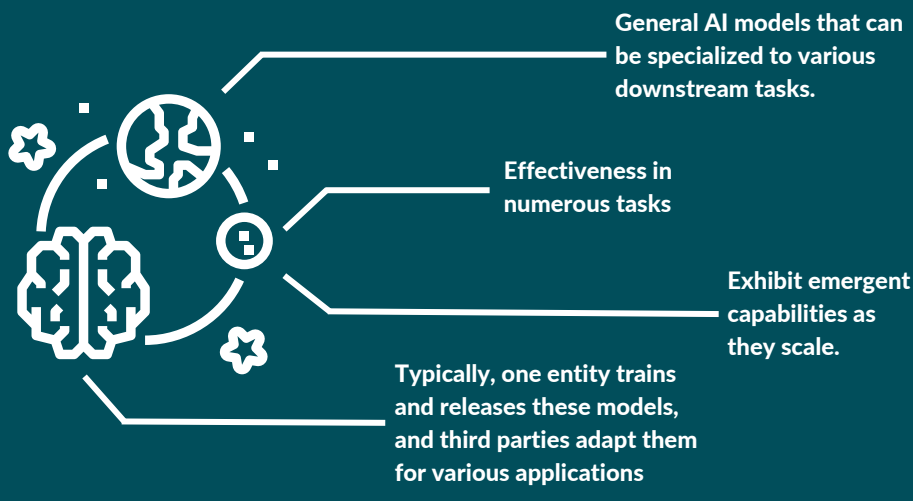


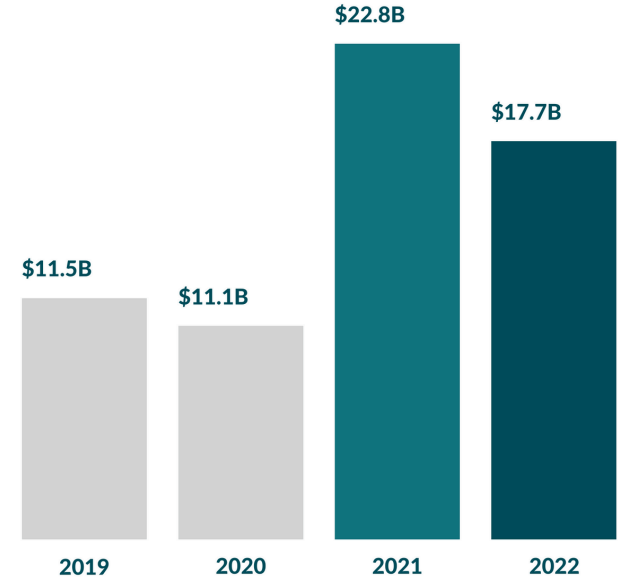
FOUNDATION MODELS IN ARTIFICIAL INTELLIGENCE

Are you an investor looking into AI? Then Foundation Models such as Large Language Models (LLM) should be at the top of your mind.

WHAT ARE FOUNDATION MODELS?

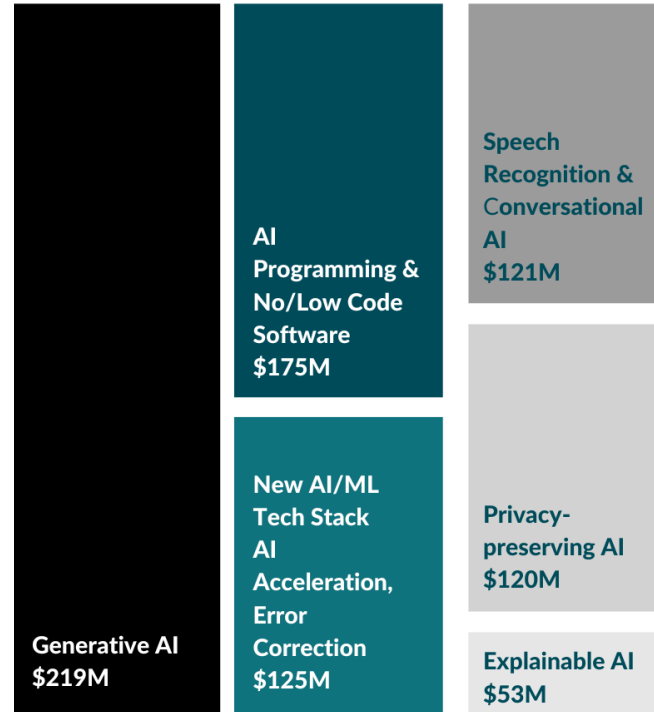


In 2022, European Deep Tech Startups raised 22% less than 2021, but still 60% more than in 2020.



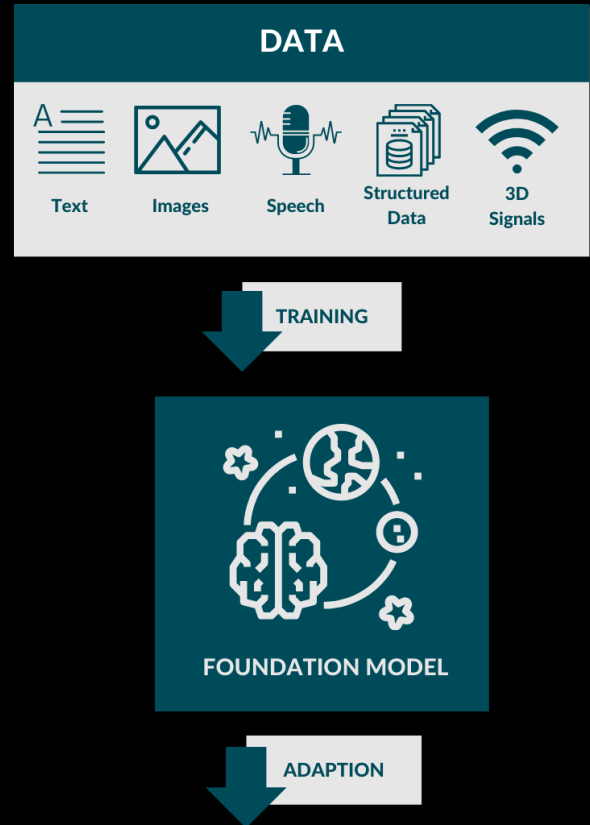
Source: Dealroom.co/Lakestar/Walden Catalyst: The European Deep Tech Report, 2023 Edition

VC Investment in European Novel AI Deep Tech Segments 2021-2022



Source: Dealroom: A New Frontier: Generative AI in 2022, 20 December, 2022

HOW IT WORKS



RISK FACTORS

Bias: LLM can perpetuate social stereotypes.

Privacy: LLM could disclose personal information.

False Output: Misleading information

Fraud: Personalized scams and fraud.

User Behavior: Users may overestimate the capabilities of LLMs that appear human-like and use them in unsafe ways.

Energy: Training and operating LLMs require significant computing power.

OPPORTUNITIES

Versatility: LLM are suitable for a wide range of downstream applications.

Scaling Law: Observed trend of LLMs to scale their performance on predictable power law when increasing the model size.

Open Source: Numerous LLMs are available via open-source libraries, enabling non-experts to utilize them in their applications.



TASK



Source: CRFM/HAI: On the Opportunities and Risks of Foundation Models, 12 Jul 2022



WHY IT MATTERS!

There will be thousands of startups utilizing Foundation Models for downstream business cases in the future. Investors will need to understand:

- ➔ How the underlying models have been trained (size and diversity of data set).
- ➔ How bias is handled and accounted for.
- ➔ How the models perform according to benchmarks, cost, and MIOps.