

HumanE AI Net:

The HumanE AI Network

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D7.3 Report on how Regulation for AI can be brought forward in different critical Domains including a Time Plan for further Events

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EXECUTIVE SUMMARY

The following report describes addresses two key components. First, the report addresses regulation for AI, and second, it summarizes future planned events.

The topic of regulation for AI was addressed by means of a panel, for which the key findings as well as the complete panel are provided. For the additional events, a short description as well as a timeline and a presentation of the objectives are provided. It also outlines how the events aim to connect other organizations and associations in Europe to integrate and implement social impact into existing structures in the research, business and industry ecosystems and inspire even more actors at the European level through the HumanE AI Net.

1. INTRODUCTION

With the regulation of artificial intelligence (AI), the European Commission is addressing one of the central issues of our time. However, a number of key legal issues remain unresolved. Among other things, how regulation for AI can be brought forward in different critical domains. However, initial approaches to this have already been taken up in the European AI Act.

For this reason, the focus of this paper is rather on the extent to which regulation in Europe fosters or hinders the AI community. This goes hand in hand with the objective of our work packages and at the same time allows the inclusion of different stakeholder groups – startups, corporations, researchers, lawyers. An expert panel was chosen as the format for this exchange between the different groups. The results of this are presented in the next chapter.

2. A PANEL ON THE EUROPEAN AI ACT - REGULATION TO FOSTER OR HINDER THE AI COMMUNITY?

We hosted a panel discussion to discuss the necessity and risks of the European AI act with experts from academia, industry, and startups. The goal was to establish an in-depth understanding of their respective needs and concerns towards AI regulations and the European AI act from the perspective of various stakeholders.

The panel was joined by:

Virginia Dignum is a full professor at the Umeå University, Sweden, where she leads the Social and Ethical Artificial Intelligence research group. She is involved in several international initiatives on policy and strategy guidelines for AI research and applications such as the European Commission High Level Expert Group on Artificial Intelligence and the World Economic Forum Council on AI.

Patrick Glauner is a full professor for Artificial Intelligence at Deggendorf Institute of Technology, Germany. He regularly advises politicians on AI topics. Besides his academic career, he is the founder and CEO of an AI consulting firm.

Arno De Bois is a researcher at the Law, Science, Technology & Society research group at VUB University in Brussels, Belgium. In his research, he focuses on legal protection by design in the development of artificial neural networks

Marc Hilbert is a team lead for machine learning for engineering and production at the VW Data:Lab in Munich, Germany. Here he drives analysis based on signal and model-based methods and focus on extracting information for machine health and performance diagnostics, including visualization of high-dimensional data. Besides his industry work, he is a lecturer for business intelligence at the Leiden University, Netherlands.

Maria-Liisa Bruckert is a Co-Founder and Co-CEO of SQIN, an AI based skin coaching app. SQUIN helps to get to know your own skin better, develop an individual Beauty Journey and tries to optimize your skin health to the maximum!

To gain insight into the concerns and needs of startups and as an input for the panel discussions, Feng Wang (Co-Founder of AICAN, a startup focusing on AI for cancer treatment) gave a keynote sharing insight into how regulations affect her startup (see Fig. 1). She described regulations in the EU as high entry barriers for AI startups and described this as an impediment when compared to competitors from the United States:

„Competitors in the US do not have such a high bar.” **Feng Wang on the EU data regulations.**



Figure 1: Keynote on the influence of regulation on AI startups by Feng Wang, Co-Founder of AICAN

The following panel (see Fig. 2) revolved around the leading question of how to design regulation to foster instead of hinder AI innovation and whether the proposed European AI act is on track to provide this. In the discussion, the participants clearly showed their points of view, which are presented here in excerpts. The full recording of the panel is available on Youtube¹.

“If the AI act becomes a reality, this will end all AI innovation in Europe because [...] any kind of application can have a disastrous outcome, any search engine could cause mental problems to you and as soon as it does, it is a high-risk application and all the requirements for high-risk applications [...] are simply unfulfillable.” **Patrick Glauner on the dangers of the proposed AI act.**

“The AI act is not regulating too much, it is a risk-based approach so meaning that we look at certain applications which have a certain risk and only if you fall into that risk scenario, you have to go this certain way. [...] And this risk-based approach is a very good approach.” **Marc Hilbert on the proposed AI act.**

“It’s not that easy to find out how to proceed specifically because it’s kind of a barrier but on the other hand not very specific for every industry. If you are not an expert from regulation or legal it is hard to understand it.” **Maria-Liisa Bruckert on the proposed AI act.**

“AI is just a tool to do something. It does not matter how you do something; it matters what you do.” **Patrick Glauner on what to regulate.**

“If it affects citizens, if it has an impact, then please regulate that thing.” **Virginia Dignum on what to regulate.**

“Well designed regulation is a steppingstone for innovation.” **Virginia Dignum**

“Good regulation instead of prohibiting will give direction to innovation.” **Arno De Bois on regulation.**

¹ <https://www.youtube.com/watch?v=4-w3HAf0keg>

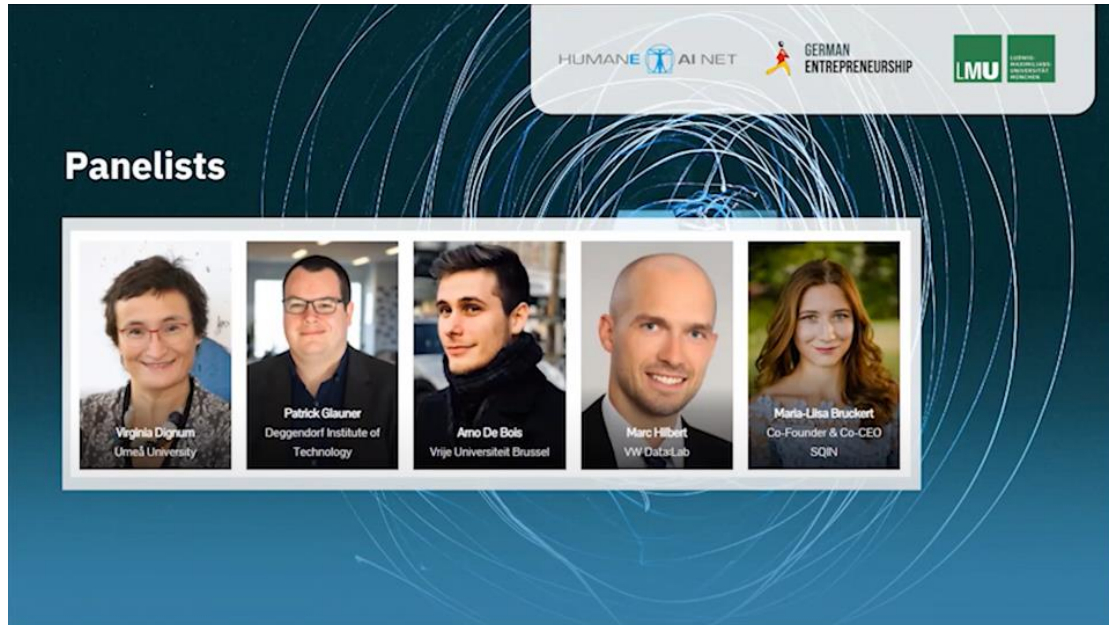


Figure 2: Overview of the Panellists

3. FURTHER PLAN FOR NETWORKING EVENTS

Based on the strategy presented in Deliverable 7.1 and the feedback at the Technical Review, we have planned further events that not only involve and bring together a variety of different stakeholders, but also have a special focus on involving major industry players in the respective projects.

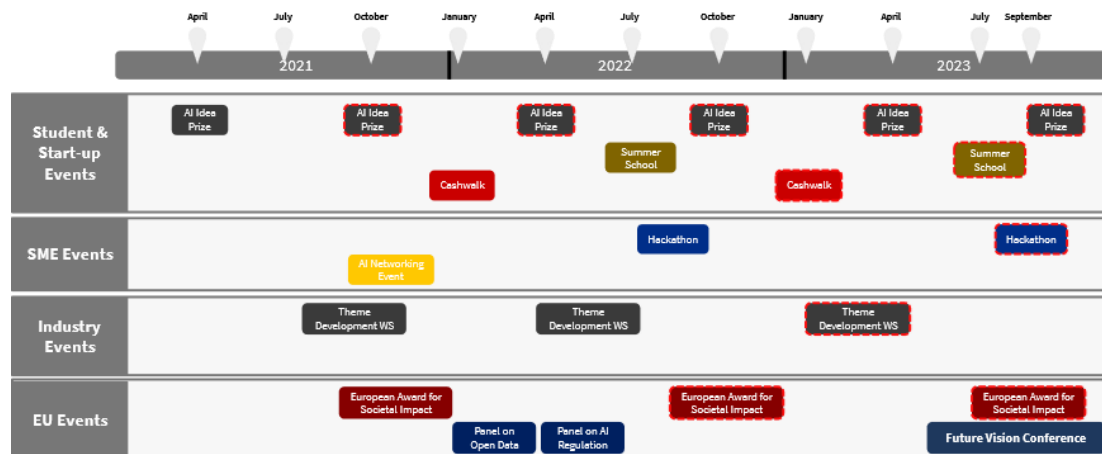


Figure 1: Time Plan for AI Networking Events

From the chart attached below, it is clear that there is a greater focus on events and formats that involve more big industry players compared to the plan first presented like the Theme Development Workshops, different Panels, the AI Idea Prize and the Cashwalk event. In addition, we are strongly cooperation with other European networks like TAILOR, CLAIRE and VISION.

A detailed overview of the upcoming events and a short description will now follow in the upcoming chapters.

3.1 PANEL ON OPEN DATA

The results of the Open Data panel have already been presented in detail in Deliverable Report D7.2. For this reason, only the report and the video are referred to below (Link: <https://amp.ubicomp.net/panel-on-opendata-business-cases/>).

3.2 PANEL ON AI REGULATION

The results of the Panel on AI Regulations were presented in Chapter 2. For this reason, the event will not be discussed again in the following.

3.3 THEME DEVELOPMENT WORKSHOPS

The Theme Development Workshops (TDW) are a joint project of TAILOR, HumanE AI Net, VISION and CLAIRE. The overall goal is to identify the major challenges for AI in Europe together in groups of scientists, industrial actors and societal stakeholders. To this end, we are again bringing together high-level personas from major industry players with experts from the research community. This will help to co-develop an innovation agenda for AI in Europe.

In the one-day workshop with 20-50 participants, there will be a rotating program of plenary presentations and discussion groups with a smaller number of participants in breakout sessions. The upcoming TDWs are on the topic of “Mitigation Bias & Disinformation” and “AI for Future Manufacturing”.

AI: MITIGATING BIAS & DISINFORMATION
Theme Development Workshop

Identify common goals between academia and industry as well as other relevant stakeholders, and define promising approaches for European research and innovation in Trustworthy AI.

Organising Committee: ALGORITHMIC SOCIAL INTERACTIONS, C³SMA, DFKI, EUROPEAN ENTREPRENEURSHIP, OMEA UNIVERSITY, zhaw, Pop AI

Workshop programme

Due to Covid 19, the workshop will be held online with a mixed programme of presentations and in-depth discussions about specific sub-topics in smaller groups (Breakout sessions). This gives you the opportunity to discuss with selected experts and contribute to the strategic research and innovation agenda for AI in Europe.

09:00 - 09:15 Welcome & Objectives
09:15 - 09:30 Inoculation against misinformation Prof. Dr. Sander van der Linden University of Cambridge
09:30 - 09:45 Responsible AI approaches to address bias and misinformation Prof. Dr. Virginia Dignum Umeå University
09:45 - 10:00 Coffee Break & Socialising
10:00 - 11:30 Parallel Breakout sessions
11:30 - 12:30 Plenary presentation of key findings from the Breakout sessions
12:30 - 13:30 Lunch break & Socialising
13:30 - 13:45 Democracy and Knowledge in the Digital Age Miguel Poitras Maduro Chair of the European Digital Media Observatory (EDMO)
13:45 - 14:00 The challenge of finding the keyboard terrorist Mijke van den Hoek Police of The Netherlands & Utrecht University
14:00 - 15:30 Parallel Breakout sessions
15:30 - 15:45 Coffee Break & Socialising
15:45 - 16:45 Plenary presentation of key findings from the Breakout sessions
16:45 - 17:30 Closing & Socialising

Breakout sessions

Breakout session 1: The "arms race" nature of Deepfake detection
This session will focus on the issue of new generation Deepfake detection models that can evade their detection, leading to an "arms race" of AI methods and possible ways to stop or at least slow down this arms race by regulatory measures.

Breakout session 2: Explainability aspects in AI for disinformation
The session will focus on identifying potential effective strategies and new approaches to fill the gap between existing AI explanation capabilities offered by current systems and AI explanations that are needed in the media domain.

Breakout session 3: Science Communication with and on AI
This session will address how transfer of scientific insights to society has changed in digital media environments in recent years. Specifically, the role of AI technology in science journalism will be discussed, complemented by strategies for specifically increasing trust in AI for society.

Breakout session 4: A social cognitive perspective to AI and misinformation
This session will focus on the challenges as well as opportunities to better integrate a social and cognitive perspective to the analysis of misinformation spread and social dynamics in human-AI hybrid systems.

Breakout session 5: Abusive Language Detection and Comment Moderation
This session will investigate the potentials and risks of automated content moderation with a specific focus on abusive language detection. Besides algorithmic challenges, this session will also address ethical and legal aspects.

Breakout session 6: Automation in Online Media
This session will deal with technical, societal, regulatory, and ethical challenges modern AI-based automation technologies pose to communication in social networks with respect to disinformation and manipulation.

Breakout session 7: Measuring Polarisation, Radicalization, and the emergence of Echo Chambers in online debates
This session will discuss how to identify, measure and characterise the interplay between users' social interactions in social media and the content they share and consume, also in terms of polarisation and radicalisation.

Breakout session 8: Dataset sharing and governance in AI for disinformation
This session will focus on the balance between ethical, regulatory and technical aspects of disinformation-related dataset sharing. These aspects need to be handled jointly to publish datasets that are technically useful and socially acceptable to share.

Breakout session 9: What is bias and when is it bad?
This session will focus on how bias can be beneficial. It is often assumed that biases are bad, but they are relative to some criteria that can change over time or context. These criteria will be looked at in more detail in the session, e.g. regarding gender bias.

Breakout session 10: Uninformation vs. Disinformation?
This session will focus on the concepts of "uninformation" vs. disinformation. False information leads to disinformation, but information can be far more misleading if it does not contain the whole story. The "uninformation" gives an incomplete view of reality and leads to misconceptions, for example in war propaganda.

Breakout session 11: SafetyTech
This session focuses on SafetyTech technology that protects individuals in digital spaces. To avoid consequential problems arising from techno solutionism, we must find solutions that truly enrich the online experience, while respecting our values and freedoms.

Breakout session 12: Online manipulation
This session explores how human decision-making in highly mediated digital environments becomes the target of actors that are inclined to abuse their power at the expense of the very fabric of society.

Please register here.

We invite the community to suggest further topics of interest for the breakout sessions. Please use the [online application form](#) for your suggestions.

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Figure 2: Theme Development Workshops on Mitigation Bias & Disinformation

TDW IV: AI for Future Manufacturing
Theme Development Workshop

10 May 2022 | 9:00 - 17:30 CEST

Identify common goals between academia and the manufacturing sector as well as other relevant stakeholders, and define promising approaches for European research and innovation in Trustworthy AI.

Click to see the flyer Register

Share on Facebook Share on Twitter Share on LinkedIn

Organising Committee: ABB, DFKI, EUROPEAN ENTREPRENEURSHIP, OMEA UNIVERSITY, zhaw, Pop AI

AI FOR FUTURE MANUFACTURING
Theme Development Workshop

10 May 2022 | 9:00 - 17:30 CEST

Identify common goals between academia and the manufacturing sector as well as other relevant stakeholders, and define promising approaches for European research and innovation in Trustworthy AI.

Click to see the flyer Register

Share on Facebook Share on Twitter Share on LinkedIn

Figure 3: Theme Development Workshop on AI for Future Manufacturing

We have noticed that the exchange between industry and business works very well during the Theme Development Workshops and would therefore like to strengthen this further and in this course also identify and concretize business use cases of AI technology as well as recommendations and needs for the EU AI research agenda.

3.4 EUROPEAN ENTREPRENEURIAL SUMMER SCHOOL

To increase cross-European cooperation across other projects, we will conduct the European Entrepreneurial Summer School together with Saarland University,

Saarland Informatics Campus and the Max Planck Institute Informatic as the 6th Summer School on Computational Interaction.

The cooperation makes sense for different reasons, both for the EU and for the participants. In addition to the existing formats and lectures on the AI topics, the students as well as Postdocs, PhD candidates and researcher will be provided with impulses and methods for their entrepreneurial journey in the future. This will empower the participants to think one step further and to get to know and use their own potentials. By empowering the European AI talents to turn their own ideas into startups, we will also be contributing to the European Commission's goal of transferring research into businesses. The goal is to build a generation of young responsible leaders who create positive change in our society and secure Europe as an innovative and competitive player in technological developments.



Figure 4: European AI Summer School

In order to achieve the given goals, the teams will be intensively coached and provided with inputs and feedback. In addition, participants will gain complementary knowledge through a series of interactive sessions with renowned entrepreneurs and mentors with relevant expertise. The summer school agenda is a mix of input from AI experts, corporate and startup decision makers, team working sessions, and team building and presentations. At the end of the course, each team will present their idea to a large audience.

This format is planned for 13th till 18th of June 2022 in Saarland and will be conducted as an in person event.

3.5 AI IDEA PRIZE: SHOW, PITCH & MATCH

In the second edition of the AI Idea Award, the event organized by German Entrepreneurship and Ludwig-Maximilians-Universität (LMU) Munich is expanded to include a partnership with ETH Zurich. This is intended to provide additional reach and increase cooperation across Europe. The goal of the event remains the same - to give students and startups a stage to present their ideas. This is intended to highlight potential in the ideas, but also to trigger critical discussions. In addition, participants



will have the opportunity to network with AI experts from research, business and the startup scene.



Figure 5: AI IDEA PRIZE 2.0

The event is planned for the early summer of 2022. We are already in the process of recruiting high level speakers and jury members - both from industry and research.

3.6 CASHWALK

After last year's Cashwalk was able to attract many top-class AI startups as well as investors, a virtual event is planned again for this year. At the exclusive pitch event, around 50 startups from Germany and Europe will be presented to a panel of over 100 investors. Part of the event is a top-class jury, which provides deep insights into the startups' business model with targeted questions. Each event offers different "Industry Tracks" that help investors identify relevant startups - one of them being the HumanE AI track.

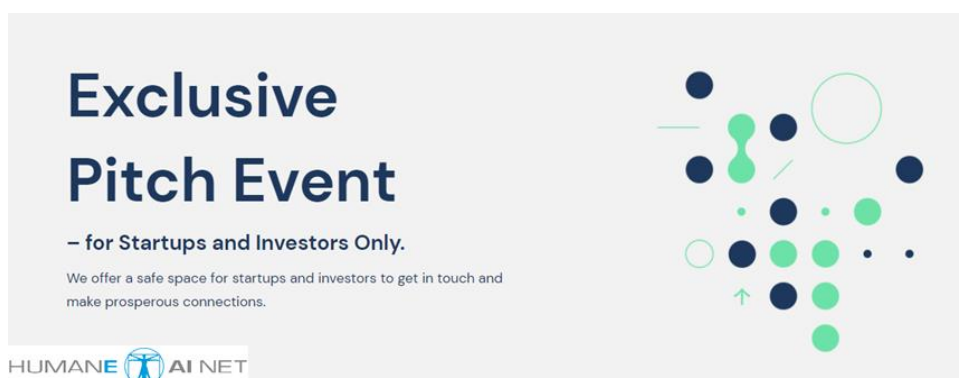


Figure 6: Cashwalk 2.0

Target groups of the event format are startups in the fundraising phase (Seed, Series A and Series B) and investors. The event is exclusive for selected startups and investors to enable targeted conversations/matchings.

The event thus targets one of the key problems facing the AI network in the EU - the lack of funding for startups. By giving startups from different sectors and different stages at Cashwalk a platform to be visited by a large number of investors, new connections can be established, and investments made. This will support the EU's long-term positioning in the field of human-centric AI.

3.7 EUROPEAN USE CASE AWARD FOR SOCIETAL IMPACT

Similar to the Cashwalk, the StageTwo event targets the problem that many AI use cases are brought to market as prototypes and require intensive funding before they can be deployed as products. In addition, it is often difficult for industry to decide which of the applications to fund and support due to a lack of expertise on technical details, development and implementation costs, and potential societal impact.

StageTwo is tackling these issues, which is why we will try to partner again with RWTH Aachen University in 2022 to win the European Use Case Award for Societal Impact as part of the first pan-European competition for the best startups emerging from leading European universities.



Figure 7: Layout European Use Case Award for Societal Impact

The European Use Case Award for Societal Impact supports the HumanE AI network in two key ways. First, it provides a stage for startups to present their use cases and have them evaluated, ensuring the industrial relevance of their business ideas. Secondly, the organization of a closing event promotes the exchange between the participants as well as other stakeholders from industry, universities, and politics. This enables an additional strengthening of the Europe-wide AI network and contributes in the long term to increasing innovation capacity within the EU.

3.8 AI HACKATHON

To give SMEs a low-capital opportunity to drive innovation in the AI field, we are planning an AI Hackathon together with VISION and TAILOR. For this purpose, we work out different business challenges together with the SME partners in advance. Startups, PhDs, postdocs as well as student teams can then apply for the predefined challenges.



Figure 8: Layout AI Hackathon

The hackathon is held over a predefined timeframe (e.g., 48 hours). During this time window, the participating teams receive additional coaching from experts in the AI and entrepreneurship field. This is intended to additionally raise the level of the results. The final results can then be presented by the respective teams in a pitch event. Here, the results will be evaluated by a jury and the best teams will receive an additional award.


The aim of the event is to create a match between AI experts and business case owners (SMEs). On the one hand, this should show SMEs additional innovation potential and, on the other hand, give startups and students the opportunity to work on real business problems. This promotes mutual inspiration and exchange and should aim for long-term collaboration.

The event fits perfectly with our work package strategy, as it addresses a central problem of SMEs: the lack of know-how and innovation potential of SMEs in the AI field. At the same time, the event promotes the exchange between different stakeholder groups and creates connections.

3.9 THE FUTURE VISION CONFERENCE


The final event still scheduled is the Future Vision Conference. The objective here has not changed compared to Report D7.1. It still aims to bring all stakeholders together and inspire, ideate, and create a future disruptive vision for different domains. The conference will invite all relevant stakeholders (industry, startups, research, non-profit, government) to come together and create a future vision for the HumanE AI NET. At the conference and fair, cooperation across disciplines, industries and nationalities is celebrated, co-creation and networking is strengthened, and public feedback and interaction is facilitated.





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FUTURE VISION CONFERENCE

THE FUTURE IS NOW

At the interdisciplinary Future Vision Conference, we will bring all stakeholders together and inspire, ideate and create a future disruptive vision for different domains. The conferences will invite all relevant stakeholders to come together and create a future vision for the domain.

Who's invited

To get the most relevant results from the conference, all stakeholders are invited. This includes relevant industry players as well as startups, researcher, non-profit organizations, and government officials.

Strategic benefits

The future vision conference promotes active exchange between the various stakeholders within the EU. It helps to form a long-term strategy that benefits the EU as a front runner for specific AI topics within the industry.

Figure 9: Layout Future Vision Conference

During the conference, relevant stakeholders are not only brought together, but a vision for the respective industry is created through interactive exchange. The aim is to work out a strategy that will position Europe as a pioneer in the field of human-centric AI in the long term. This requires a joint vision from all stakeholders. Through an interactive design of the conference, the participants are given the opportunity to contribute their opinions and expertise. For this purpose, different breakouts will work on focal topics. The Future Vision Conference aims to develop a long-term AI vision. This will help to define clear research and industry priorities.

The HumanE AI network as well as the entire European Union will benefit from hosting the Future Vision Conference. On the one hand, it promotes active exchange between the various stakeholders within the EU. On the other hand, the conference helps to form a long-term strategy to involve EU artificial intelligent technology and thought leader in aligned on a European approach. These are central components of the HumanE AI strategy and an essential success factor for maximizing the socio-economic impact of the research roadmap of the consortium.

The participants of the Future Vision Conference get the chance to expand and specialize their network within and across their domain. This creates opportunities for collaborations and partnerships to advance and promote human centric AI. In addition, participants can actively shape the future research agenda according to their requirements and thus represent their own interests. The interactive design of the event as well as the networking possibilities can therefore generate and strengthen competitive advantages in the long term.

To guarantee the best possible networking opportunities and a strong sense of togetherness for all participants, the conference is scheduled as an analogue event for September 2023. Since the Future Vision Conference is also a networking event, we will not be organizing and implementing it on our own. Rather, we will try to involve partners from the various stakeholder groups. This should also strengthen and promote the alignment with the respective domain.

4. OUTLOOK & NEXT STEPS

The various events should help to establish a stronger exchange between all stakeholder groups and thus contribute to positioning Europe as a front runner in the field of human centric AI in the long run.

The event strategy was adjusted based on feedback from the last review. One of the key feedback points was the involvement of several larger industry players, as they themselves have large research capacities. We have integrated this in the panels as well as in Theme Development Workshops, the European Summer School, the AI Idea Prize, the European Use Case Award and the Future Vision Conference. In this way, we hope not only for stronger networking, but also for greater participation in research activities by industry partners - including partners outside the HumanE AI NET.