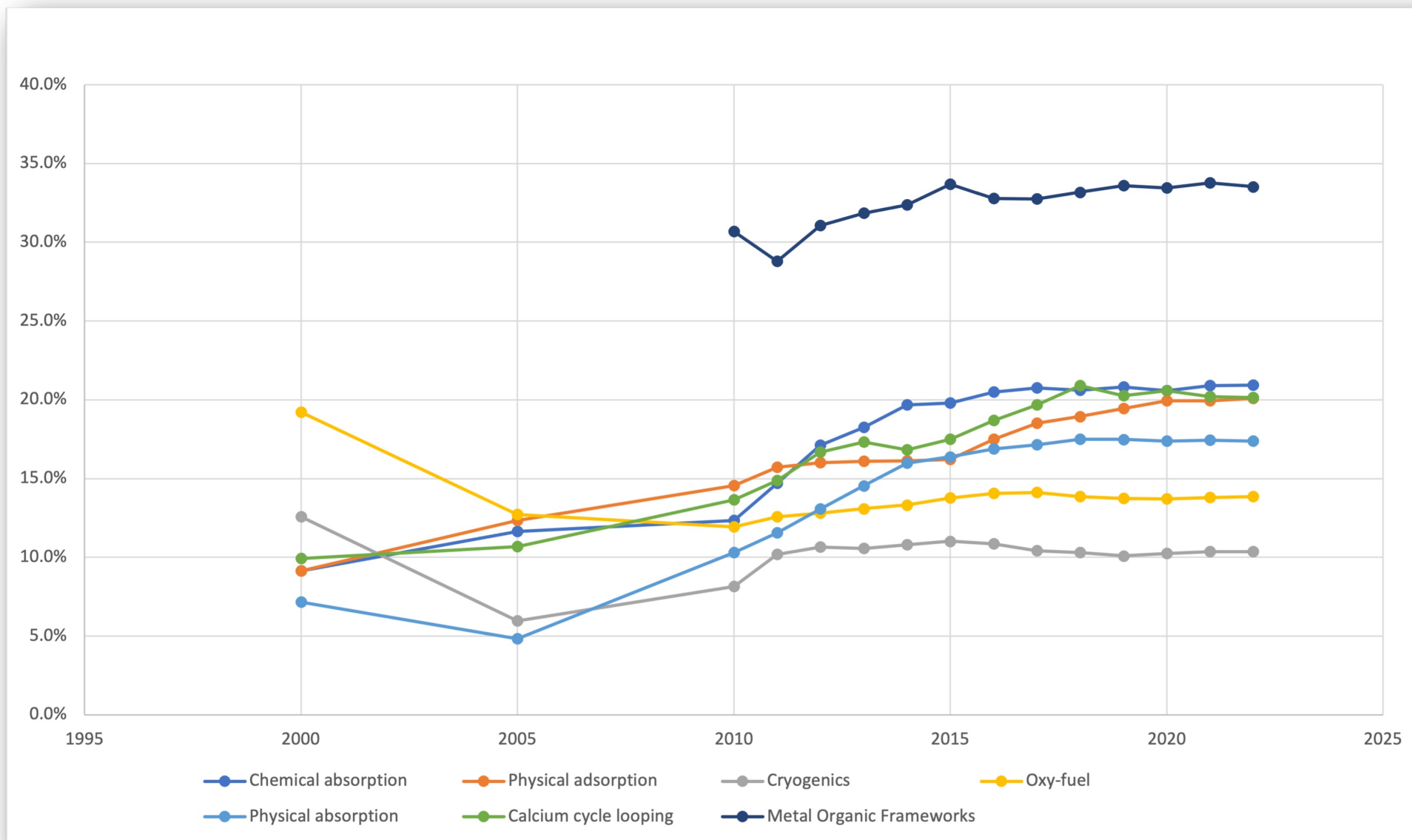
Outputs
- Estimates of the improvement speed for each technology
- Measurements of the cycle time and knowledge flow for each technology

Workflow
1. Trained 7 AI classifiers. This took about 2 hours per classifier
2. Extracted insights from Focus' SaaS platform

Improvement speeds (higher = better)

The fastest improving technologies tend to win. As can be seen, metal organic frameworks improve consistently faster than the others. Historically, this is a key indicator of a technology being disruptive. A technology's improvement speed is estimated with the cycle time and knowledge flow metrics. These are explained on the next slides.

Cycle times in years (lower = better)
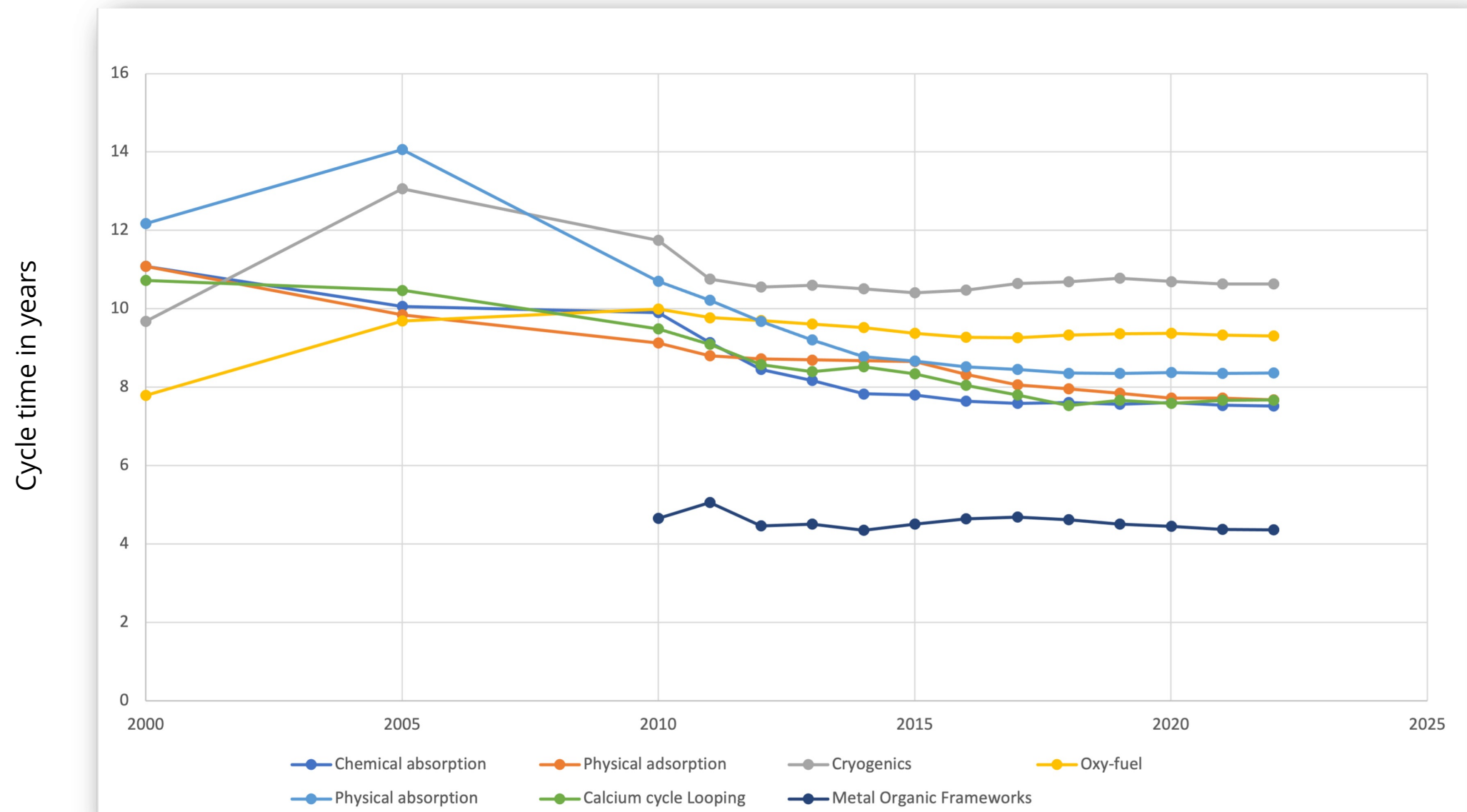
Cycle time estimates a technology's iteration speed by measuring the average age of backwards citations being made by inventions in each technology area. The shorter the cycle time, the more recent the knowledge that is being improved over. Technologies with short cycle times iterate, and thus improve, faster. In this case, metal organic frameworks clearly have the shortest cycle time.
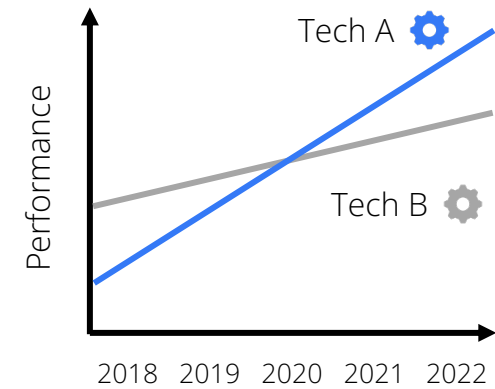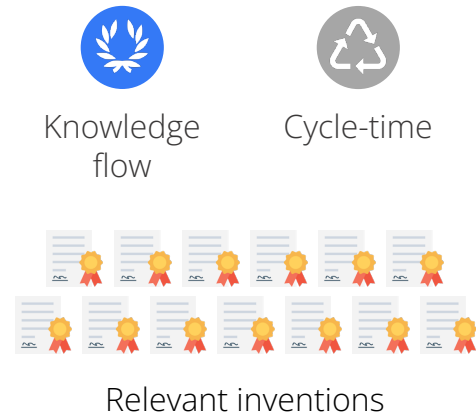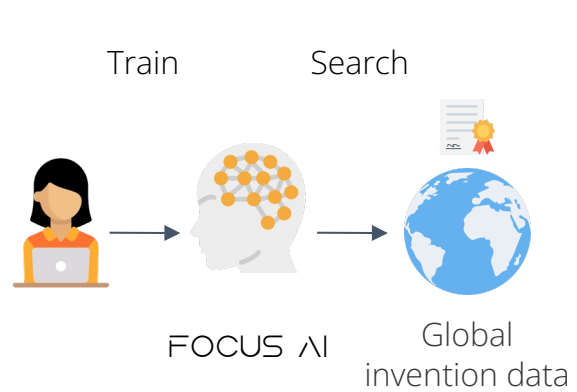
Knowledge flow (higher = better)
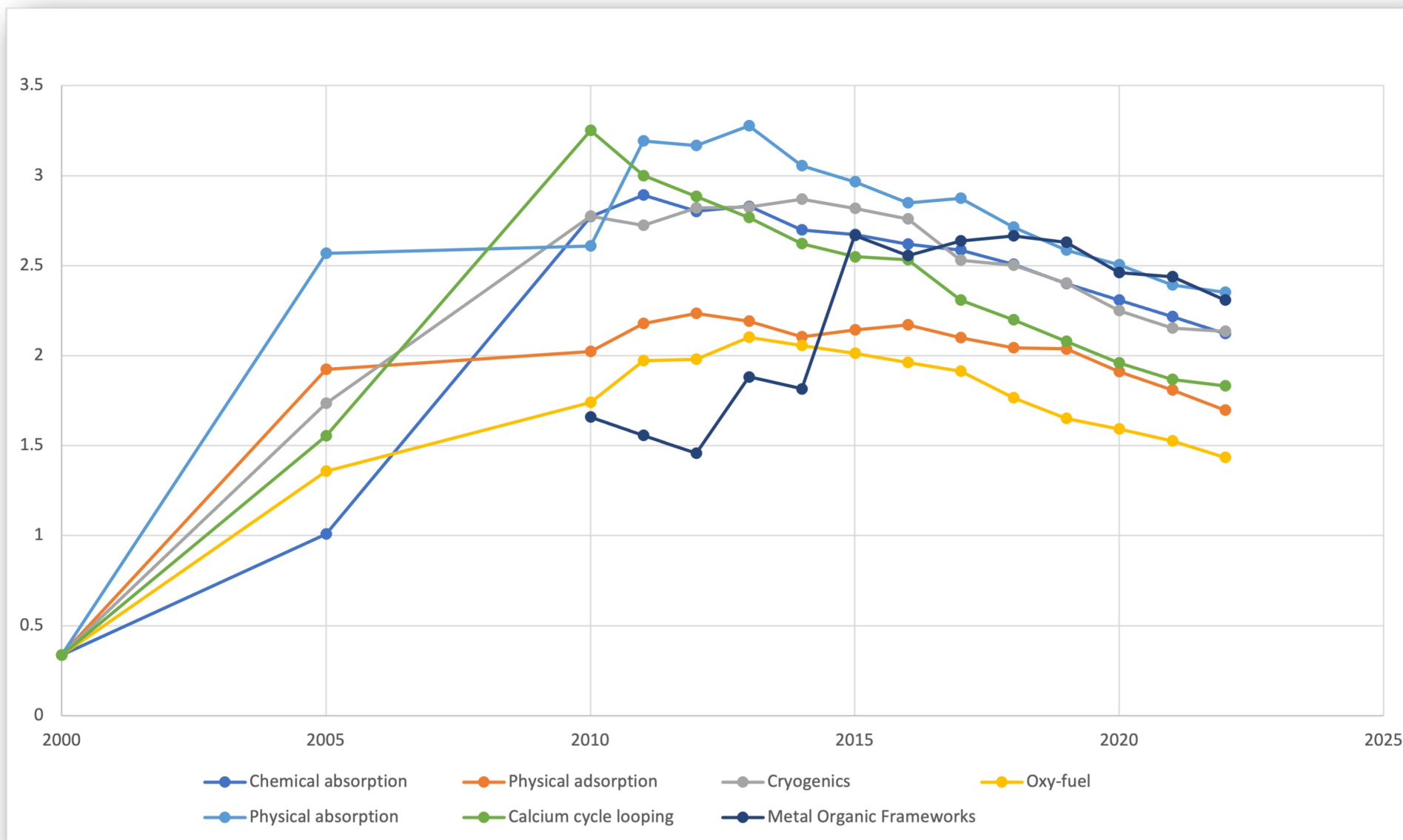
Whereas cycle time measures iteration speed. Knowledge flow measures iteration impact. Generally, great inventions get cited soon after publication. Technically, knowledge flow measures the number of times the average invention gets cited within 3 years of publication. Metal organic frameworks scores very high again. Meaning that not only does it iterate fast, but its iterations are also important.

How does our forecasting work?

Train   Search

FOCUS AI

Global invention data

Knowledge flow   Cycle-time

Relevant inventions

Performance

Tech A

Tech B

2018   2019   2020   2021   2022

1

Find relevant inventions

🕐 0.5 - 6 hours

2

Calculate metrics*

🕐 Instant

3

Estimate improvement speed*

🕐 Instant

What are the benefits?

Competitive advantage

Focus reliably predicts which emerging technologies will win. Stay ahead of the curve and make informed decisions about technology investments, product development, and positioning.

Better predictions

Human experts can be biased, people have blind spots, and the amount of information they can take into consideration is limited. Focus has none of these issues and gives you objective and quantifiable insight into the future.

Reduced cost and effort

Forecasting technology trends and their impact on the industry can be a time-consuming and expensive process. Focus largely automates it, so you can spend time where it matters, strategy & execution.

The Focus platform

- Cloud-based, all you need is a laptop and an internet connection

- Powered by a powerful AI framework that analyzes 165M+ patent documents from all around the world. Our prediction models were built and verified together with MIT

- Train the classifiers yourself or have us help you do it, no previous experience is required to become a forecasting expert!
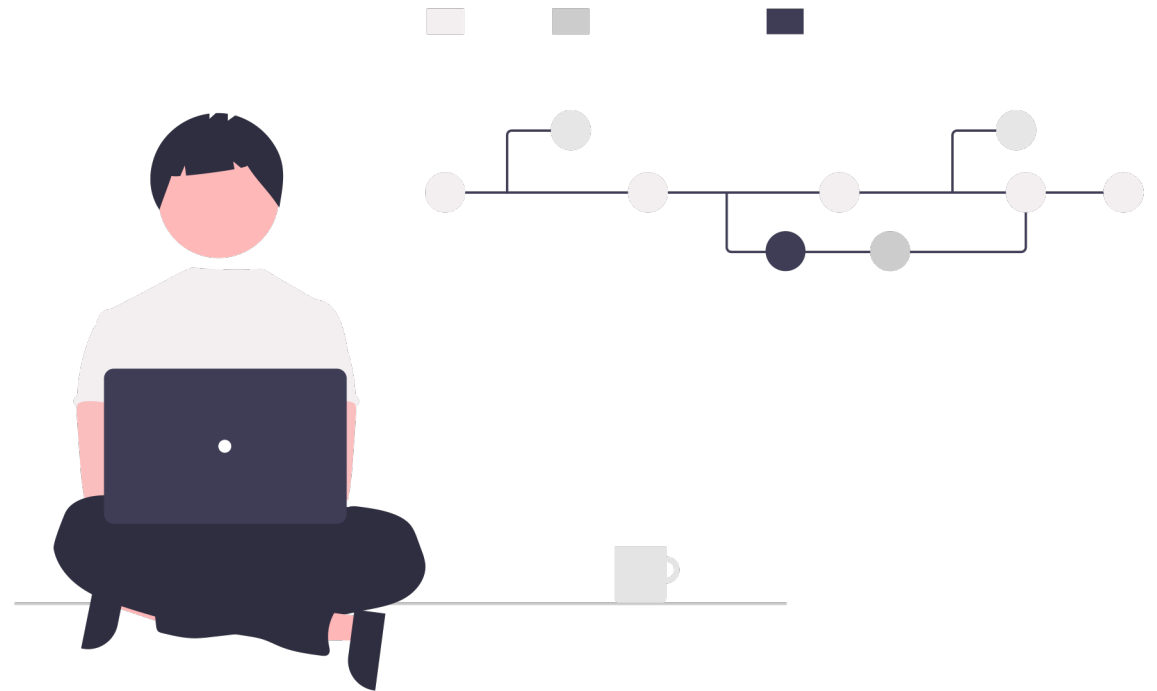
All the world's technologies at your fingertips

Thank you!

Let's get in touch

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