Repräsentanz der Deutschen Wirtschaft
German-New Zealand Chamber of Commerce Inc.

LET THE BOTS DO THE JOBS?
AI AS GAME CHANGER FOR BUSINESSES

Have you ever had a conversation with Alexa, asking her when the Brandenburg Gate in Berlin was built or how high the Sky City Tower in Auckland is? Since Alexa is not a real person but an intelligent computer program that many users already see as a useful tool in their everyday activities, it becomes obvious that Artificial Intelligence (AI) is going to have a massive impact on people' s lives in the foreseeable future.

AI technologies boost business innovation

Algorithms are constantly developing, programs are getting smarter over time – AI is a global technology trend that will fundamentally change the nature of all industries. The deployment of Big Data, Internet of Things and other technologies is driving the demand for AI applications. AI technologies will lead businesses to a highly innovative level of productivity for themselves and most importantly for their customers. They will be able to generate benefits in various areas such as operational efficiency, customer engagement and employee productivity. Implementing AI Technologies promises a subsequent increase in sales opportunities and sales figures for established industries, services and products. Online portals for statistics such as Statista and Tractica already predict that the worldwide annual turnover of AI Technologies is expected to rise to 90 billion US Dollar by 2025. More than 40% of this turnover will be generated in North America, about 20% in Europe and further 20% in Asia-Pacific. Between the years 2010 and 2018 Artificial Intelligence firms have received nearly 70 billion US Dollar in investments worldwide. A PricewaterhouseCoopers study further concludes that the growth potential for the global economy through innovative products that use AI, combined with gains in efficiency, could reach 15.7 trillion US Dollar by 2030. Therefore to remain competitive in the long term, countries need to get involved in the development and implementation of AI.

Entrepreneur scene shapes future of AI in New Zealand

Although AI technologies have the potential to increase New Zealand's GDP by up to 54 billion NZ Dollar by 2035, the country does not yet have a nationally coordinated AI policy. So far, the Government intends to develop the Information and Communication Technology Sector (ICT) into the second largest contributor to GDP by 2051. In New Zealand, AI technology is mainly driven by its entrepreneurs who perform well in technology niches. The country is a minor actor in the global technology field and does not have the capital to create platforms at global scale. Therefore, its businesses successfully build upon foundational platform technologies which are developed overseas. According to a recently released survey of the AI Forum of New Zealand, the numbers of AI solutions constantly increase and are already deployed in agriculture, energy, financial services, retail and transport. The survey also shows that nearly 70% of the participants consider AI to improve customer relationship management, over 60 % plan to deploy intelligent assistants and want to use AI to support financial analytics and management reporting.

The national AI research report also showed, many businesses claim that a broader understanding and discussion of Artificial Intelligence is needed. For instance, although AI research is occurring across all universities in New Zealand, it remains too theoretical to produce outcomes that meet private sector needs. The survey concludes that New Zealand needs to increase its onshore talent pool as well as its investment in AI research and technologies.

AI roll-out in Germany offers opportunity for cooperation

The start of AI developments in Germany goes back into the 1980s, when scientists and companies started to collaborate to teach machines how to think. In 1988, the German Research Centre for Artificial Intelligence (DFKI) was founded, which today is the world's largest in the field of AI and counts more than 900 employees. Besides this, hundreds of research facilities, institutes and companies have partnered to develop Artificial Intelligence applications across Germany.

Nearly every fifth AI company in continental Europe has its headquarters in Germany and future investments in AI technologies are a major priority for many German companies. By now, 'AI Made in Germany' is becoming a leading global brand and Germany is a well-known location for basic and applied research in the field of AI technologies. Several research institutions, degree programs and clusters are extensively developing and implementing AI. Particularly the German automotive industry is congregating several trending tech topics. Global groups such as Volkswagen, BMW and Daimler are investing in modern, AI-controlled factories. Manufacturers are developing solutions for assisted and autonomous driving, intelligent operating systems, entertainment systems and navigation systems at their German R&D centers.

With intent to bring together leading experts in self-learning systems and AI from science, industry, politics and civic organizations, the online platform Lernende Systeme" (engl. learning systems) was launched by the Federal Ministry of Education and Research (BMBF) in 2017.

The platform aims to:

• shape self-learning systems to ensure positive, fair and responsible social coexistence

• strengthen skills for developing and using self-learning systems

• act as an independent intermediary to combine different perspectives

• promote dialogue within society on Artificial Intelligence

• develop objectives and scenarios for the application of self-learning systems

• encourage collaboration in research and development

Today, over 40% of German organizations implementing AI are going beyond small pilots and test projects and adopt AI applications at a larger scale. Germany also has a vibrant start up scene in the field of AI. More than 130 AI start-ups and university spin-offs were funded with nearly 1 billion Euro of private and public investments. On top of that the volume of public and private Venture Capital (VC) investments into German AI startups is increasing. In fact, more than 300 VC deals in the AI field have been accomplished in Germany between 2010 and 2018.

Sources:

- Tractica: Artificial Intelligence Market Forecasts

- Statista: Revenues from the artificial intelligence (AI) market worldwide from 2016 to 2025 Capgemini Digital Transformation Institute, 2017

- PwC: Artificial Intelligence everywhere

For further information, please visit:

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