AI Act Impact Survey

Pan-European survey of AI Startups and VCs about the impact of the AI Act

12. December 2022

Picture by Dall-e

INITIATIVE FOR APPLIED ARTIFICIAL INTELLIGENCE · HUB FRANCE IA · AI AUSTRIA · KI BUNDESVERBAND · NL AI Coalitie · aipoland · AI SWEDEN

We all share the goals of the AI Act

Competitive

AI is already used as a strategic asset of nations.

We need to foster digital sovereignty by staying relevant and competitive.

Trustworthy

AI will affect us all.

We want an AI based on European values and quality.

Fast

There is a global race.

We should not be the ones walking.

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About this survey

Conducted witih **100+ AI Startups and other companies developing AI across Europe**, including **France, Sweden, Poland, Austria, the Netherlands and Germany**. Complemented by the views of **15 Venture Capital Firms**.

Diverse pool of companies that develop solutions in specific **industries (e.g. Healthcare)**, provide **tools for AI development (e.g. MLOps, Model Library)** or offer **independent AI technologies services (e.g. video analysis, anomaly detection)** have contributed to this extensive survey.

The survey was initiated **by appliedAI Initiative** and distributed in **collaboration with other national AI Initiatives (AI Sweden, AI Austria, AI Hub France, AI Poland, NL AI Coalitie, KI Bundesverband).**

With this data, we have created **a summary of how AI innovators are thinking about the upcoming AI Regulation by the EU**. Questions about **AI Act awareness, compliance challenges, Risk classification, implementation cost or Sandboxes** is just a few of the information you can find in the next slides.

Executive Summary

- The 113 EU-based AI Startups in this survey drive AI Innovation by developing diverse AI Systems, with both specific and generic purposes.
- 33% - 50% of the AI Systems would classify as High-Risk which goes way beyond the assumption in the Policy Impact Assessment by the EU Commission (5-15%).
- 50% of the AI Startups believe the AI Act will slow down AI Innovation in Europe. 16% consider stopping to develop AI or relocation outside the EU.
- 45% would consider their solution as a General Purpose AI.
- Now being somewhat competitive, most of the 15 surveyed VCs expect that the AI Act will drastically reduce the competitiveness of European Startups in AI.
- For High-Risk AI Systems, the additional requirements and obligations are a significant challenge for startups in terms of technical and organisational complexity and compliance cost.
- VC investments shift toward AI Systems with a specific purpose, in low-risk applications, and, to some extent, to non-AI startups and outside of Europe.
- All relevant indicators for VC investments for high-risk startups will decrease.

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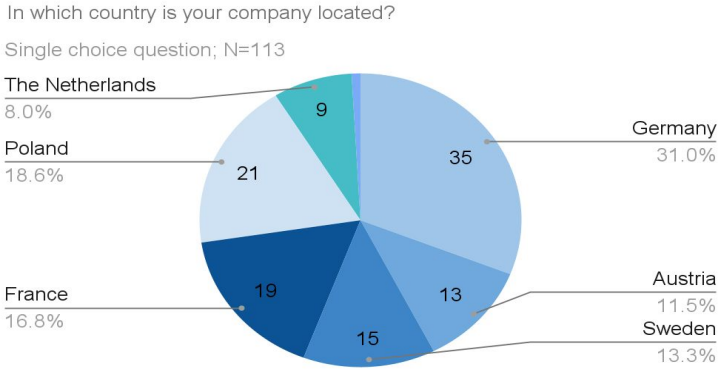
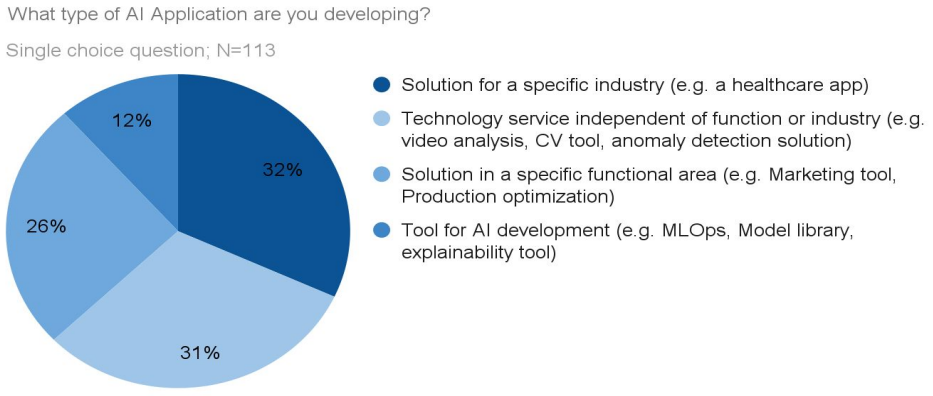
Section 1: Survey Participants

- AI Startups
- Venture Capital Firms

Dall-e Prompt:
“AI Startups and VCs from different European countries offer views on the upcoming AI Regulation, Corporate memphis style in grey blue yellow and white colors”

AI Startups

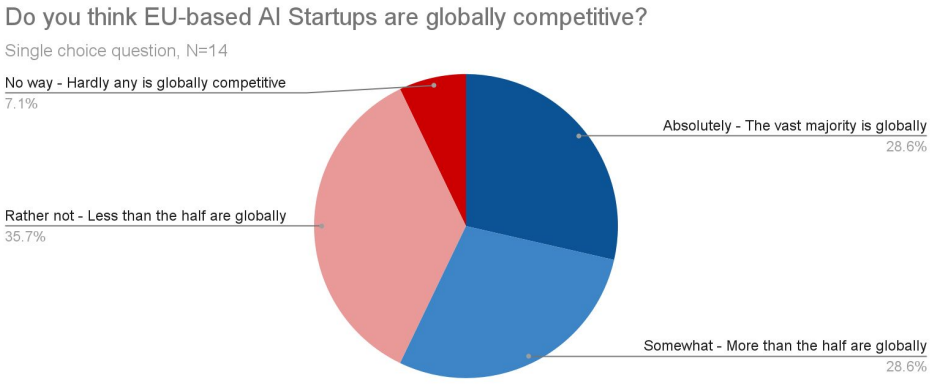


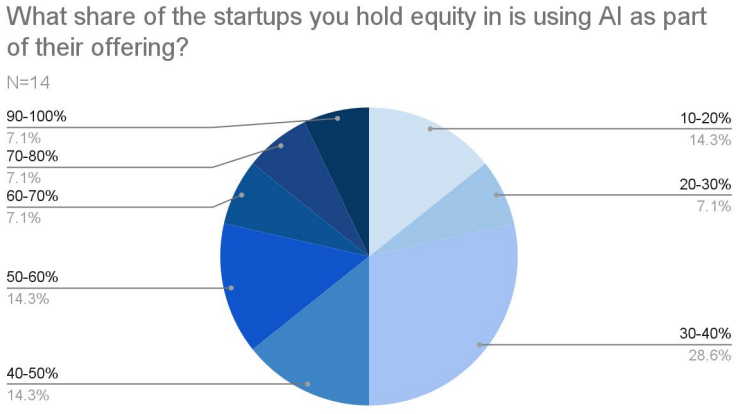


Data Collection Method
Target group: AI Startups and other AI developing companies.
Countries of data collection: Austria, France, Germany, Poland, Sweden The Netherlands

Count of participating Startups: N=113
Period of data collection: mid-Oct to mid-Nov 2022
Questionnaire: See here

Venture Capital Firms





Data Collection Method
Target group: Venture Capital Firms
Countries of data collection: Europe

Count of participating VCs: N=15
Period of data collection: Early-November to mid-November 2022
Questionnaire: See here

Section 2: High Risk AI Systems

- High Risk AI Systems
- General Purpose AI Systems
- Impact on Innovation & Competitiveness

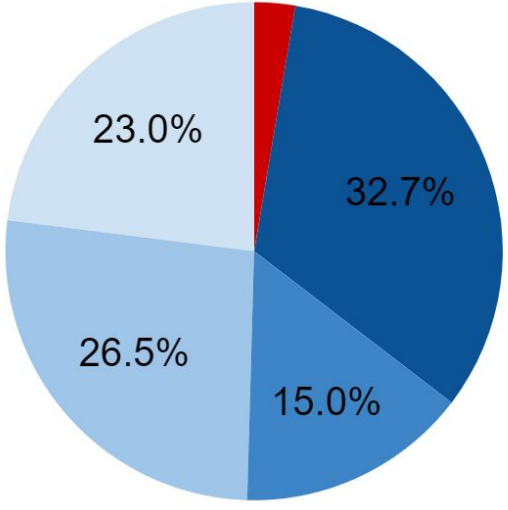
Dall-e Prompt:
“The share of high-risk AI-Systems is higher than assumed, some startups consider relocation outside the EU, some VCs consider moving funding away from European AI , Corporate memphis style in grey blue yellow and white colors”

High-Risk AI Systems

33-50% of the Startup Solutions could be classified as high risk

Considering the flag-ship Use Case of your Startup/company, in which risk class of the AI Act is it going to fall?*

Single choice question; N=113



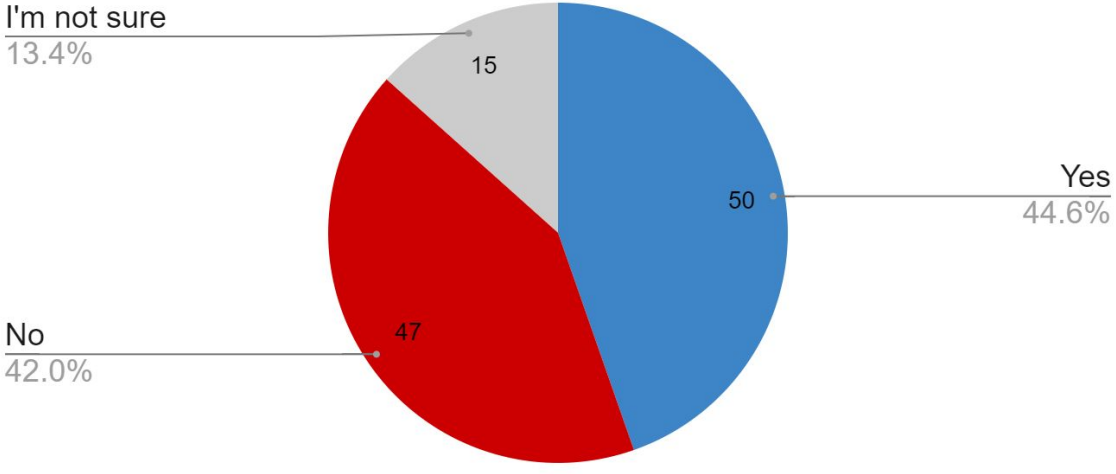
- Prohibited (e.g. real-time biometric identification, social scoring, predictive policing, subliminal techniques that may cause physical or psychological harm; Art. 5)
- High-Risk (see Annex II or Annex III, linked under*; Art. 6)
- I am not sure
- Information Obligation (if your AI System is interacting with natural persons/human beings; Art. 52)
- Low / Minimal Risk (in case your AI System is none of the above)

General Purpose AI Systems

45% of the Startup Solutions could be classified as General Purpose AI

Do you consider your AI System to be of 'general purpose'?

Single choice question; N=112

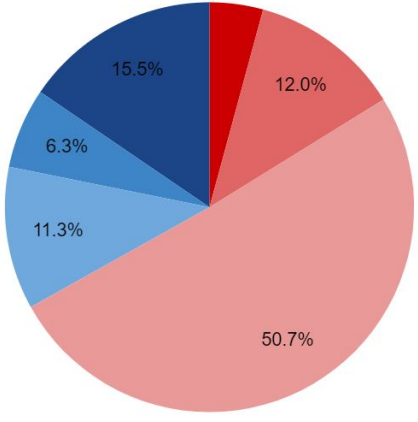


Impact on Innovation & Competitiveness - Startups

Two thirds expect a negative impact of the AI Act on AI Innovation in Europe

What impact do you foresee for your company and how are your going to respond to those obligations?

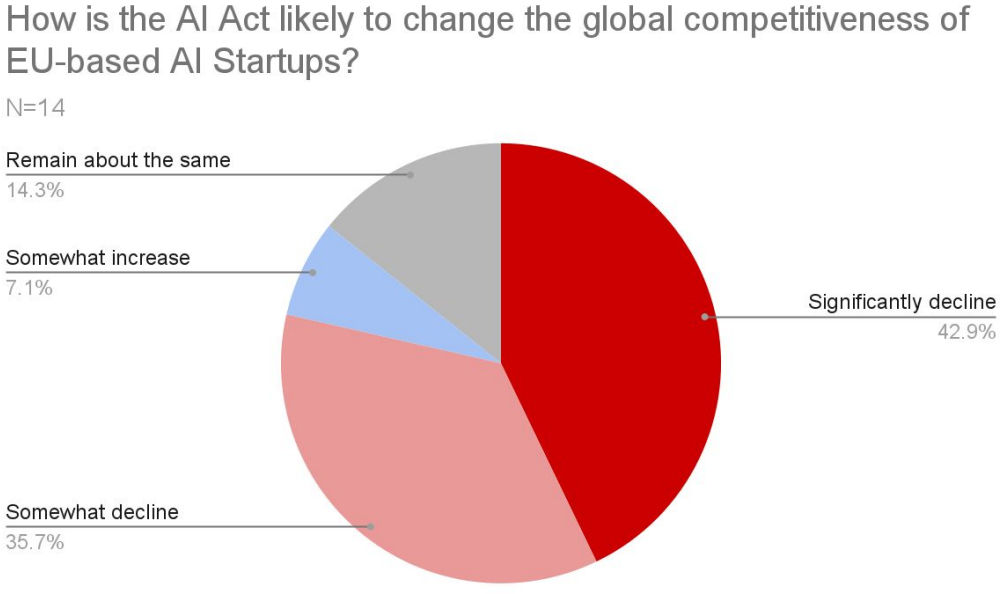
Multiple choice question; N=142



- Shutdown: We will stop developing AI solutions
- Relocation: We relocate our AI activities to outside the EU
- Slow down: The obligations will impede our development activities
- Neutral impact: The cost for compliance outweigh their benefits
- Not affected: Our AI is not in the scope of the AI Act
- Positive impact: We embrace the new obligations and believe they add value for us

Impact on Innovation & Competitiveness - VCs

VCs see a drastic worsening of Europe's competitiveness in AI and will move investments to either outside of Europe or in other technologies



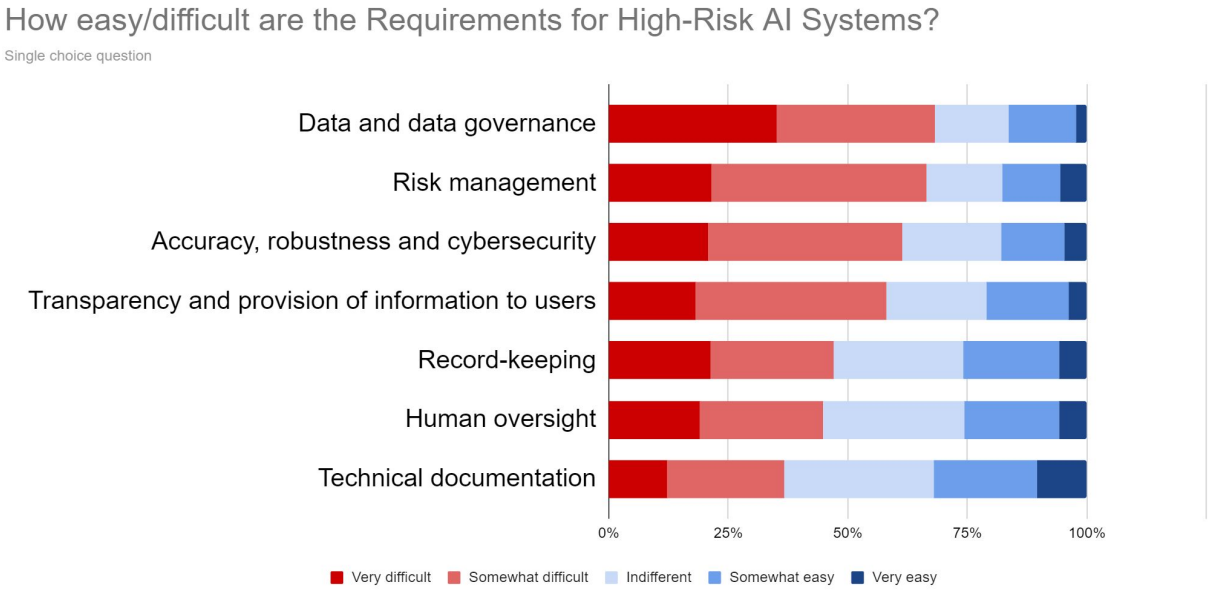
Section 3: Consequences of working on high risk AI Systems

- High-Risk Requirements & Obligations
- Cost for compliance
- Financial impact

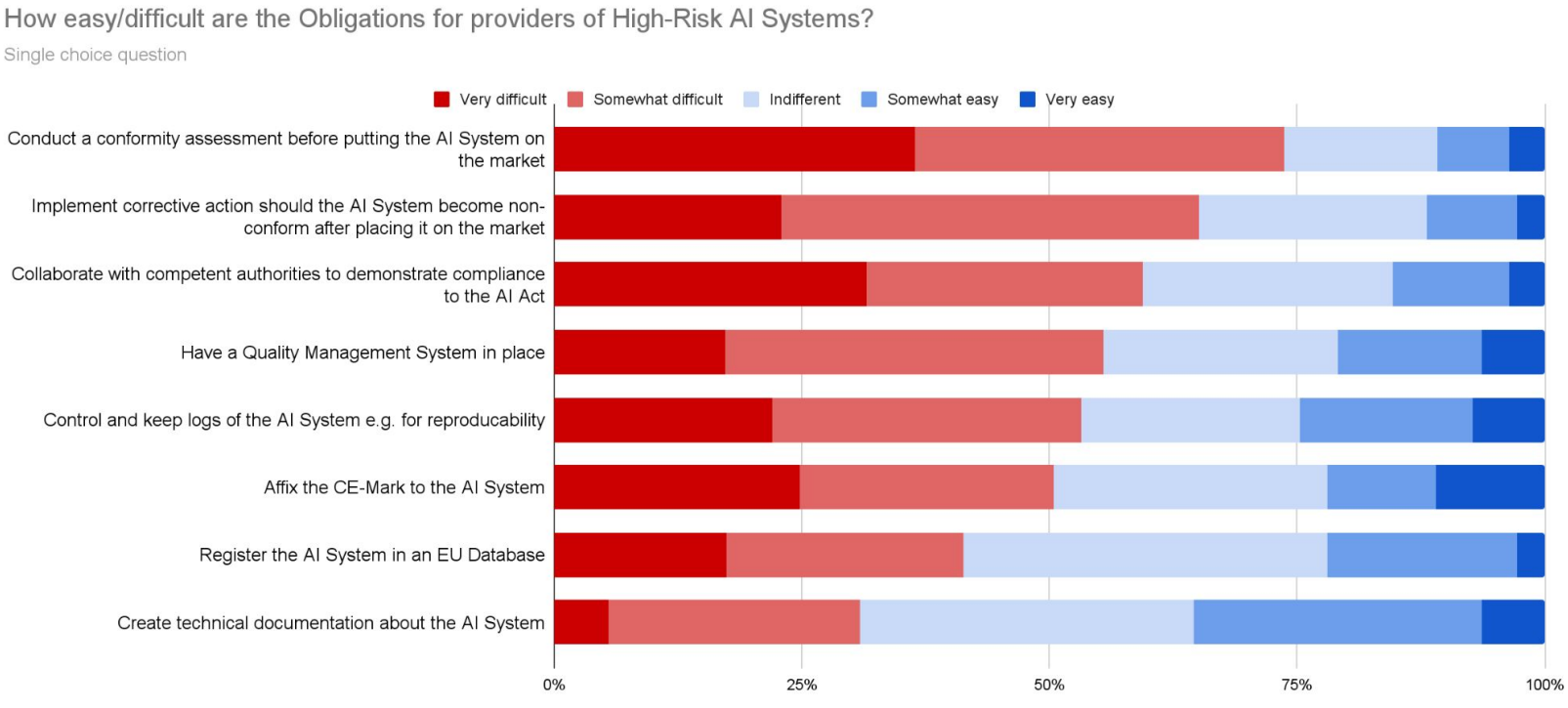
Dall-e Prompt:
“An Entrepreneur who is faced with more technological complexity, less funding from VCs, and more cost to compliance as a result of the AI Act, close up, Corporate memphis style in grey blue yellow and white colors”

High-Risk Requirements are challenging on the System-Level

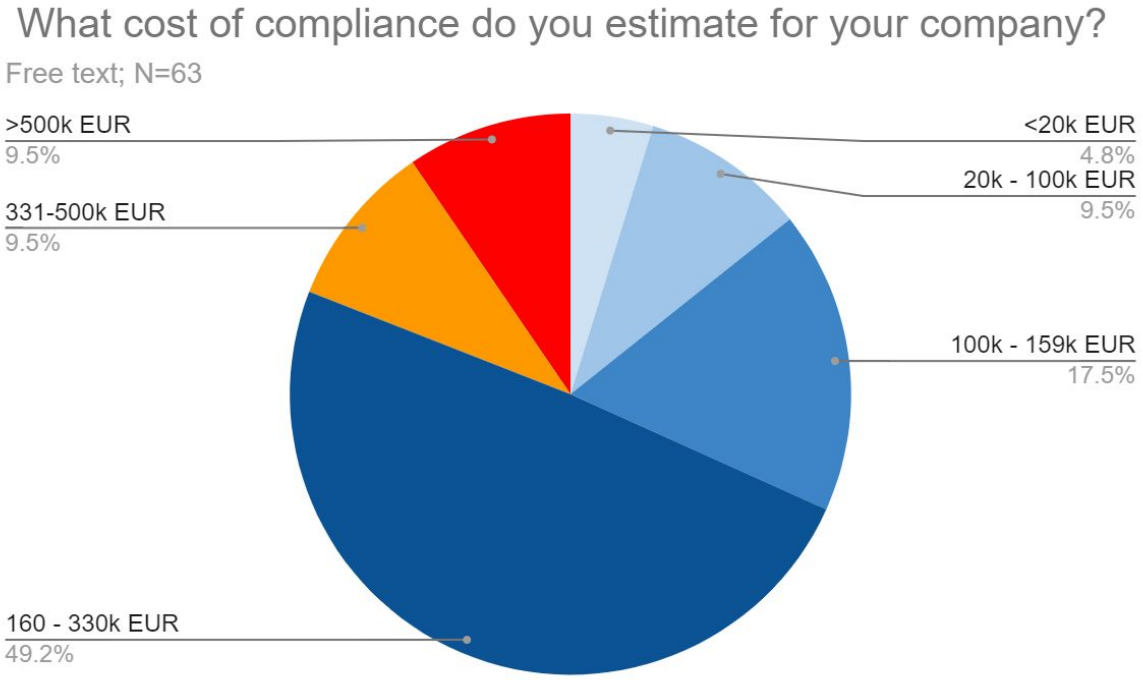
Complexity is rising: Data Governance and Risk Management are seen as the most difficult high-risk requirements



AI Startups struggle with the obligation for high-risk providers, as they have limited experience with conformity assessments

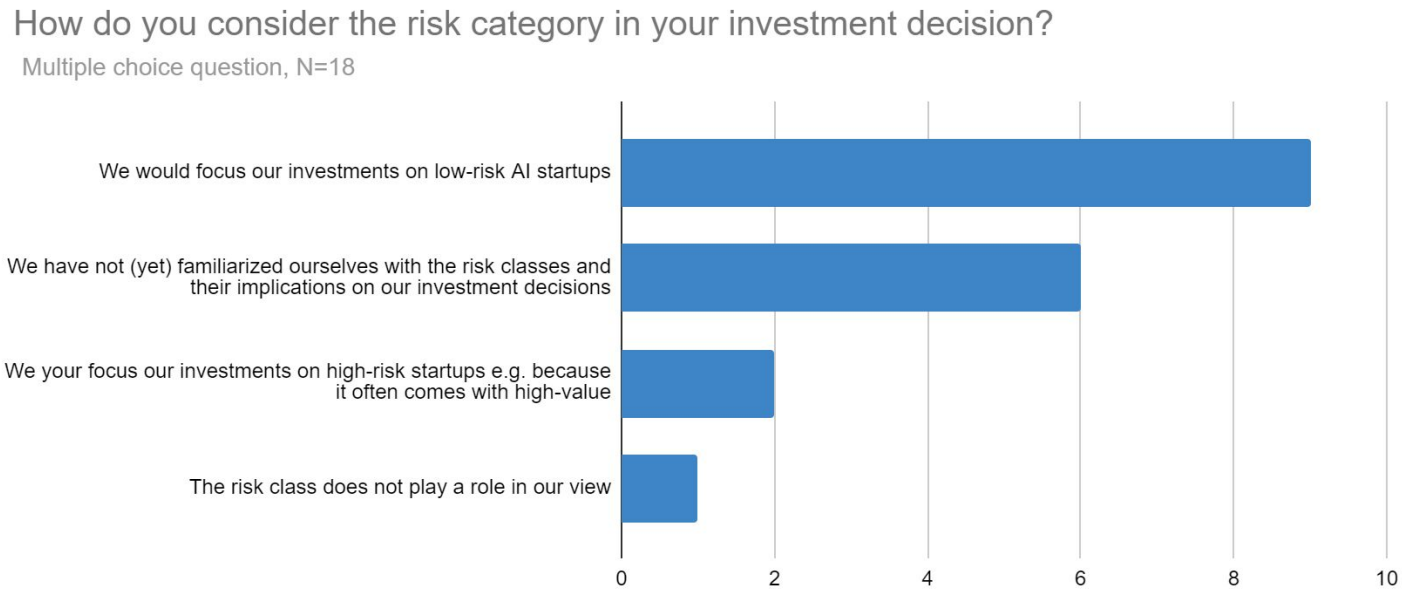


Half the startups confirm the assumed compliance cost in the Policy Impact Report, around 20% expect higher expenses



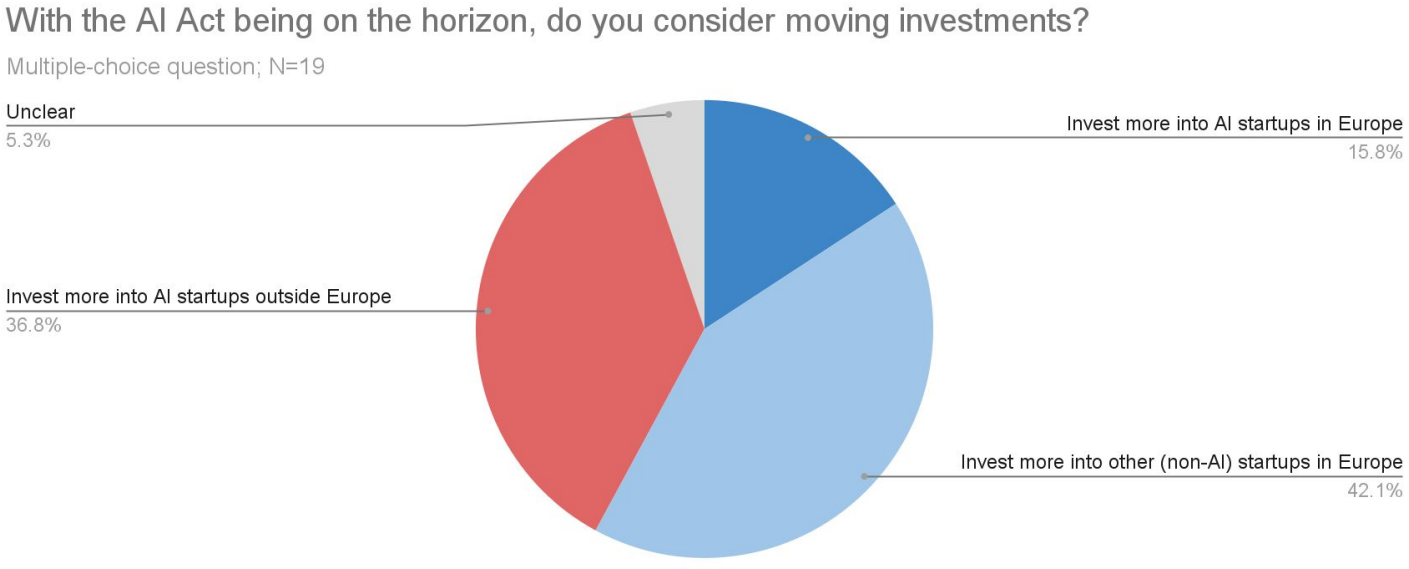
Financial impact - attractive types of AI Innovation

The AI Act is considered to lead to less disruptive innovation and a shift towards smaller incremental ones.



Re-allocation of VC Funds: Regional Focus

The available VC-Funding for AI Startups is likely to shrink under the AI Act and partially move toward Startups outside the EU and non-AI technologies

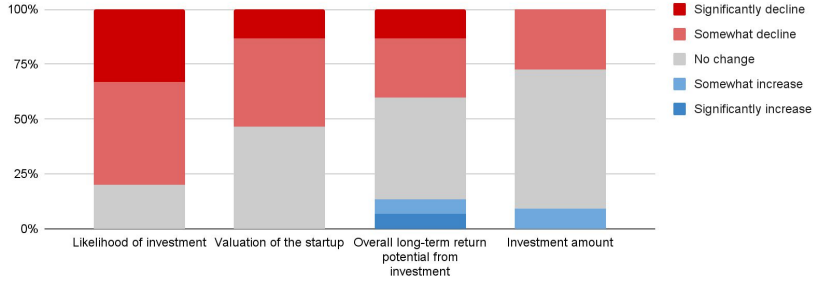


Re-allocation of VC Funds: high-risk vs low risk AI Systems

Startups developing high risk AI Systems face are less attractive to investors

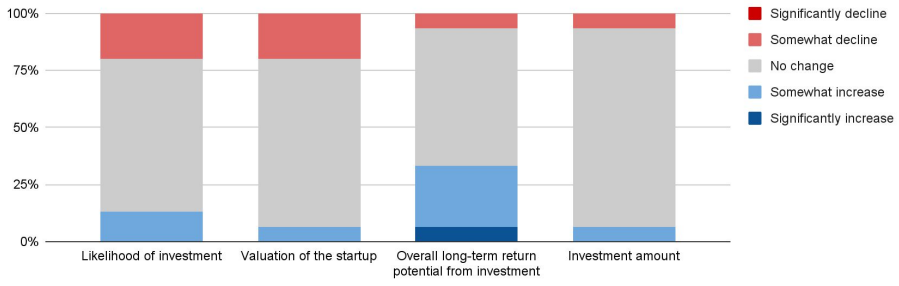
If a startup falls into the "high-risk" Class in the AI Act, how does this affect the valuation and attractivenss of the startup?

Single choice question, N=15



If a startup falls into the "low-risk" Class in the AI Act, how does this affect the valuation and attractivenss of the startup?

Single choice question, N=15



+ <u>significant decline</u> of the likelihood for investment and valuation of the Startup for <u>high-risk AI Systems</u>

+ <u>minor increases</u> of the likelihood for investment and valuation of the Startup for <u>low-risk AI Systems</u>

Section 4: Accelerating Compliance

- Support for Startups
- Comments by Startups

Dall-e Prompt:
“Policy makers, startups, corporates and certification bodies engaging in trial and error of new AI regulations in a regulatory sandbox, flat illustration in grey blue yellow and white colors”

Best practices and additional funding are key drivers for compliance for AI Startups

What kind of support or assistance would you like to see for meeting the requirements and obligations from the AI Act?

Multiple choice question; N=239

Comments from Startups

"I would add a requirement for **the EU to provide tools, training, guidance and financial resources** to enable AI companies to implement regulatory requirements quickly"

"In order not to slow down the development of young companies for whom compliance can be cumbersome/restrictive, there should be **a framework for testing that is validated by the authority** and allows continuity during the compliance phase."

"**Definitions of AI SYSTEMS with high risk are still too vague**. Ensure that this does not prevent companies from doing their work."

"A much **clearer framework for quality or compliance levels should be established** from the outset to have clear levels for achieving these levels (a bit like SecNumCloud). At this stage it is too vague, therefore open to interpretation and therefore inevitably expensive because it is not defined to achieve quality, performance and compliance levels."

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Policy Recommendations

1. Keep European Competitiveness in the center of the discussions.

2. Reduce amount of high-risk cases: Narrow the High-Risk Criteria to get closer to the anticipated 5%-15% of affected AI-Systems.

3. GP AI: Consider the role of Startups as GP AIs provider in the light of GP AI Obligations.

4. Foresee bottlenecks and systematically debottleneck them e.g. in the area of 3rd party conformity assessments to not additionally slow down innovation.

5. Conceptualise Regulatory Sandboxes as drivers for innovation in a protected, but attractive environment.

6. Update the Coordinated Plan and take the needs of European AI Startups into account, specifically in areas that are considered very difficult or costly. Reduce cost of compliance.

Endnotes

- Questionnaires
- Limitations
- Authors

Dall-e Prompt:
“a painting of happy entrepreneurs learning from each other on how to build robust, lawful and ethical AI Systems, flat illustration in grey blue yellow and white colors”

Questionnaires

Did you miss the survey, but would still like to share your perspective?

We'd love to hear your thoughts.

The questionnaires are open:

- AI Startups: https://forms.gle/8wKzdLs1fXAzDdhu9
- Venture Capital Firms: https://forms.gle/QkjJsPJcVEQdA4EJ6

Would you like to run the survey in your country? Perhaps in your local language?
That is possible. Please contact appliedAI.

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Limitations

- Our study represents only a share of the AI Startup community in Europe. There are no official numbers on the total population of AI Startups in Europe, but proxies are ranging from ~500 AI Startups in 2020 in France, Germany and Sweden (Source) to 1600 AI Startups across Europe (incl. UK) in 2019 (Source).

- Our study does not control for the level of proficiency about the AI Act. We did provide guidance material in the questionnaire, e.g. about the criteria for risk classification, but it is unknown to what extent the respondents are really familiar with the AI Act.

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