

# Cross-industry innovation: Artificial Intelligence (AI)



## Diverse business opportunities

- <u>Al thrives on Bavaria's industrial strength</u>: Thanks to its strong and diverse manufacturing base, Bavaria is a hotbed for Industry 4.0 in Europe and hence for cross-industry innovation based on artificial intelligence.
- On a global scale, Bavaria's competitive edge in Al is in embedded systems and industrial IoT applications. From mechanical engineering to pharmaceuticals to automotive – smart new applications and Al based services are highly sought after in all industry sectors.
- Bavaria is also among Germany's most important regions in the services sector, major branches being insurance and financial services.
- A new ecosystem of insurance and cross-industry partners, startups, investors, universities and research institutions has evolved over the last years with a clear focus on creating new Al-driven business models.
- > In 2020, Munich ranked first among German cities in terms of funding of AI with an average funding of EUR 27 million per company.

### Effective networks

- The <u>Hightech Agenda</u> set the agenda for building a world class "Al-District" in Bavaria. The concept provides for a state-wide-network to connect and strengthen existing and new Al hotspots. The newly founded Bavarian Al Agency, will manage the network. An advisory board consisting of renowned experts from Bavaria and abroad will consult to ensure that the network will turn artificial intelligence into a major driving force for business success.
- For example, Würzburg (Data Science), Ingolstadt (Mobility), Erlangen (Healthcare) and Nürnberg (flexible AI applications) act as hubs for specific topics. Munich's focus is on intelligent robotics with both the LMU and TU universities as well as independent research institutes building world class R&D facilities. In the same spirit, <u>appliedAI</u>, a part of <u>UnternehmerTUM</u> is Germanys largest initiative for the application of AI technology, helping companies to tackle the operational challenges of AI transformation.
- Institutions such as the <u>ADA Lovelace Center</u> for Analytics, Data and Applications in Nuremberg facilitate cross-industry innovation by bringing R&D and business together. Here, companies team up with leading national and international AI researchers to collaborate on specific projects.
- Munich based <u>fortiss</u> center seeks to bridge the gap between research and real life applications. In 2019, a dedicated center for AI research was founded in <u>collaboration</u> with IBM Watson IoT Center.

## **Glocal perspectives**

- The growing AI field in Bavaria is not just driven by investments from the Bavarian state and local investors but also international corporates, private investors and accelerators. The <u>Bavarian AI ven-</u> <u>ture capital landscape</u> is highly dynamic.
- Many global players are contributing to turning Bavaria into a global AI hotspot. For example, <u>IBM Watson's IoT headquarters</u> is located here and Munich is one of three locations of <u>Microsoft's IoT & AI</u> <u>Insider Lab</u>.
- Local research institutions and universities are well connected globally with partner institutions worldwide – major research projects operate across border.

#### Access to talent

- The Hightech Agenda is also designed to massively expand the capacities for prepping world class AI talent at Bavarian universities and technical colleges. 100 new professorships will be created over the coming years.
- Already today, the Munich School of Robotics and Machine Intelligence is a world class facility for research and education, which closely collaborates with other institutions such as Fraunhofer Institut on specific topics.
- All Bavarian Al hubs such as Würzburg, Erlangen or Nürnberg are home to universities offering specific programmes on Al. In addition, universities and technical colleges in many other Bavarian cities <u>offer specialized programmes</u>. For example, Aschaffenburg offers a programme on "Medical Engineering and Data Science", the Al course at OTH Weiden allows for specialization on specific topics such as Smart Home and Smart Energy.