SCALEUP Google for Startups NOTION

AI adoption, adaptation, and creation by startups in Germany

Key findings

1. **Adoption levels** are broadly similar, though Germany lags slightly behind Europe overall.
2. **Adaptation** is almost on par, suggesting similar willingness to customise technologies.
3. **Creation** is the most notable divergence, with Germany trailing Europe by nearly 2 percentage points, indicating fewer companies are developing AI technologies in-house.
4. **Scale**: A minority of European startups and scaleups have adopted and adapted AI to create business value - nearly 200k startups have adopted AI
5. **ROI**: 53% of German startups are seeing a positive return to adopting AI
6. **Efficiency**: 59% of German startups believe AI has increased their efficiency, over 50% have seen product development processes take less time using AI
7. **Innovation**: 56% of German startups believe that AI has enhanced innovation in their company
8. **People**: For 84% of German startups AI has positively impacted, or not changed headcount growth. However, for 16% there has been a decrease in growth as a result of AI use
9. **Europe**: 59% of European respondents believe that European startups can become global leaders based on the current state of the ecosystem, while 52% of German startups feel the same.

(Source: Centiment, Scaleup Global, 2025. N=357)

Research approach

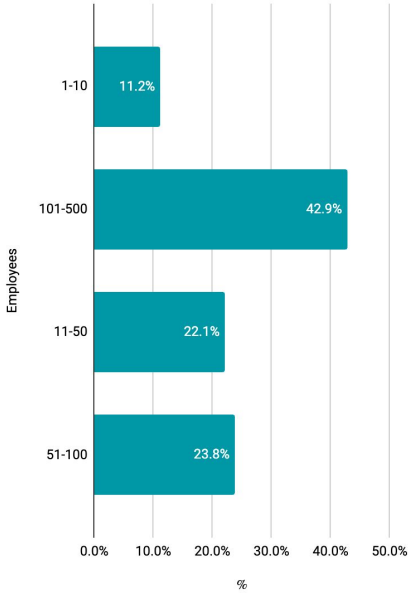
Scaleup Global, in collaboration with Google for Startups, South Summit and Notion Capital conducted this research to understand the impact of AI adoption on value creation, efficiency, growth, market acceleration, and the positioning of German startups in the global AI landscape.

Quantitative data was collected using an online survey with Centiment. Respondents were asked about their use of AI, how this has prospectively impacted their business, the broader European startup landscape, and global AI ecosystem, and what can be done to better improve conditions for AI success on the continent looking forward.

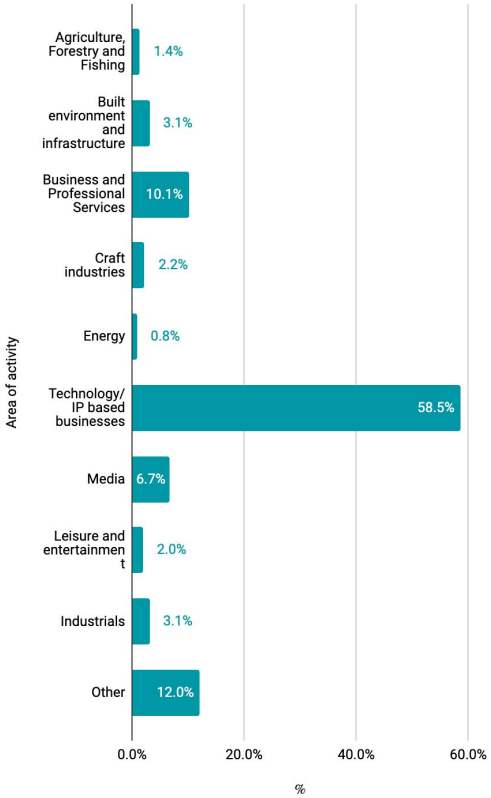
Just under half of respondents were senior leaders at German companies employing 101-500 people (43%). The majority of respondents identified their company as a tech firm (59%), while others operated across Media (7%), and business and professional services (10%).

Data was collected in February 2025. Startups were selected based on their geographical location (headquartered in Germany), headcount (fewer than 500 people), their self identification as a startup, and the person responding occupying a position as a senior leader at that company.

In addition to survey data, firm level data from Dealroom (which was chosen as it best reflects the population from which the survey sample was drawn), was used to explore other company level characteristics at a population level. The survey data represents a sample of tech companies adopting and adapting AI in Europe, the number of respondents for Germany is 357, the previous study with a pan-European sample has 866 responses.



Headcount of companies represented by respondents



Area of activity of companies represented by respondents

(Source: Centiment, Scaleup Global, 2025. N=357)

German startups are lagging behind their European peers in AI adoption (aside from GenAI) and creation

	Europe			Germany		
	% Adopting	% Adapting	% Creating	% Adopting	% Adapting	% Creating
Machine learning	55.9%	10.5%	8.1%	56.0%	8.1%	7.3%
Natural Language processing	52.7%	10.4%	7.2%	49.6%	12.0%	5.3%
Computer vision	47.7%	9.4%	8.9%	45.9%	11.8%	4.5%
Robotics	38.7%	7.8%	6.0%	34.5%	5.9%	5.6%
Predictive analytics	54.0%	10.4%	6.6%	47.3%	7.3%	7.0%
Generative AI	59.8%	11.4%	7.7%	66.4%	11.5%	4.2%
Total	**51.5%**	**10.0%**	**7.4%**	**50.0%**	**9.4%**	**5.7%**

(Source: Centiment, Scaleup Global, 2025. N=866 Europe and N=357 Germany)

In Europe, 51% of respondents are adopting AI, 10% are adopting and actively adapting AI to suit their businesses needs, and 7% are generating new technologies

Low adaptation may be as a result of data protection concerns, relatively low availability of world leading AI talent compared to the US, for example, cultural factors, like risk aversion, or inability to access essential infrastructure, like high powerful computing.

	Experimental adoption	Partial adoption (some teams or functions)	Full adoption (all teams of functions	**Adoption and active adaptation** of tech to suit business needs	**Generation** of new technology to serve business needs	**Not using**
Machine learning	17.%	24%	14%	11%	9%	26%
Natural Language processing	15%	20%	14%	12%	8%	31%
Computer vision	14%	18%	14%	10%	8%	36%
Robotics	12%	15%	9%	8%	6%	50%
Predictive analytics	17%	22%	13%	10%	7%	31%
Generative AI	20%	25%	14%	12%	7%	21%
Total	**ADOPTION**: 51%			10%	7%	33%

50% of German startups are adopting AI in some form, 9% are adapting the technology, less than 6% are generating new AI tools.

	Experimental adoption	Partial adoption	Full adoption	**Adoption and active adaptation** of tech to suit business needs	**Generation** of new technology to serve business needs	**Not using**
Machine learning	19%	22%	15%	8%	7%	29%
Natural Language Processing	14%	20%	16%	12%	5%	33%
Computer Vision	15%	22%	10%	12%	5%	38%
Robotics	9%	16%	9%	6%	6%	54%
Predictive analytics	15%	19%	14%	7%	7%	38%
Generative AI	22%	25%	19%	12%	4%	18%
Total	**ADOPTION**: 50%			9%	6%	35%

(Source: Centiment, Scaleup Global, 2025. N=357)

Essentially, this is a product which is very data-driven, and I think any business that's gathering huge amounts of data from its customer base has an opportunity to apply AI across all aspects of the product. We connect into the warehouse management systems or whatever central hub of information our client has on shipments. Some of our clients have upwards of two and a half million shipments a year, others do 10 or 20 million, even more. We gather data on shipments - what's in them, tracking numbers, couriers, origin, destination -and from there we can start applying AI.

Currently, a lot of processes that we automate through our platform are done manually. One of the big value-adds is reducing the operational expenditure involved in managing lost or damaged shipments. We also improve efficiency by identifying losses more quickly, providing coverage, and spotting instances of fraud sooner.

We're problem- and customer-led rather than just looking to plug in AI for its own sake. Ultimately, our goal is to solve the problem of lost and damaged items in transit and to optimise courier performance. Wherever AI helps us do that more efficiently—whether it's through anomaly detection, image recognition, or predictive analysis—that's where we'll use it.

As a small team, one of the reasons for adopting AI is to keep our staffing and cost base low while we scale to millions of shipments. We have ambitious plans for global growth, especially within high-volume, relatively low-value shipping markets. AI is part of that strategy, but always driven by real problems our customers have. As we partner with third-party logistics firms and major courier companies, AI will remain a core component in expanding our platform and automating the entire claims and insurance process.

Megan Bingham-Walker

Founder and CEO, Anansi. $2mn raised. Based between the UK and Germany. 15 employees. Enterprise value $8-12mn.

53% of German startups are seeing a positive return to adopting AI

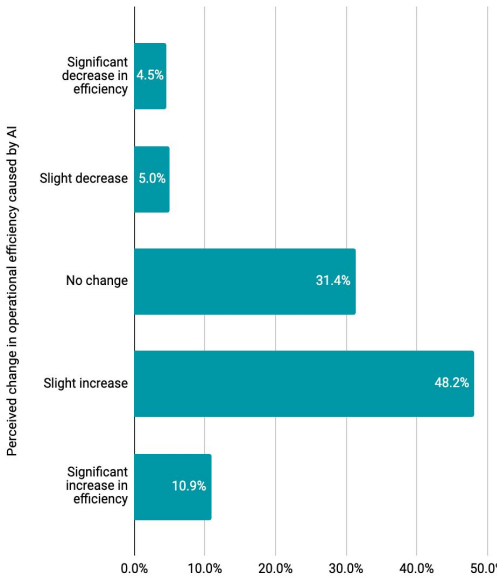
AI adoption among German startups is delivering broadly positive results, particularly in product development and customer success. In product development, 63% report a positive impact, including 24.6% who say it is significant. Marketing and sales also benefit, with 53.8% and 50.7% respectively reporting positive outcomes, though these are more incremental.

	Significant negative impact	Slight negative impact	No impact	Slight positive impact	Significant positive impact
Product development	2.2%	4.8%	30.0%	38.4%	24.6%
Customer success	2.2%	3.9%	34.2%	44.5%	15.1%
Marketing	1.4%	4.5%	40.3%	35.9%	17.9%
Sales	2.2%	5.6%	41.5%	37.0%	13.7%
Finance	1.1%	6.2%	49.3%	30.0%	13.4%
People	2.8%	5.6%	44.8%	35.3%	11.5%
Total	**NEGATIVE**: 7.1%		40%	**POSITIVE**: 52.9%	

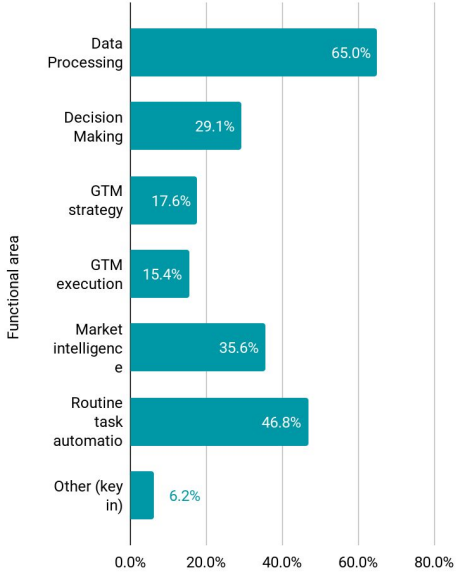
In finance and people functions, however, nearly half of startups (49.3% and 44.8%) report no impact. Overall, while AI is clearly driving value in product and customer-facing roles, its effects across the startup ecosystem remain uneven.

(Source: Centiment, Scaleup Global, 2025. N=357)

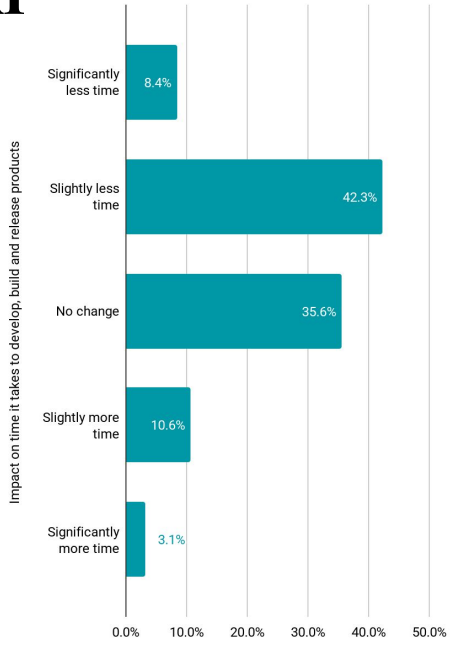
59% of German startups believe AI has increased their efficiency, over 50% have seen product development processes take less time using AI



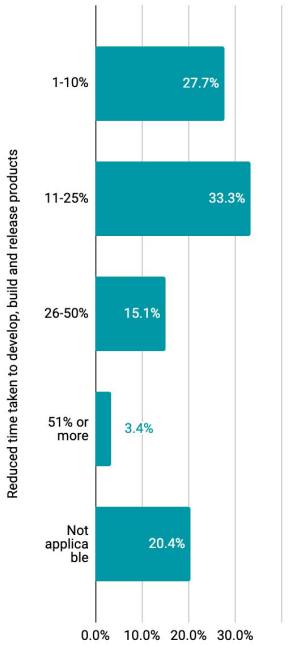
Has AI led to a change operational efficiency in your company?



In which areas, if any, has AI improved efficiency in your company?



What impact has AI had on the time it takes to develop, build and release products at your company?

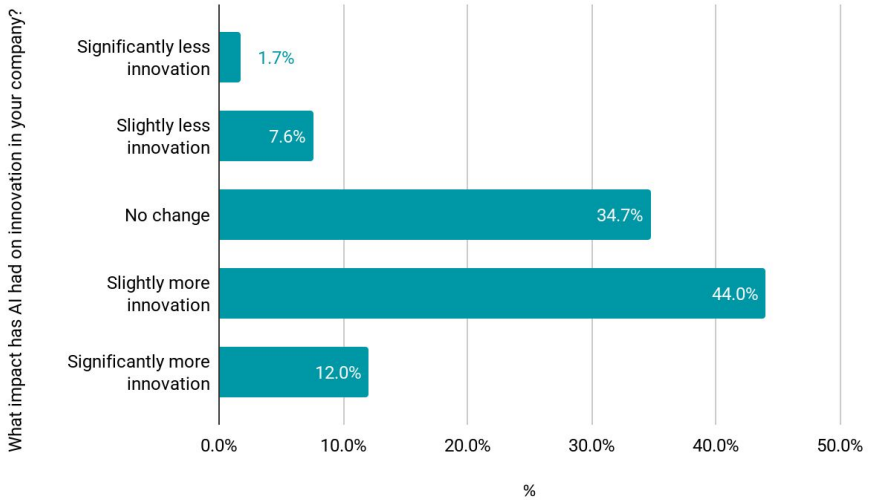


If AI has reduced time taken to develop, build and release products at your company, roughly what how much shorter is the process?

(Source: Centiment, Scaleup Global, 2025. N=357)

56% of German startups believe that AI has enhanced innovation in their company

In Europe as a whole, 58% of respondents suggested that AI has enhanced innovation - AI can enable greater levels of, and outcomes from innovation by automating tasks, enabling data-driven decisions, fostering personalised solutions, accelerating research, enabling new business models, augmenting human creativity, and solving complex problems.



What impact has AI had on innovation in your company?

(Source: Centiment, Scaleup Global, 2025. N=357)

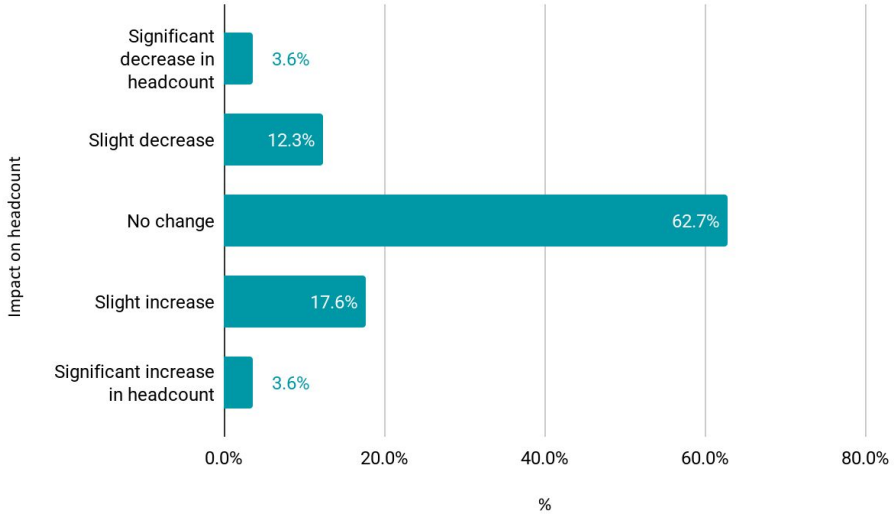
Maximilian Eichler

Senior Associate, Notion Capital

The historic industrial superpower Germany is currently in a challenging macroeconomic position - struggling under rising energy prices and a skilled worker shortage. What makes us hopeful for the future of the country and its entrepreneurial ecosystem, is that we're seeing a lot of exciting opportunities in applying AI to real world use cases across robotics, manufacturing, energy, and the broader theme of empowering deskless workers. These startups can play to Germany's inherent strengths, building a new industrial base and modernising the old incumbents.

For me, some of the most interesting examples of companies in this space are: Quantum Systems, TerraLayr, RobCo, Daedalus, ARX Robotics, Caeli Wind, Trawa, Plancraft, DoInstruct

For 84% of German startups AI has positively impacted, or not changed headcount growth. However, for 16% there has been a decrease in growth as a result of AI use

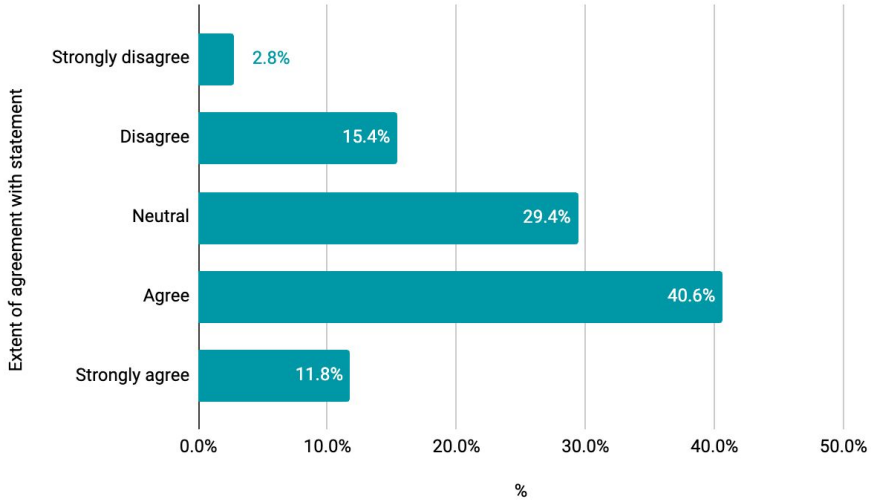


What impact has AI had on your company's overall headcount growth?

Compared to Europe, German startups perceive that AI has had less positive impact on headcount growth and substitution. Most European companies (86%) believe that AI has positively impacted, or not changed headcount growth. However, for 14% there has been a decrease in growth as a result of AI use.

(Source: Centiment, Scaleup Global, 2025. N=357)

59% of respondents believe that European startups can become global leaders based on the current state of the ecosystem



To what extent do you agree or disagree with the following statement: European startups developing cutting edge AI are able to become global leaders based on the current state of the ecosystem in Europe.

German startups are slightly less optimistic than the European startup population as a whole where 52% of startups believed that European firms become global leaders.

This slight dip in optimism among German startups may reflect a more cautious or pragmatic business culture, shaped by regulatory complexity or concerns around scaling in a competitive global market. It could also indicate a recognition of structural challenges, but is likely to be a combination of a multitude of factors.

(Source: Centiment, Scaleup Global, 2025. N=357)

Alex Schneider

Founder and CTO, Nui. $1.1mn raised. 28 people. Enterprise value $4-7mn.

When Gen AI came around the corner, what we saw was a way to enhance communication with our users, and a way to better guide them through the journey. We built a sort of chatbot, but the chatbot is not just a general-purpose one—it's very focused on the knowledge that we gathered with our care experts.

We do have the care experts that every user can reach out to personally and get information directly from real people, but we're also offering the tech. We have some sort of split reality for the user. They can go to the human being or they can go to the AI and get exactly the same treatment. We're not just using Gen AI for our customers, but also internally. It's not only for creative work, but also analytics.

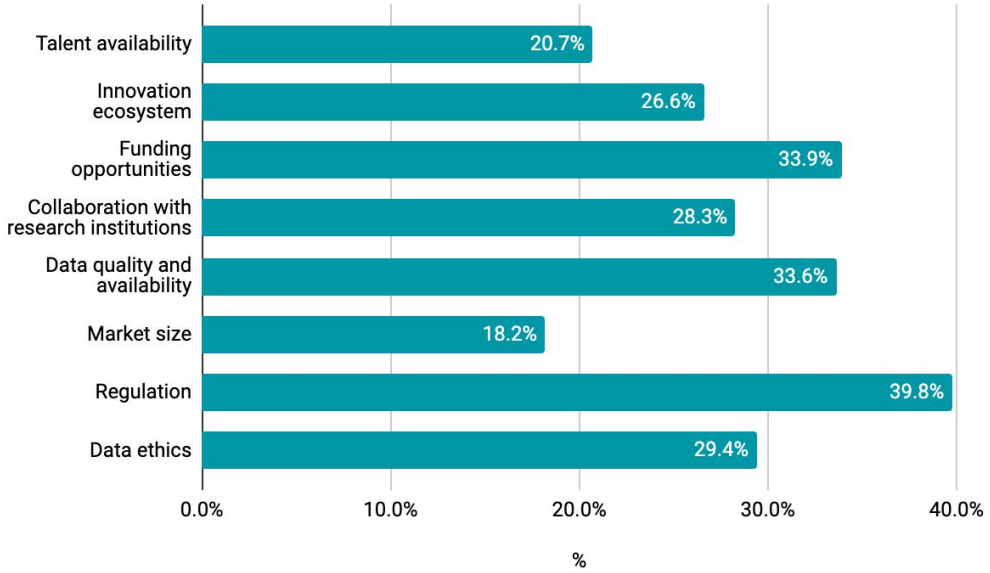
We went from around 70% of correct answers to over 90%. That was when we really started to add to the performance of our application. The moment we got a threshold beyond 90% correctness, the response from the users was much better than before. We rarely get a bad response now. We took that to the next step, because we had this chatbot in our app, and we wanted to make more use of it than just giving good answers on certain questions. We integrated the features of our application into the knowledge base of the AI chatbot.

In our business vertical in Germany, we're actually the only ones that are using Gen AI. That gives us a unique position.

For the future, we're experimenting with generative workflows—it's not just a simple chatbot anymore, but a self-thinking, self-improving entity. We want to grab the user by the hand, asking them where they are in the care journey, and adapt to that.

Startups believe that changes to regulation (40%) would be of most benefit to the adoption of AI in Europe, followed by Data quality and availability, and funding opportunities (34%).

German startups see several areas of policy in need of reform to strengthen Europe's position in the global AI landscape, with regulation standing out as the most pressing. Funding opportunities (33.9%) and data quality and availability (33.6%) are also highlighted as critical enablers where improved policy support could unlock greater AI adoption and growth. Startups additionally call for stronger policy focus on enhancing collaboration with research institutions (28.3%) and addressing challenges around data ethics (29.4%), underlining the importance of trust and translational research in AI development.



In which areas would policy change most benefit the adoption of AI in Europe?

(Source: Centiment, Scaleup Global, 2025. N=357)

Marc Obrador Sureda

CTO and Co-founder, Build38

Build38 was born as a spin-off of the German company G+D, specialising in cybersecurity. The four co-founders were originally employees at G+D, working within the software innovation department. We officially established Build38 at the end of 2018, focusing specifically on securing mobile applications through our proprietary technology.

From the very beginning, we adopted a data-centric approach to our product, aiming to provide value to our customers through a platform effect. The intention was always to leverage data to enhance security, but initially, we simply didn't have enough of it. It's only in the past 12 to 18 months we've accumulated sufficient data to make meaningful use of AI.

Today, we have tens of millions of endpoints on our platform. This scale allows us to instantly apply security insights gathered across our customer base, dramatically improving threat detection and response, even for very small customers.

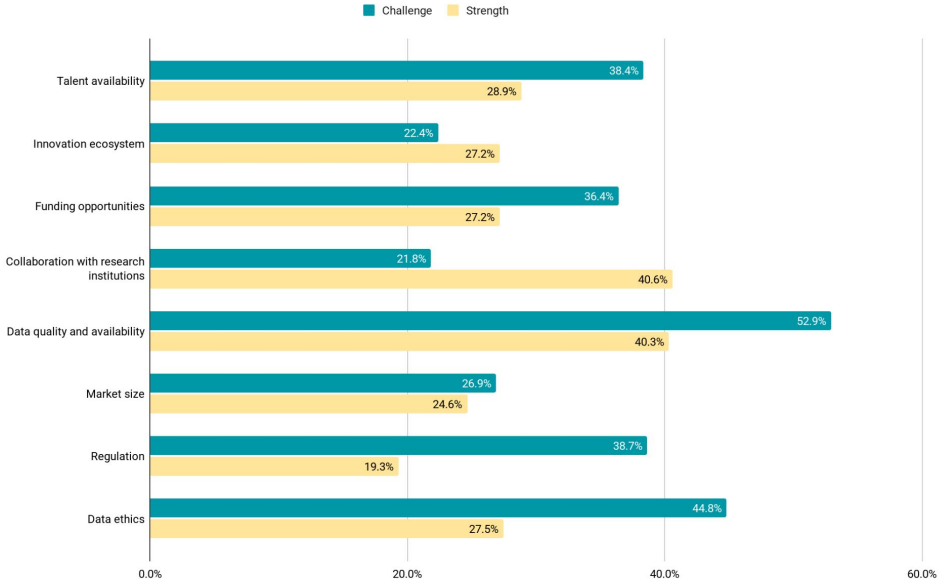
We've used external specialists - primarily freelancers - for AI and data science projects. Additionally, we're collaborating with universities, such as one project funded through public-private collaboration with the Catalan government.

Looking ahead, we're rapidly expanding AI use cases within our platform. Previously cumbersome processes have now become straightforward because we already have the infrastructure and the data to quickly implement advanced models.

AI won't fundamentally disrupt our core mission, but it is significantly accelerating our ability to deliver innovative, data-driven security solutions. We expect this acceleration to continue, deepening the advantage of our data-centric approach.

Data quality and availability (53%) is the top challenge faced by German startups *building cutting edge AI*, while Research collaboration is the top strength (41%)

German startups believe they face a number of challenges in developing cutting-edge AI, with data quality and availability (52.9%), data ethics (44.8%), and regulation (38.7%) standing out as the most significant barriers. However, there are also clear strengths within the ecosystem - most notably collaboration with research institutions (40.6%) and data quality (40.3%). What does this mean for startups? While issues persist, Europe possesses strong foundations in academic partnerships and data infrastructure that can be built upon to advance AI leadership.

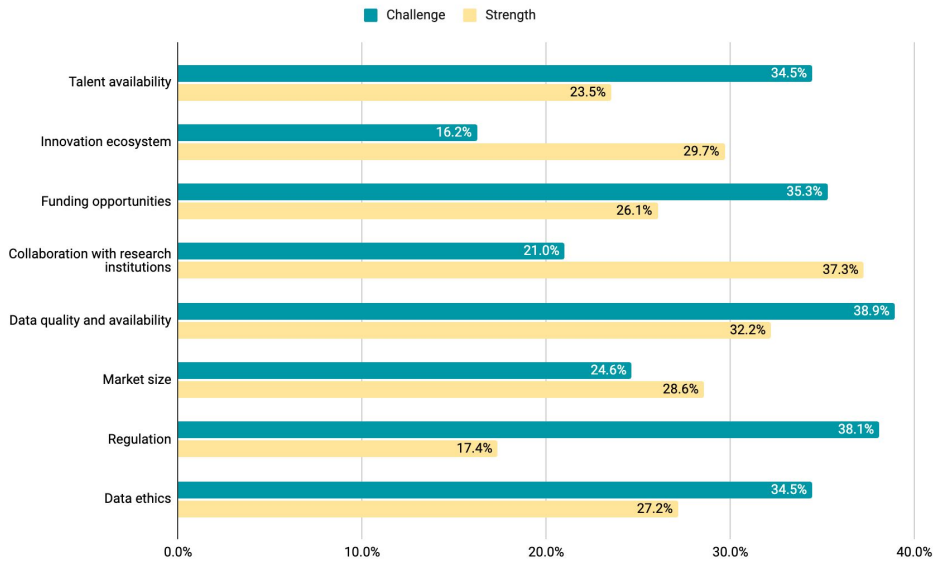


What are the main strengths and challenges faced by startups developing cutting edge AI technologies?

This broadly reflects the perception of startups in Europe as a whole: Data quality and availability (48%), Data ethics (48%) and Regulation (47%) are the top challenges faced by European startups developing cutting edge AI.

(Source: Centiment, Scaleup Global, 2025. N=357)

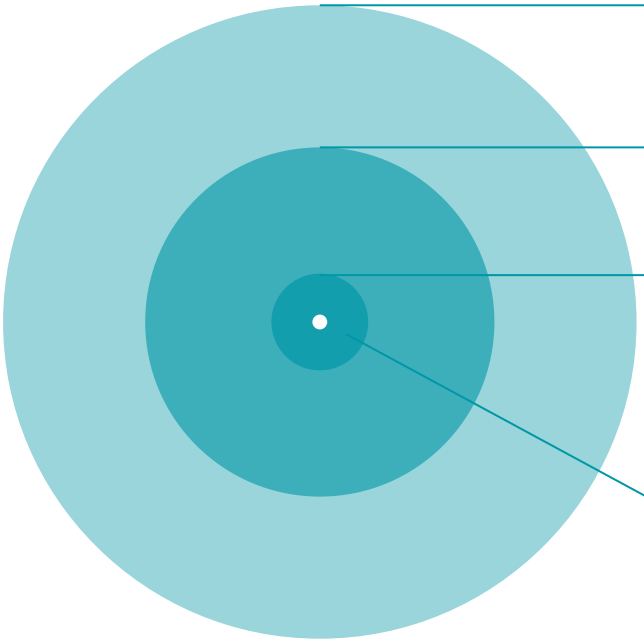
The picture for German startups *adopting* AI is similar, but more mixed. Data quality (39%) and Regulation (38%), and are top challenges.



What are the main strengths and challenges faced by startups adopting AI?

German startups adopting AI perceive several key strengths in the regional landscape, particularly around collaboration and knowledge infrastructure. Over a third (37.3%) highlight collaboration with research institutions as a strength, reflecting Europe's strong academic foundations and public-private research links. The innovation ecosystem is also seen positively by 29.7% of startups, alongside data quality and availability (32.2%) and market size (28.6%). While funding and talent remain more frequently cited as challenges, a notable share of startups still view these as strengths (26.1% and 23.5% respectively). Despite concerns around regulation and data ethics, these perceived strengths and challenges indicate the perception of a solid base from which European startups can build competitive AI capabilities.

(Source: Centiment, Scaleup Global, 2025. N=357)



527,100 tech startups and scaleups in Europe

184,500 startups and scaleups have adopted AI technologies

14,644 startups and scaleups have adopted and adapted foundational AI technologies for core business value

591 startups and scaleups hold a patent in AI and/ or machine learning

Source Scaleup Global, Notion Capital, Dealroom 2024. Note: for illustrative purposes only, not to scale

Context setting: according to Dealroom data minority of European startups and scaleups have *adopted* and *adapted* AI to create business value – nearly 200k startups have *adopted* AI

Kamil Mieczakowski
Partner at Notion Capital

"At Notion, we're seeing a significant uptick in AI-driven innovation across Europe. With 60% of startups reporting increased efficiency thanks to AI, and 47% noting reduced product development times, it's clear that AI is already delivering tangible benefits. What stood out to me is that AI adopters and creators make up just 3% of European startups but now represent 13% of the ecosystem's total value - a strong indicator of AI's transformative potential. While challenges remain around data quality and regulation, the finding in this report from Notion Capital and Google for Startups, that 59% of startups believe Europe can become a global AI leader highlights the opportunity for continued investment."

"The report underscores the significant role of AI in driving efficiency and innovation among German startups. While challenges such as data quality and regulatory frameworks remain, the resilience and innovative spirit of the German startup ecosystem is evident. Google remains committed to supporting the growth of the AI ecosystem in Germany through our initiatives for startups, and we believe that by fostering collaboration and addressing these key issues, we can unlock further potential and ensure Europe's leadership in the global AI landscape."

Sabine Frank
Head of Governmental Affairs and Public Policy at Google DACH