AI HUB EAST NETHERLANDS

APPLICATION DRIVEN **TECHNOLOGY HUB**TO DRIVE **EUROPEAN AI INNOVATION**

he AI hub East Netherlands is a new technology hub that will drive Artificial Intelligence (AI) innovation in the region and connect to other initiatives in the Netherlands and Europe.

Artificial Intelligence is the ability of a system to correctly interpret external data, learn from this data, and use these lessons to achieve specific goals and tasks and ultimately make decisions autonomously. AI is already becoming embedded and influential in our modern lives, both socially and industrially. It can be expected that it will only become more critical to the future of life and economic prosperity as our world evolves evermore towards digitalisation.

This new hub comes as a collaborative effort between industry and the knowledge institutes of Overijssel and Gelderland and is instrumental to the wider AiNed programme, which has the mission of accelerating the development and application of AI across the Netherlands. This all falls under the governments' strategic action plan and the Netherlands AI Coalition (NLAIC) to further establish the nation as a world leader in AI technology.

AiNed is a network of AI established hubs, with each hub having dedicated working groups and an industry or application-specific focus. As part of a well-connected network of partner hubs, opportunities in AI can be identified in cross-collaboration efforts between the private-public sectors. Through this wider collaboration a network of over 400 different organisations is involved. The AI hub East Netherlands will place specific focus on AI for the manufacturing industry as well as AI for health. These two industry focuses align with the strategic themes and existing specialised expertise already established in the local region.

The new Hub itself will see very close collaboration between entrepreneurs in start-up companies working alongside and in collaboration with established research institutes, private companies, and government bodies. All this is with the common aim of improving lives through leading Al applications research and development across a wide span of industries including health and nutrition, advanced manufacturing, energy, and education. The hub will allow all stakeholders and involved partners in Al the guidance and rich knowledge needed to improve the way machines and software operate and how people's lives are lived.

Victor-Jan Leurs, Managing Director of the Twente board gave some commentary on the Ai Hub's greatest benefits to the region. He believes that the Ai Hub will further strengthen the regions strong position in medical technology innovation and smart industry development;

"Artificial Intelligence is an important technology to help strengthen entrepreneurs in our region, both larger and SME companies. The technology enables many new opportunities in for example the manufacturing and medical industry. The Ai HUB East Netherlands aims to be a connecting hub to develop new projects and link us to other regions with complementary skills in AI. That is of great value to develop and integrate this technology in new products and processes and so make companies in our region more future ready."

Victor-Jan Leurs
 Managing Director,
 Twente Board

With possible funding of 1.05 billion Euro from the National Growth Fund, in addition to matched investment from private partners, the Hub is positioned for substantial and rapid growth over the 6-year road map between now and 2027. Currently in the first phase of this growth journey, the national AiNed program has already been allocated 276 million Euro to kickstart the first instance of this exciting initiative worth roughly 560 million Euro.

The AI hub East Netherlands will be a haven for budding entrepreneurs, growing start-ups right through to the larger established companies that will take up residency. Operationally, the hub will be able to provide intimate guidance in the mapping out of growth plans, partnerships, project help and funding opportunities. The hub also allows for partners looking at growing AI applications, network connections and partnership structures required for success. This can happen locally in the East Netherlands, nationally as part of the wider established AiNed network and European industrial networks.

A key driver of success for the innovative applications that grow out of the hub will be in the way investment funding is allocated to new start-ups and projects that have high future return prospects. As part of the AiNed network, the AI hub East Netherlands will allow for the identification and nurturing of AI applications and technologies that show high future earning potential, with large investments being made in the infancy of these projects. With substantial upfront investments and a very strong ability to network complementary skillsets across different fields of AI, both SME's and larger firms will get the opportunities they need to pave the way for the future.

Scientific Director Ian Gibson of the Fraunhofer Project Centre at The University of Twente, described the benefits they are already seeing through collaborative AI project work in the region.

"FPC is already working on a number of projects in the field of AI in manufacturing, alongside colleagues from **UT** and the Fraunhofer **Institute for Production** Technology (IPT) in Aachen. As we gain more knowledge and as more companies start to realise they need help to make sense of all their data, we can expect an ever-increasing number of future projects. Although we recognise that the AI Hub is about more than just manufacturing, it is clear that being part of the Hub can only benefit FPC and its partners and vice versa."

- Ian Gibson

Scientific Director, Fraunhofer Project Center at the University of Twente Being interconnected with research experts and knowledge leaders also has enormous benefits for both research and industry. As well as the synergy of knowledge transfer from research to application, the hub will also allow for researchers to have direct access to valid and highly relevant data sets and in-situ application specific environments. These aspects are crucial for the research and development of new tools and systems that are of high relevance and applicability to commercial and industrial application.

Scientific Director of the Digital Society
Institute, Maarten van Steen, described
the importance of The Hubs network and
community approach. He believes that the
only way to effectively mature the technology
practically is if the hub's network, companies,
and institutes come together to solve
tomorrows and problems and technology
application needs.

"Most important is that each of the seven hubs does not operate on its own: a hub is a node in a national network. It has regional and national responsibilities. The hubs play a crucial role in defining regional-based, but nationally connected programs and projects for the approximately 560 million Euro that needs to be realised in the coming years. No single entity, be it a university or a company will ever succeed without teaming up."

Maarten van Steen
 Scientific Director,
 Digital Society Institute

For the local Twente region, the AI hub East Netherlands will also further embed the well-known reputation as a centre for advanced technology and manufacturing. Through the hub's access to the extended network of 400+stakeholders, the local region as a whole will prosper from the increased AI maturity that is developed. Maarten goes on to say

"No single organisation can boost the AI maturity level of a region. For that, it is crucial to maintain focus and team up with organisations with shared ambitions. Scale is essential. And despite how difficult it may be, any organisation that wants to participate in an AiNed project just for its own benefit, will eventually not come as far as they may have anticipated. An AI hub is there to help build the best consortia to reach higher AI."

32