

GERMANY

COUNTRY REPORT

Key findings:

- Four in five German businesses (**80%**) now report that they are familiar with AI. Familiarity with AI is particularly strong in the automotive industry (**90%**).
- **48%** of German businesses have adopted AI, with a further **19%** in the pilot stages.
- Businesses that have integrated AI into their operations are experiencing increased efficiency and productivity, with three in four (**74%**) perceiving AI as having a positive impact on the value of their business.
- **52%** of companies plan to hire new staff to drive AI implementation and development, with **30%** planning to do so within the next 12 months.
- More than half (**58%**) of businesses think that AI is having a positive impact on the company's Environmental, Social, or Governance (ESG) initiatives.
- A number of clear 'AI hotspots' are emerging across Germany, with Berlin and Northern Rhine Westphalia identified as the two leading regions.
- The automotive sector reports the highest level of AI implementation (**71%**).

Introduction

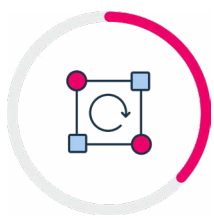
AWS' original [Unlocking study](#) revealed that digital technologies like AI could unlock €668 billion for Germany's economy by 2030, and that German businesses are eager to embrace emerging technologies such as AI and cloud computing. Business interest in AI has continued to grow in the months since this initial study, with **80%** of businesses reporting that they are now familiar with AI. Strong levels of familiarity are reflected in high rates of AI implementation within companies, with **48%** of businesses currently using AI in their operations, for example in process automation (**36%**) and customer service (**29%**).

The importance of AI-transformation is well understood by businesses, with **79%** considering AI to be important for industry-wide innovation. Businesses in Germany are therefore taking actionable steps to ensure they are able to access the opportunities afforded by this technology; **52%** of companies plan to hire new staff to drive AI implementation and development, with **30%** planning to do so within the next 12 months.

In an environment of continued business interest for technological innovation and implementation, AWS has focused this report on the tangible impact that AI adoption has had on firms as well as its primary use-cases, regions where adoption is growing fastest and the key drivers of this, and specific sector break-downs.

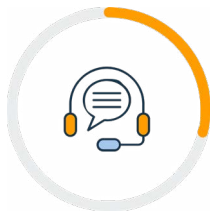
AI primary use-cases and impact

As levels of AI adoption continue to grow in Germany, businesses are diversifying the areas in which they use AI systems.



36%

AI technologies are currently used primarily for process automation and optimisation



29%

followed closely by customer service and support



27%

and predictive analytics and forecasting

High levels of AI integration in specific business areas are having sizable impacts on the overall functioning of businesses. **44%** of adopters attribute increased business efficiency in recent months to AI integration, and **39%** report that adopting and implementing AI technologies have improved both decision-making and enhanced customer experience.

74% of businesses that have adopted AI into their operations also report that this has had a positive impact on their business' value.

In addition to increasing company value, businesses perceive AI as a force for increasing productivity. **70%** of adopters report that AI has increased their competitiveness, and **69%** note increased workforce productivity and efficiency.

German businesses also report that AI has been important in allowing them to become greener, with **58%** of adopters suggesting that AI had a positive impact on their environmental or sustainability ambitions, e.g., through energy optimisation or waste management.

Regional AI hotspots

As AI becomes more widespread in the private sector, hotspots are beginning to emerge. These hotspots are spread across the country, with the main regional hotspots identified by businesses being Berlin, Northern Rhine Westphalia, and Bavaria.



Top 3 regions identified as 'AI hotspots' by German businesses

1. Berlin
2. Northern Rhine Westphalia
3. Bavaria



Top 3 cities identified as 'AI hotspots' by German businesses

1. Berlin
2. Munich
3. Frankfurt

Businesses most strongly associate these AI hotspots with the presence of AI companies (**50%** of respondents) as well as the presence of research institutes and skilled AI talent (**29%** of respondents).

The growth of AI hotspots is attributed by businesses primarily as being driven by firms in the IT industry (**29%**), finance (**27%**) and energy (**21%**).

AI hotspots are likely to witness an influx of new businesses locating in these regions in the coming years, as **89%** of businesses suggest that the nearby presence of skilled AI professionals is important in determining the location of their company.

Sector specific insights

As part of this report an industry specific questionnaire was sent to firms operating in the automotive and healthcare sectors, as well as start-ups.

Automotive industry:



The automotive industry is pioneering AI awareness (**90%**) among German companies.



German automotive companies strongly perceive AI as having a positive influence on business value (**77%**) and workforce productivity (**79%**).



58% of automotive businesses are planning to hire new staff for AI implementation and development.

The automotive industry is an industry leader in AI adoption rates. **90%** of businesses in this sector consider themselves to be familiar with AI, compared to **80%** across all sectors, while **71%** of automotive businesses use AI in their business operations, compared to **48%** across all industries.

High levels of AI implementation in the automotive sector have been driven by desires for cost savings and efficiency gains, with **47%** of these businesses citing AI as a means to reduce costs, and **38%** envisioning AI as increasing efficiency, such as through improved supply chain management.

Firms in this sector also consider AI as a key driver of business value (**77%**) and workforce productivity (**79%**). The impact that AI will have on these business functions in the industry is expected to increase further over the coming years, with **84%** of automotive businesses referencing these as key areas that AI will influence in the coming five years.

Although optimism surrounding AI is high in the sector, hiring plans trail behind other sectors analysed as part of this study. **58%** of the automotive sector plan to incorporate skilled AI professionals to drive implementation and development.

The automotive sector is therefore more likely to invest in training and upskilling programmes for employees (**40%** vs **17%**).

The presence of skilled AI talent is a primary consideration for companies when evaluating the attractiveness of a location for investment, with **41%** ranking the availability of skilled professionals as the most determinant factor.

Healthcare industry:



Healthcare has the longest standing relationship with AI adoption amongst the sectors analysed, with one in ten (**8%**) firms having used AI for more than 5 years. Process automation (**64%**), predictive analytics, and customer service (**45%**) are the three most common uses.



Despite AI having been present in the healthcare industry for a longer time than other sectors, only **69%** of healthcare businesses have adopted AI compared to **70%** of all businesses.



The most frequently noted positive impact of AI implementation for German businesses is increasing business value, with **75%** reporting AI to be a driver of business value.

Businesses working in the healthcare sector were the least familiar with AI of all surveyed industries, with only **73%** familiar with AI.

Healthcare businesses (**38%**) are also using AI less than those across all sectors (**48%**).

Despite lower levels of AI integration in the sector, healthcare has the longest standing relationship with AI systems. Close to one in ten (**8%**) respondents have used AI systems for more than five years.

These firms recognise that AI has significant benefits, with cost savings (**41%**) and efficiency gains (**37%**) being most strongly identified as key drivers of AI adoption.

AI is also heralded in the sector as a driver of improved business value, with **75%** of respondents reporting that AI implementation has improved their businesses' value.

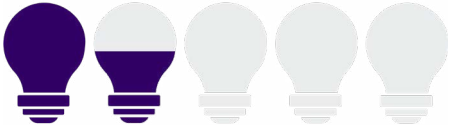
Start-ups:



AI familiarity among start-ups (**89%**) is significantly stronger than it is across all businesses (**80%**).



Start-ups are leading in the search for different applications for AI, with **18%** experimenting with different AI use cases across their company's operations (compared to **15%** across all businesses).



Start-ups regard Germany as an excellent location to operate their business from, valuing good access to data centres and high speed internet (**32%**), closely followed by the potential for collaboration and exchange within AI ecosystems (**30%**).

Start-up businesses are more likely to be aware of AI (**89%**) than those across all businesses (**80%**). This increased awareness translates to high adoption among start-ups, where **68%** of respondents have implemented AI in their operations.

Start-ups continue to experiment with different uses for AI within their business models, with **18%** citing experimentation as a use case for AI. Although AI experimentation levels are high, process optimisation and automation are emerging as the key applications of AI for start-ups, with **30%** of start-ups using AI to fulfil this function.

Similarly to other sectors, cost-savings and efficiency gains also are strong drivers of AI implementation for start-ups, yet customer expectation pressures are also disproportionately key drivers of AI implementation for start-ups (**24%** vs. **10%** in the healthcare sector).

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Conclusion

The study results demonstrate that German companies recognise AI's potential for their businesses and are increasingly reaping the benefits of advanced technologies.

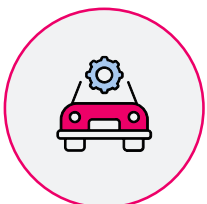
Companies demonstrate high levels of satisfaction regarding the impact that AI incorporation is having on business value and workforce productivity and efficiency.

Methodology

The fieldwork for this study was undertaken by Strand Partners' research team for Amazon Web Services. This research has followed the guidance set forth by [ESOMAR](#).

We surveyed 1,000 nationally representative business leaders in Germany (i.e. founders, CEOs or C-suite staff). Business leaders were representative by size, sector and NUTS 1 region.

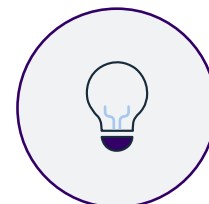
Alongside the 1,000 above, we provided additional samples of 100 each for the below industries, to ensure insightful and accurate reporting on their AI adoption:



Automotive



Healthcare &
Pharmaceutical



Startups