



DIGITALISATION AND DEVELOPMENT OF ARTIFICIAL INTELLIGENCE IN NORTH RHINE- WESTPHALIA (GERMANY)

AGENDA – 10 BEST LOCATION FACTORS FOR NRW



01.

Dynamic business location in the center of Europe



02.

Industrial heartland of Germany



03.

Home of the world market leaders



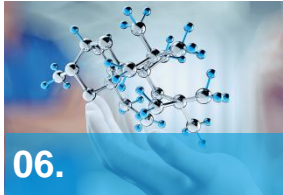
04.

Germany's No. 1 investment location



05.

Europe's gateway with an excellent transport infrastructure



06.

World class in research and development



07.

One of Europe's best breeding grounds for talents



08.

Logistics competence of world renown



09.

Future-oriented digital location

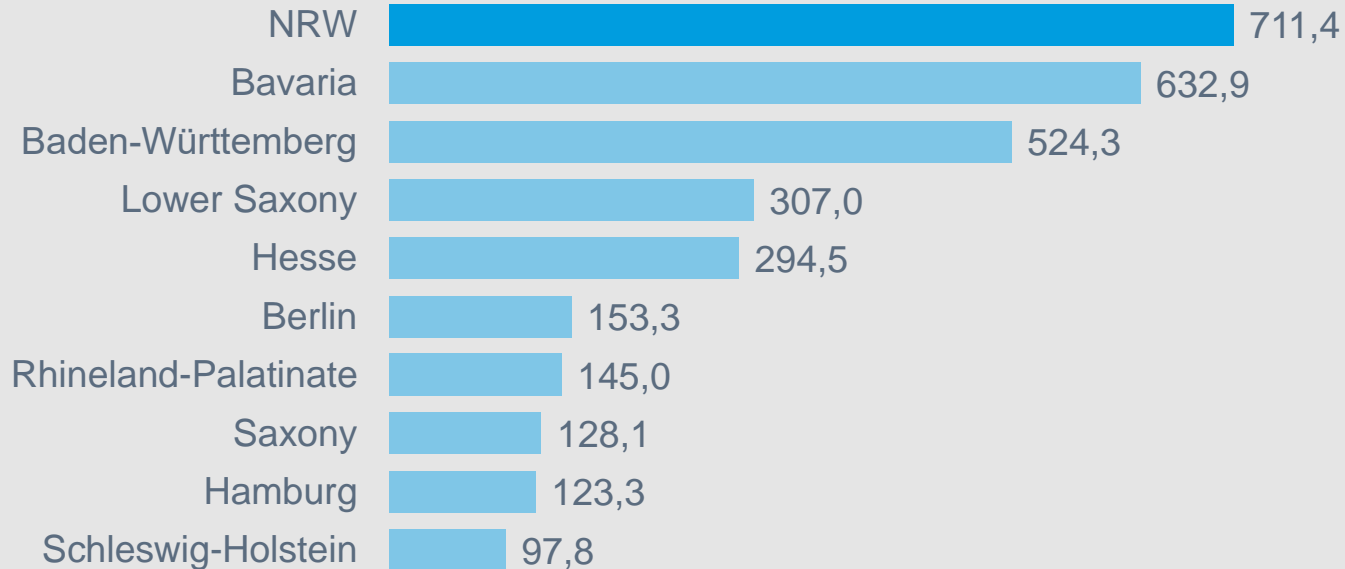


10.

Highest quality of life in NRW

THE LEADING GERMAN STATE BY GDP

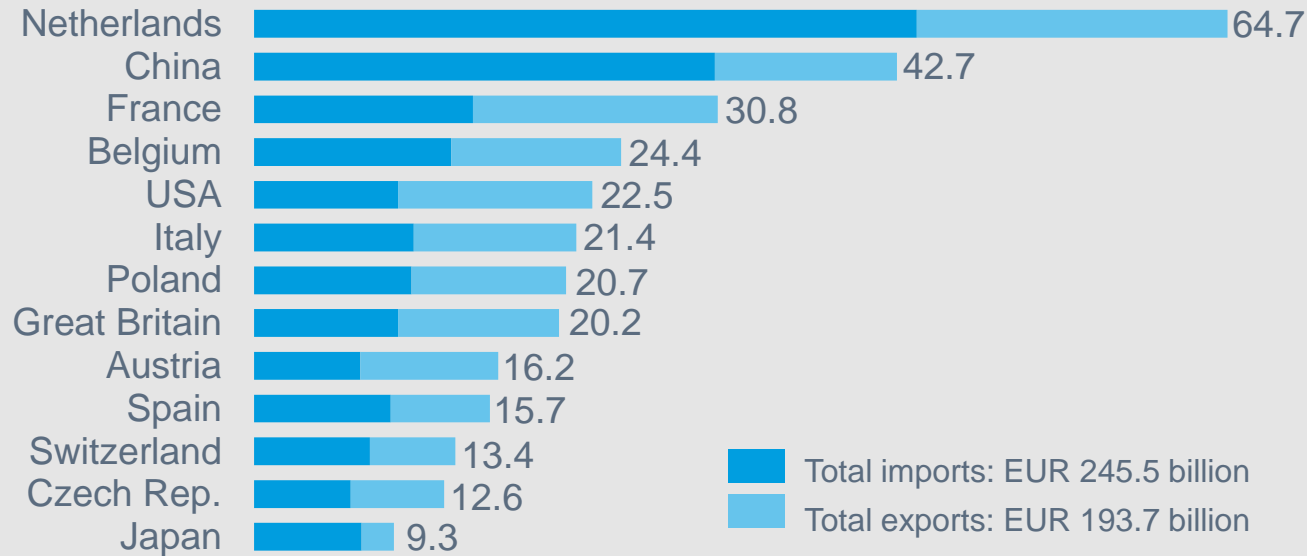
Germany's total GDP in 2019: EUR 3,436 bn



Source: IT.NRW, March 2020

TRADING VOLUME OF EUR 439 BILLION

The most important trading partners of NRW in 2019 (in EUR billion)



Source: IT.NRW, March 2020

NRW IS NO. 1 TRADE FAIR LOCATION WORLDWIDE



**6 million visitors
every year**

**The world's No. 1 trade fair location
Düsseldorf, Essen, Cologne, Dortmund**

**More than 100
internationally leading
trade fairs**

**Big public and trade
fairs e.g. demexco und
gamescom**

INDUSTRIAL HEARTLAND OF GERMANY

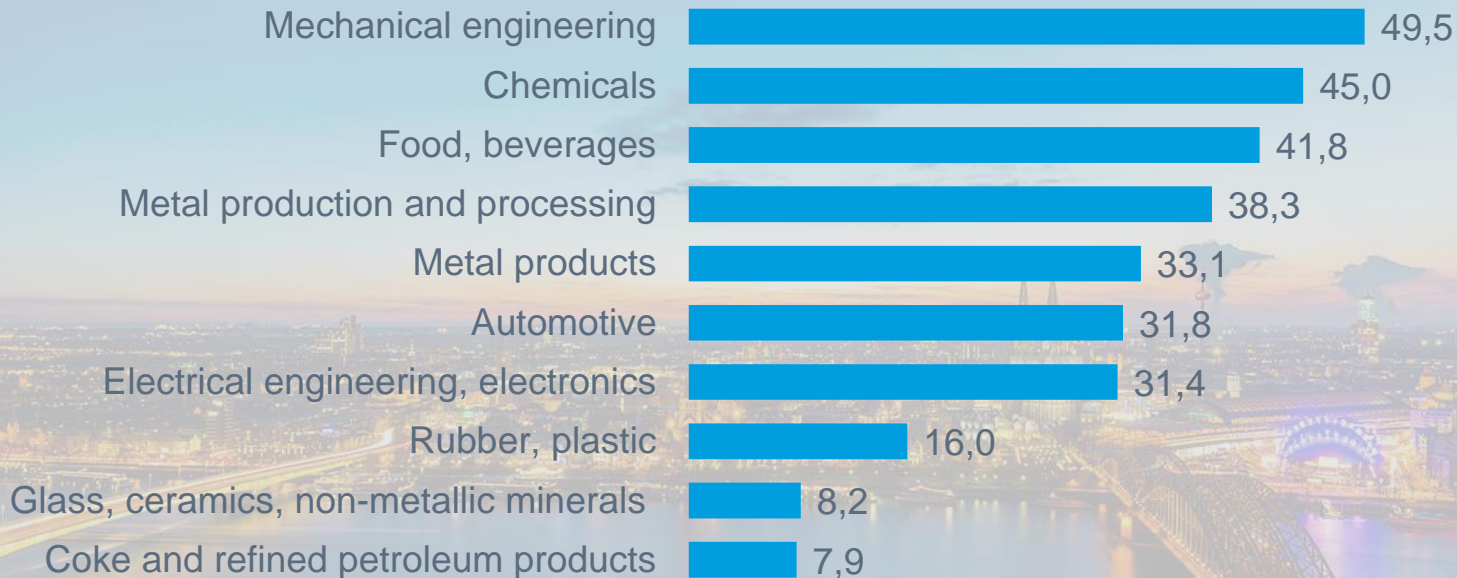


Industrial heartland

- In 2019, the industrial enterprises based in NRW generated sales of 352 billion euros.
- The biggest industrial employer in NRW is mechanical engineering with 207,2000 employees (19.0 percent share of German total)
- 19.7 percent of the employed population of NRW work in the industrial sector.
- With the Ruhr Metropolis as its core, NRW is the strongest industrial region in Europe.

TOP LOCATION FOR MANUFACTURERS AND SUPPLIERS

Sales 2019 (in EUR bn)



Source: IT.NRW; the figures refer to companies with 20 and more employees

A GLOBAL PLAYER'S PLACE

18 of the 50 top-selling companies in Germany are based in NRW



SMEs – THE BACKBONE OF THE ECONOMY



713,200 small and medium-sized companies

- They account for 99.4 % of all the companies in the state.
- They employ 78.7 % of all company employees subject to social insurance contributions.
- They provide 82.4 % of all training positions in NRW.

AROUND 20,000 FOREIGN COMPANIES IN NRW



Well-known foreign companies in NRW

- 21.3 % of the foreign companies are based in NRW
- Foreign investors provide work for about 1 million persons
- Major investor countries are: the Netherlands, USA, Switzerland, Great Britain, France, VR China, Austria, Japan, Italy, Russia and Turkey.

EUROPE'S GATEWAY WITH AN EXCELLENT TRANSPORT INFRASTRUCTURE



Easy to reach – excellent transportation infrastructure

2 major international airports as well as 4 airports with European connections

More than 2,200 km of expressways – mostly with six lanes

Highest rail network density in Germany

Duisburg is the world's largest inland port

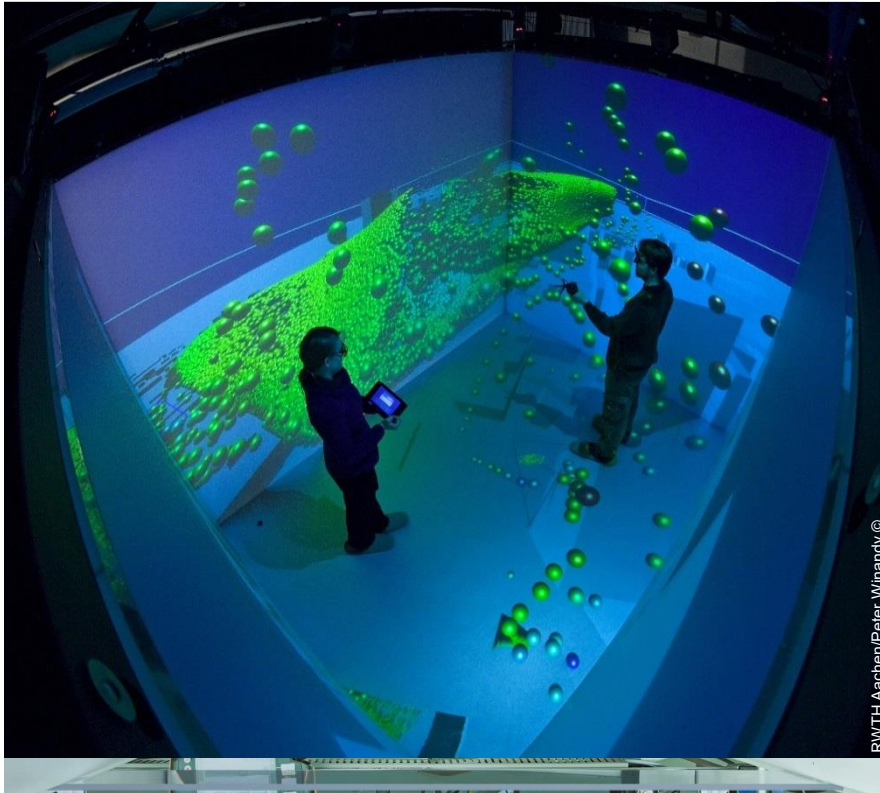
NRW IS AN R&D LOCATION OF WORLD RENOWN



The research network in NRW is one of the densest in Europe

- 70 universities and technical colleges
- 59 special research areas at universities
- More than 50 non-university research facilities
- More than 60 technology centers
- 30 technology transfer units

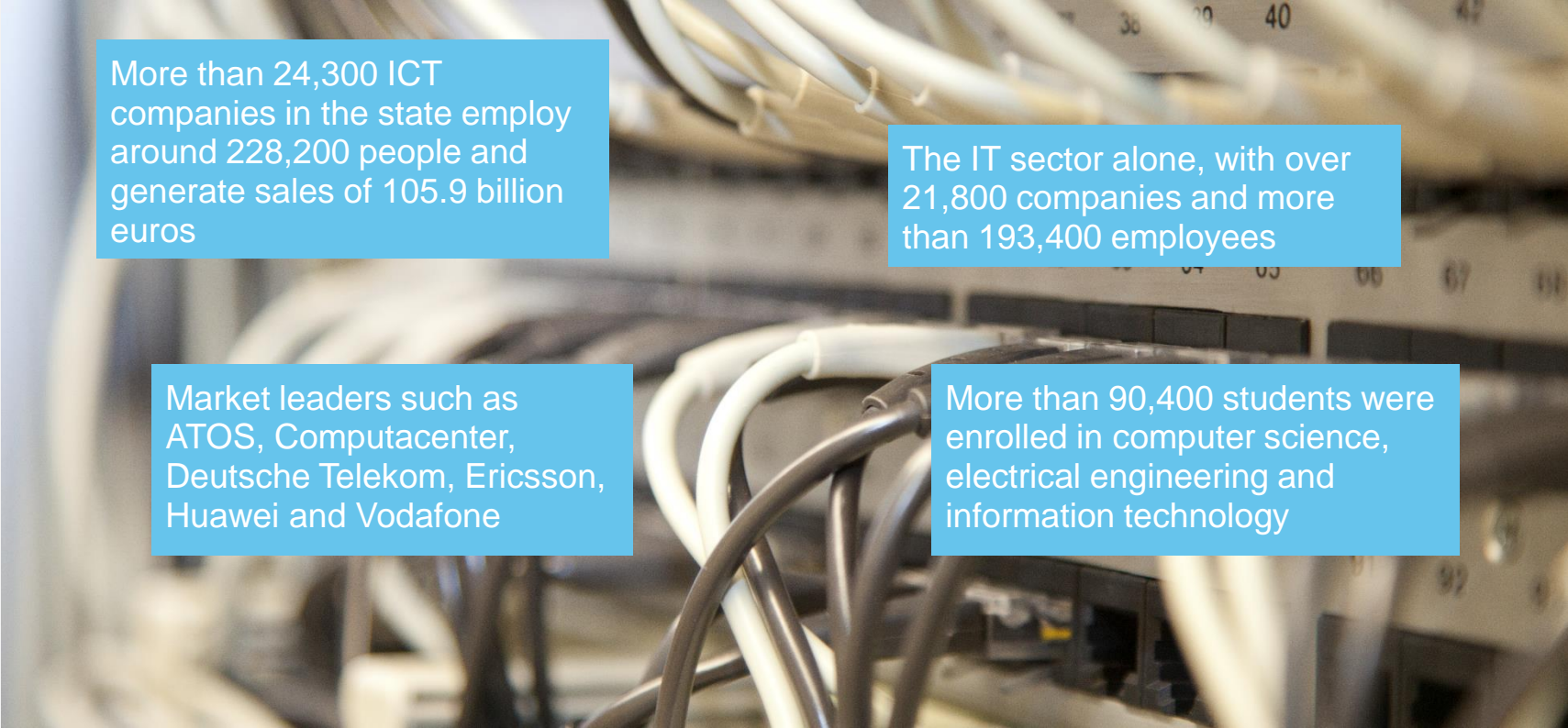
FUTURE-ORIENTED DIGITAL LOCATION



1/5 of German startups have grown in NRW

- About 1/3 of all German ICT sales are generated in NRW
- 20% of all German startups are at home in NRW, e.g. auxmoney, trivago or bitstars
- More than 87,000 students in NRW are studying informatics and electrical engineering – they have the core competences for the digital economy.

INFORMATION AND COMMUNICATIONS TECHNOLOGY IN NORTH RHINE-WESTPHALIA



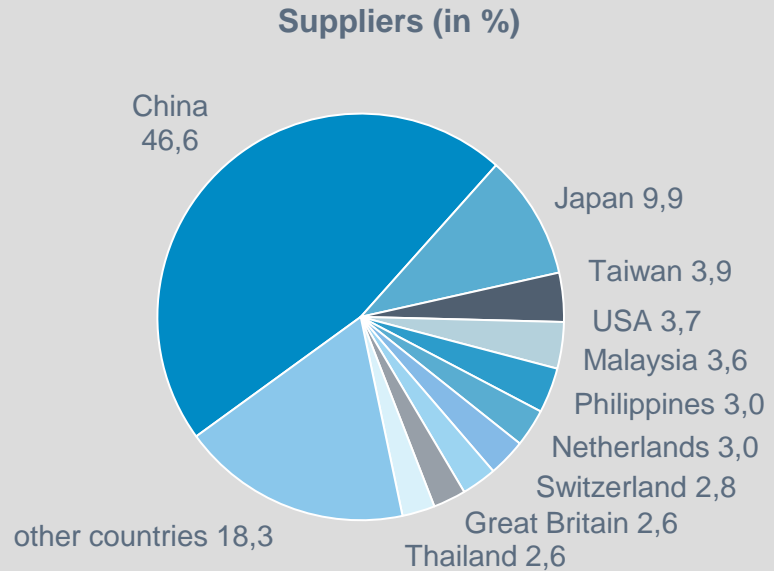
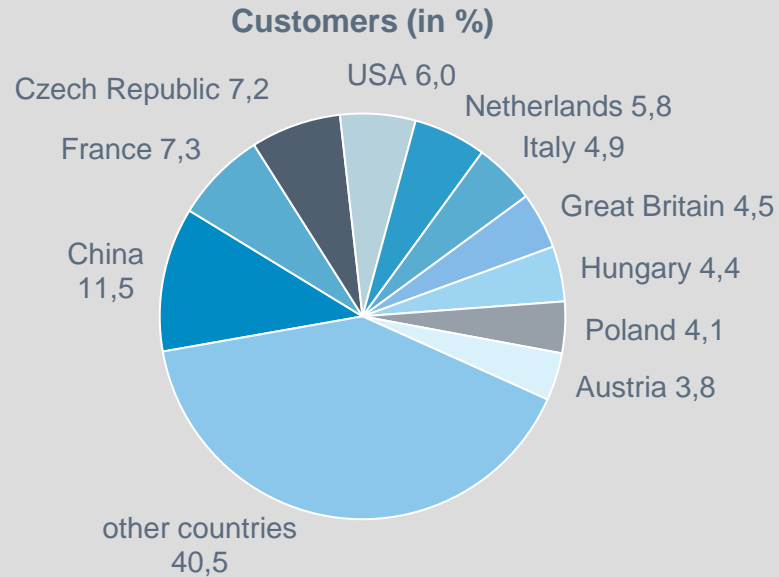
More than 24,300 ICT companies in the state employ around 228,200 people and generate sales of 105.9 billion euros

The IT sector alone, with over 21,800 companies and more than 193,400 employees

Market leaders such as ATOS, Computacenter, Deutsche Telekom, Ericsson, Huawei and Vodafone

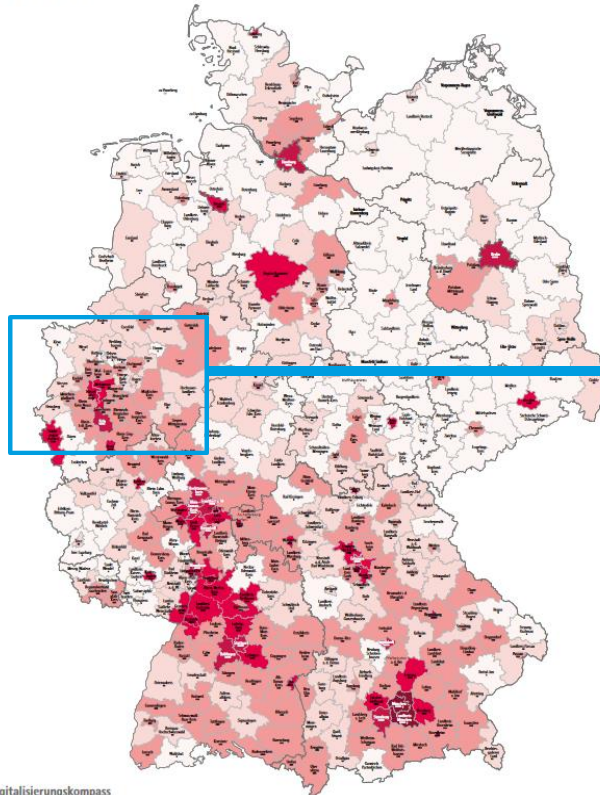
More than 90,400 students were enrolled in computer science, electrical engineering and information technology

MOST IMPORTANT TRADE PARTNERS – INFORMATION AND COMMUNICATIONS TECHNOLOGY IN NORTH RHINE-WESTPHALIA

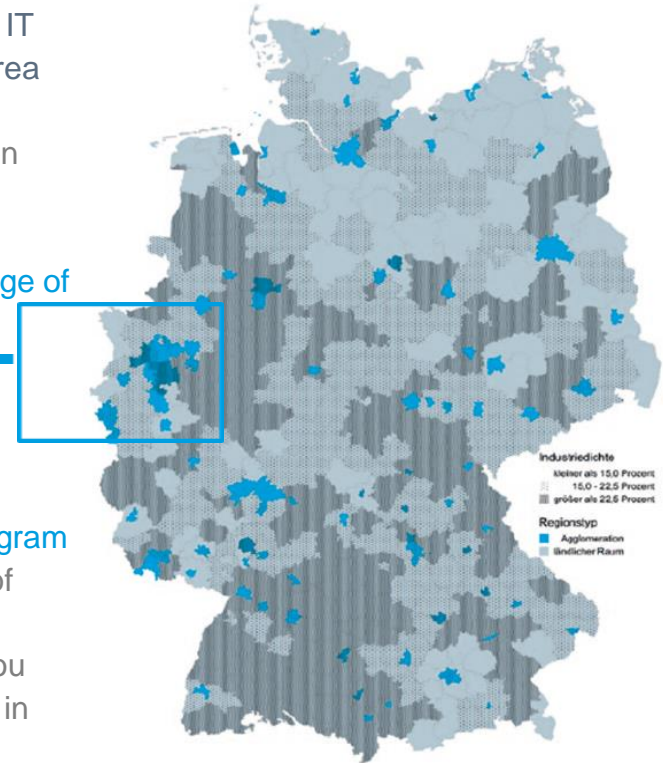


Source: IT.NRW, Foreign trade statistics for North Rhine-Westphalia; special evaluation; data: as of 2018

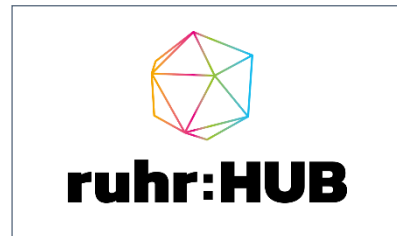
STRONG COOPERATION BETWEEN SME & DIGITAL COMPANIES



- New possibilities for IT business in digital area for **SME**
- **Cooperation** between classic industry and digital companies – **competitive advantage of NRW**
- **Bilateral R&D** programs for cooperation
- **Running federal program** for implementation of AI in Germany (for German entities if you have f.i. sales office in Germany)



REGIONAL PLATFORMS FOR THE DIGITAL ECONOMY



DWNRW Hubs

- The DWNRW hubs serve as a central contact point for startups.
- The hubs facilitate the organization of cooperation between startups, large companies and SMEs.
- The hubs are equipped to work together directly on digital prototypes and white label solutions for business models in the network of digital startups, SMEs and industry.

KEY INDUSTRIES FOR DIGITALISATION IN NRW



KEY INDUSTRIES

- Energy
Mechanical engineering & production technologies
Logistics
Healthcare
Automotive
ICT
- Large potential for combination of industrial technologies and digital solutions
- Enterprises invest to digital solutions → opportunities for foreign IT companies

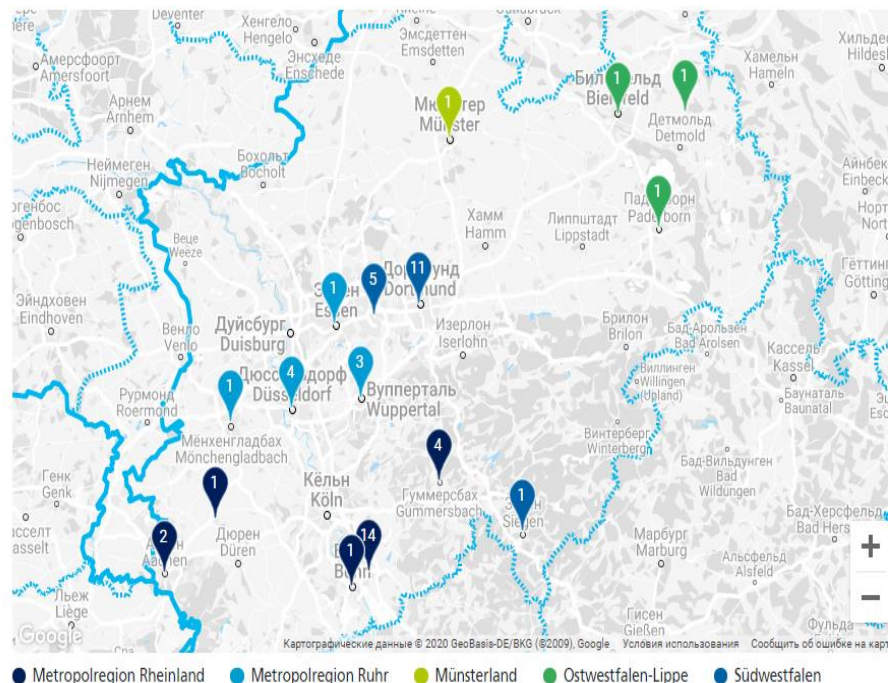
HOT SPOT OF ARTIFICIAL INTELLIGENCE IN EUROPE



AI-Competence platform


- KI.NRW – the main networking initiative for AI in NRW and leading location for AI and ML in Germany www.ki.nrw
- Close interaction between science, innovation and business to promote knowledge transfer from universities to business
- AI-competence platform is initiated on the basis of Fraunhofer institute for intelligent analysis and information systems in St. Augustin and is funded by the government of NRW
- It's owl – AI real lab for Industry 4.0, smart factory

HOT SPOT OF ARTIFICIAL INTELLIGENCE IN EUROPE



HOT SPOT FOR AI

Around 60 running projects in the area of AI in NRW on the intersection of industry & science:

 **ML2R The Competence Center Machine Learning Rhine-Ruhr** - one of six national nodes for bringing the development of Artificial Intelligence and Machine Learning in Germany to a worldwide leading level.

Industrial Automation Plattform for Big Data (iAP)

Intelligent forecasting of errors in the aircrafts

AI based forecasting in logistics

Technical infrastructure for digital twins

ACCESS TO GERMANY: ONLINE-EVENTS

EXPLORE THE VIBRANT RHINE-RUHR REGION, GET IMPORTANT INFORMATION ABOUT HOW YOU CAN SUCCESSFULLY GET IN TOUCH WITH GERMAN COMPANIES AND POTENTIAL PARTNERS AND LEARN HOW TO ENTER THE GERMAN MARKET

- Sales in Germany (8th Oct.)
- How to pitch in Germany (digitally)? (13th Oct.)

JOIN THESE AND OTHER WEBINARS AT:

www.startupgermany.nrw/access-to-germany/



16 REPRESENTATIVE OFFICES #NRWORLDWIDE



In 4 easy steps to North Rhine-Westphalia | NRW

We support you in your successful settlement in NRW with our international offices abroad and our headquarters in Düsseldorf. We are your partner and accompany the project in confidence – from the first contact to the successful settlement and beyond.



Consulting & Planning



Select a location



Set up a location



Successful growth

NRW.INVEST, State Economic Development Agency of NRW

- HQ in Düsseldorf;
- Promotion of NRW abroad;
- Support of foreign companies entering the German market:
 - Visa issues;
 - Selection of location;
 - Set up of sales office, registration of company, opening bank account
 - Support with contacts to networks etc.

FEEL FREE TO CONTACT US



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