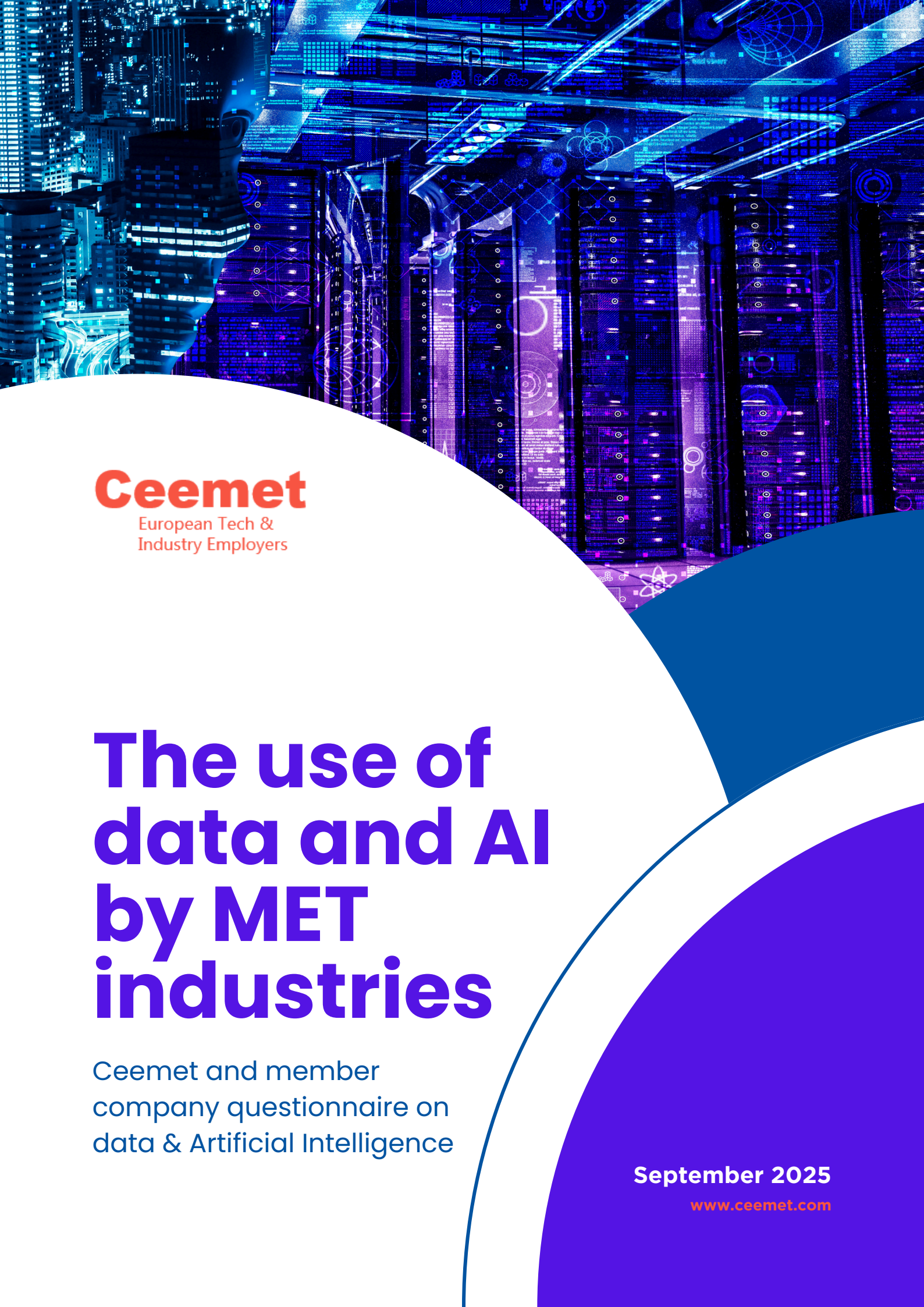




Ceemet
European Tech &
Industry Employers

The use of data and AI by MET industries

Ceemet and member
company questionnaire on
data & Artificial Intelligence

September 2025

www.ceemet.com

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About Ceemet

Set up in 1962, Ceemet is the European employers' organisation representing the interests of the metal, engineering and technology-based (MET) industries with a particular focus on topics in the areas of employment, social affairs, industrial relations, health & safety and education & training.

Ceemet members are national employers' federations across Europe and beyond based in 20 countries. They represent more than 200,000 member companies, a vast majority of which are SMEs.

Ceemet members provide direct and indirect employment for 35 million people and cover all products within the MET industrial sectors, detailed below.

Together, these companies make up Europe's largest industrial sector, both in terms of employment levels and added value, and are therefore essential to ensuring Europe's economic prosperity.



Introduction

Ceemet is the European employers' organisation representing the interests of the metal, engineering and technology-based (MET) industries with a particular focus on topics in the areas of employment, social affairs, industrial relations, health & safety and education & training. Ceemet members are national employers' federations across Europe and beyond based in 20 countries. They represent more than 200,000 member companies, a vast majority of which are SMEs. Ceemet members provide direct and indirect employment for 35 million people and cover all products within the MET industrial sectors, detailed page four. Since 2001, Ceemet is recognised as a European social partner.

At a time when the European Union is facing various economic, geopolitical and energy crises, the question of the competitiveness of its businesses, and in particular the future of its industry, is becoming increasingly important. Various report such as the Draghi report (9 september 2024) show that it's urgent to take measures to invest in innovation, support the digital and green transition of European industries, and simplify legislation in order to reduce administrative burdens in order to boost the productivity and to stay competitive in the global world. In other countries, industrial competitiveness has been boosted by the emergence of artificial intelligence (AI), strengthening robotic activities and boosting employee productivity through assistance.

The European Union (EU) places a strong emphasis on social values, which has contributed to efforts to introduce legislation in areas such as the world of work. However, this approach may pose challenges for business competitiveness.

Through this questionnaire, Ceemet wishes to observe where MET companies stand in terms of digitalisation and the implementation of European legislation on digital data. It also aims to find out how far companies have already invested in AI and how and why their employees use this new tool on a daily basis.

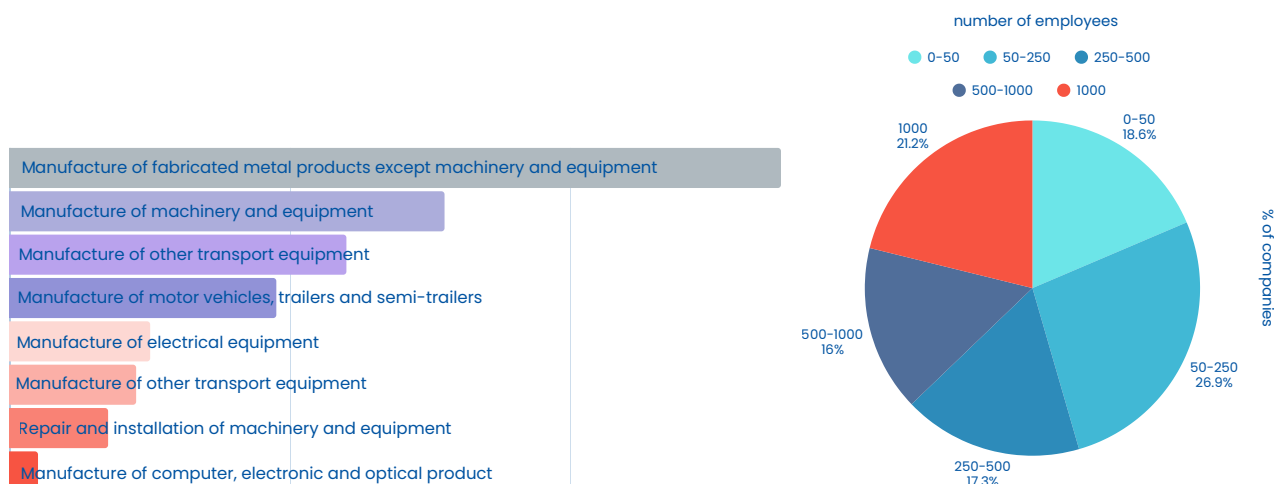
Methodology

The following report is based on a survey Ceemet conducted from January to the end of April 2025. We received 158 responses from Austrian (6), Bulgarian (15), French (7), German (11), Italian (38), Spanish (17), and Turkish (64) Metal, Engineering and Technology (MET) companies. In addition to the survey Ceemet has done in its member companies, the following infographics also integrate results from surveys our members had done from question 8 to 11 the Make UK study "[Future factories powered by AI](#)", 2024 which represent 151 companies; the Dansk Industri survey '[Analyse DI](#)' conducted in June 2024 based on 254 companies; the Swissmem study called "[The state of AI in the Swiss tech industry](#)", June 2024 for 209 companies and the Teknikföretagen survey which represents 477 companies.



This survey covers companies in the following sector the point of view of several MET industries that have as main activities for (Eurostat's NACE classification - European industry standard classification system) 55 of them Manufacture of fabricated metal products except machinery and equipment (25); for 31 Manufacture of machinery and equipment (28); for 24 Other manufacturing (32); for 19 Manufacture of motor vehicles, trailers and semi-trailers (29); for 10 Manufacture of electrical equipment (27); for 9 Manufacture of other transport equipment (30); for 7 Repair and installation of machinery and equipment (33) and for 2 Manufacture of computer, electronic and optical products (26).

In terms of company size, most of the respondents are SMEs or medium size companies.





Questions

Throughout this survey, Ceemet members wished, on the one hand, to take stock of data use within MET companies and, on the other hand, to find out to what extent and for what activities these companies integrate AI tools.

1

Usage of data

1. Is it clear to your company what and how data can be used?
2. Do you know what is GDPR?
3. What are the minimum requirements for data usage during employment?
4. Does your company encounter difficulties for data usage during employment?
5. Have you encountered any gaps in current regulation related to data usage?

2

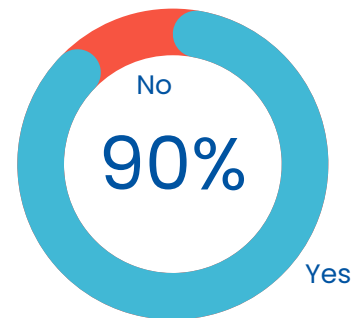
Use of algorithm and AI

1. Does your company use algorithms or AI
 - a. In human resources
 - b. In business operation
 - c. In support for employeesand if yes, for which purposes?
2. How many employees in your company use generative AI?
3. Which procedure do you use to introduce AI in the internal decision-making process?
4. To your opinion, what are the barriers for not using AI at work?

1. Usage of data

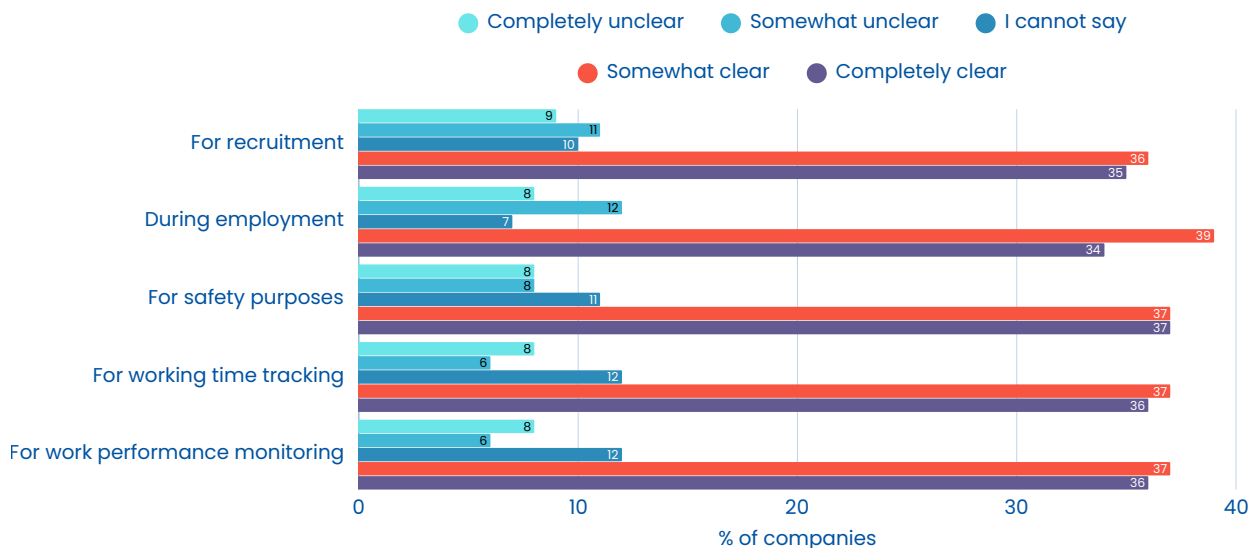
Today, the collection, exchange and use of digital data is part of our daily lives. It is also present in businesses and in the workplace and is subject to strict regulations in Europe. Within MET Industries, awareness of the GDPR, which was adopted almost ten years ago, stands at 90% and 77% if we include non-EU member states (Türkiye and the UK). Even if the GDPR served as a basis for the adoption of legislation in the UK, for example, there are still 10% of MET companies which encounter difficulties in understanding how to implement it. The GDPR covers different types/ situations of data use within companies.

1. Do you know what is GDPR?



Coming to the details on how the companies are using the data at work according to the employers' obligations and workers' rights, a large part of the companies explain that it is clear for them which data can be used and how to use them for recruitment (71%), during employment (73%), for safety purposes (74%), for working time tracking (73%) and for work performance monitoring (74%).

2. Is it clear to your company what and how data can be used?





However, things are slightly different when companies are asked to identify what practices they apply on a daily basis to respect the minimum requirement of the GDPR.

3. What are the minimum requirements for data usage during employment?

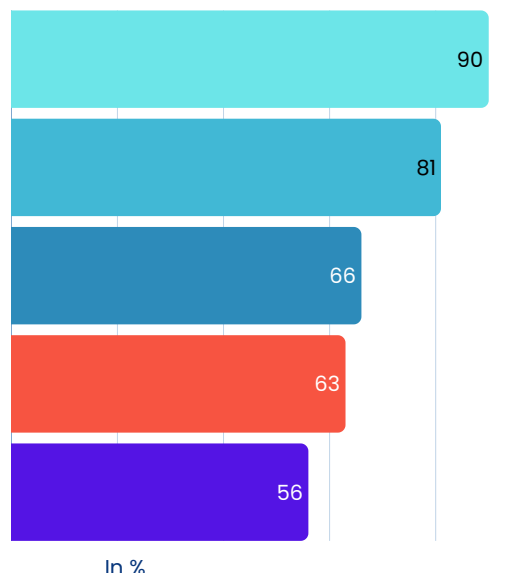
Employee data is securely stored and managed in compliance with established data protection practices.

Employee data is used for legitimate workplace purposes (e.g., payroll, performance management) following clear internal protocols.

Employees are notified and provide consent for photography or the use of their images in professional contexts (e.g., internal communication, marketing materials).

Employees are informed if their use of professional devices (e.g., computers, phones) is monitored.

Employees are regularly informed about how their data is collected, used, and stored for workplace purposes.



90% of companies that participated in the survey in the MET sector reply that their employees' data is stored and managed securely, in line with established data protection practices, and that in 81% of companies clear internal protocols are in place, only 56% of employees are regularly informed about how their data is collected, used and stored for business purposes. A large majority of employers (>60%) inform their employees and ask for their consent when using their data for business purposes.

However, 37% of employees are still not regularly informed about how their data is collected, used and stored for business purposes. Although image rights appear to be established and integrated into common sense, in reality, 34% of employees are not necessarily informed or do not give their consent to be photographed in a professional context.

However, a majority of the companies confirmed that they don't experience difficulties in using employee data to enhance productivity (82%), to improve workplace safety (85%) or to monitor work performance (82%). These results show that ambiguity may persist in the use of data despite measures taken a decade ago.

The introduction of new legislation (such as the AI Act) without full implementation of previous legislation reinforces this feeling and the difficulties for employers to fully comply with European and national law.

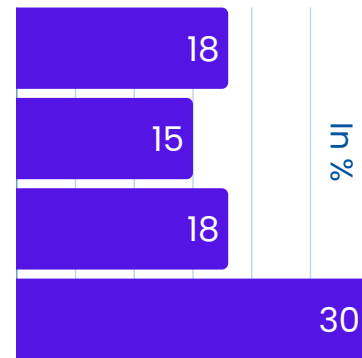
4. Does your company encounter difficulties for data usage during employment?

Our company experiences difficulties in using employee data to enhance productivity.

Our company experiences difficulties in using employee data to improve workplace safety.

Our company experiences difficulties in using employee data to monitor work performance.

Our company does not face challenges in using employee data for productivity, safety, or performance monitoring.



The difficulties faced by employers lie in implementing legislation. The MET companies explain that they not encountered gaps in current legislation during employment (55%), in recruitment (55%), for safety purposes (52%), for working time tracking (53%). They explained that they can fill gaps only for work performance monitoring (52%) but they need time to assimilate and integrate legislation in their daily work. The AI tools for monitoring work performance are regulated by the AI Act¹. This regulation is still too recent. The AI Act, which entered into force on 1 August 2024 and will be fully applicable 2 years later on 2 August 2026, is still too recent. It is thus essential to wait until the AI Act is fully implemented and understood by businesses to determine whether its framework is optimal. It must be recognised that the legislative process is lengthy and that new technologies are emerging and evolving at an ever-increasing pace. At this stage, there is thus no need for new legislation.

It is essential to wait until the AI Act is fully implemented and understood by businesses to determine whether its framework is optimal.

Conclusion

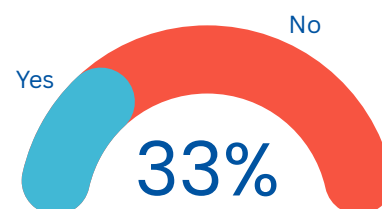
The survey conducted by Ceemet shows that most companies in the MET sector know how to use digital data carefully and in compliance with European legislation. They are aware of the minimum requirements in this area in the context of employment. However, we do not deny that 10% of companies still do not know what the GDPR is. This does not imply the need for additional legislation, but rather time and guidance to implement existing provisions.

[1] Article 9/12 & Article 72 for high risks system, Section 5 AI Office guidance on monitoring performance and tasks, AI Act, 2024

2. Use of Artificial Intelligence

With the emergence of artificial intelligence and the adoption of AI legislation, MET companies will have to adapt to this new tool and new legislation. For the moment, European companies seem cautious about introducing AI into the workplace. In 2024, 13.48%² of EU companies used AI technologies. The second part of this questionnaire provides detailed information on the use of algorithms and AI within MET industries.

In recent years, AI has entered our personal and professional lives. AI tools are gradually being introduced into companies through tools that increase productivity and improve working conditions. This tool, which requires the machine to be able to think, presents both challenges and opportunities. While European culture tends to be risk-averse, other countries are driven by a desire for innovation and competitiveness when investing in AI. The purpose of this section is to identify whether MET companies are ready to integrate AI into their work, and if yes, how and why? As of now, 33% of participating companies in the MET industries are using AI.



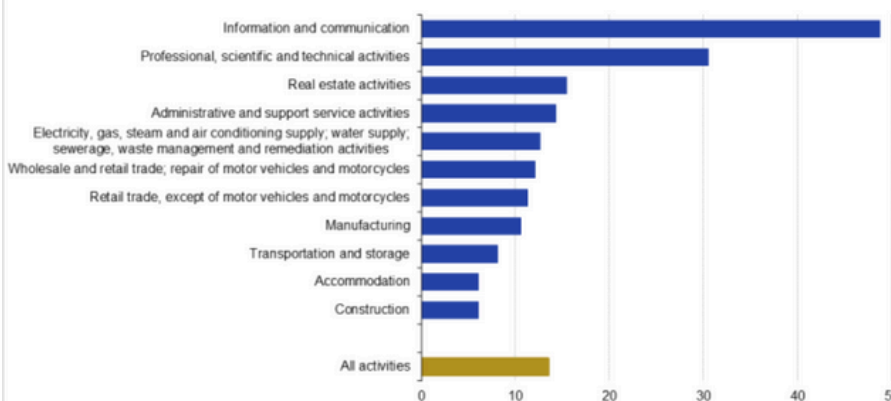
5. Are you using AI at work?

This is above the European average and the averages observed for all sectors.

The higher-than-average result can be partially explained by the fact that 21% of Ceemet survey respondents are large companies compared to the EU average where large companies are only 1%. The European average for large companies using AI is 41.17%¹ in 2024.

There are several types of AI use in the industries. For the purpose of this survey, we have categorised AI use into three groups: human resources, business operation or employees support.

Enterprises using AI technologies by economic activity, EU, 2024
(% of enterprises)



Source: Eurostat (online data code: isoc_eb_ain2)

eurostat

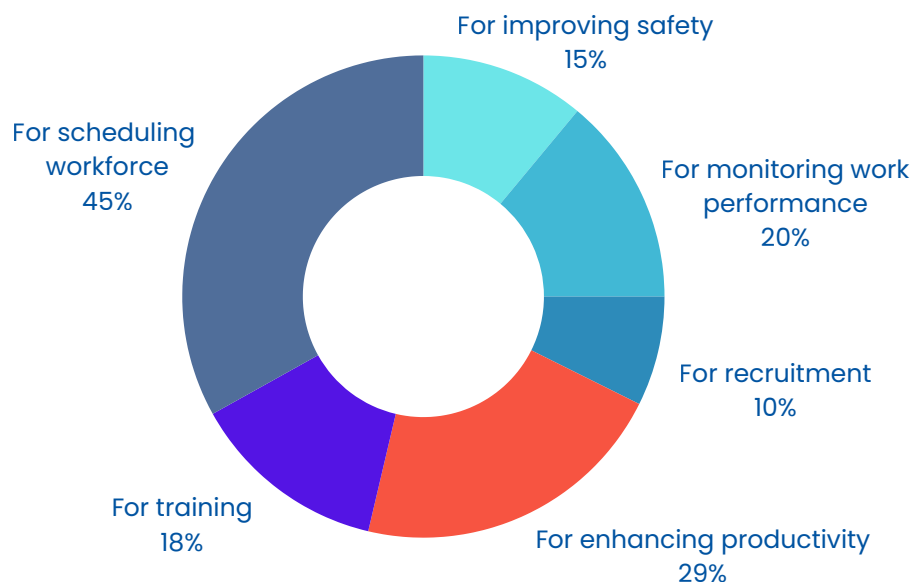
[1] Eurostat, "Use of artificial intelligence in enterprises", 2025



a. In human resources

Use of AI in human resources, according to our survey, AI is generally used for workforce planning (45%).

6. Does your company use algorithms or AI in human resources and if yes, for which purposes?



The AI tools usually enhance productivity. For this reason, 33% of participating MET companies are using AI. 20% of MET companies start also to use it for monitoring performance at work and 18% to train their workers via, for example, Nokia unveiled using an AI tool to provide recommendations to its workers on machine failure.

This use of AI in human resources remains marginal, particularly for tasks that require an emotional approach and where it seems difficult to replace it with an AI tool. Indeed, only 10% of the MET industries declare that they are using AI in the recruitment process. Most of the recent studies explained that around 80%¹ of recruitment is still with a face-to-face interview. However, it will change in the coming years. Last LinkedIn statistic shows that 82% of Gen Z candidates report feeling more comfortable during video interviews, and 76% say they have declined in-person interviews. Nevertheless, by video or in person, the employers still hire employees without AI. Certain human resources tasks require human contact and emotion to create a pleasant working atmosphere.

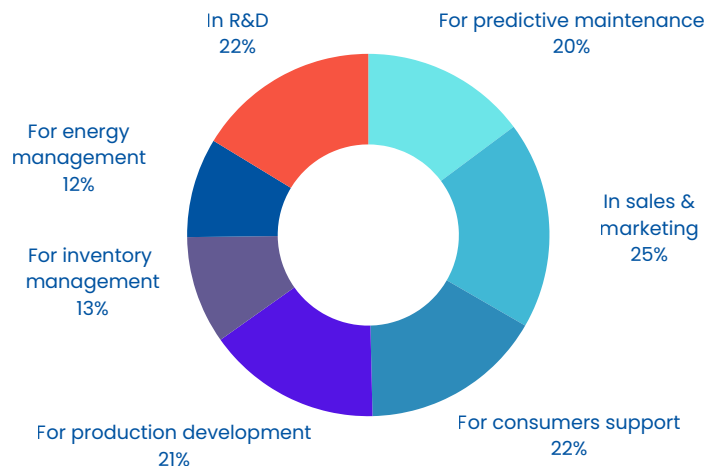
[1] [Olivier Sorgho](#), Reuters, "Nokia unveils AI assistant for industrial workers" February 14, 2024



b. In business operations

For activities linked to business operations, around 20% of the MET industries are using AI for predictive maintenance, production development or in research and development.

These actions are, however, essential to the competitiveness of businesses and should adapt and integrate faster AI to enhance productivity. In order to stay competitive in the global market, European MET industries need to catch up with the United States and Asia.



6. Does your company use algorithms or AI in business operation and if yes, for which purposes?

That is why 44%³ of surveyed companies are planning to start or are in the pilot phase for predictive maintenance, for example. AI is integrated into the production chain to assist robotisation and overall performance, and to avoid the risk of downtime, for example, by installing predictive maintenance tools.

This is the case of GE Aviation, that utilises AI to predict and prevent engine failures in aircraft by employing a digital twin approach. This method simulates engine behavior and condition, leading to improved fuel efficiency and reduced maintenance costs⁴. It is also the case at BMW⁵, AI-supported system monitors conveyor technology during assembly by identifying potential faults early. In this plant, it avoids more than 500 minutes of vehicle assembly disruption every year.

A practice that everyone is familiar with but which in reality only accounts for 22% of participating MET industries is consumer support, whether through the use of chatbots, virtual assistants or targeted advertising. Companies also state that a quarter of them use AI in sales and marketing. This data should integrate the fact that marketing and sales require the most amount of design productions, copywriting and editing, translation and visual support. It has to be read in the frame of the AI tool that supports employees. 17% of companies explain that employees use AI for image production.

[1] TestGorilla.com 82% of companies use virtual interviews, but 70% of candidates prefer in-person interviews. <https://www.testgorilla.com/blog/job-interview-statistics/>

Jobs.lu 8 out of 10 candidates prefer a face-to-face interview to a remote exchange, 2023 <https://en.jobs.lu/recruiters/8-out-of-10-candidates-prefer-face-to-face-interviews/>
Megan Sweeney, American staffing association 16 Feb 2023 — In total, 70% of all Americans prefer in-person job interviews, compared with 17% who favor video calls and only 9% who prefer audio-only calls, February 2023 <https://americanstaffing.net/posts/2023/02/16/in-person-job-interviews-vs-virtual/>

Ruth Ford Briant, "Power of face-to-face interviews", <https://www.ruthfordbriant.com/blog/view/220/index3/The-Power-of-Face-to-Face-Interviewing>, 4 March 2024

[2] InCruiters, <https://www.linkedin.com/pulse/why-gen-z-prefers-live-video-interviews-over-traditional-face-to-face-f2fmf>, 19 March 2025

[3] PWC, "AI in Maintenance and Asset Management", 28 March 2024

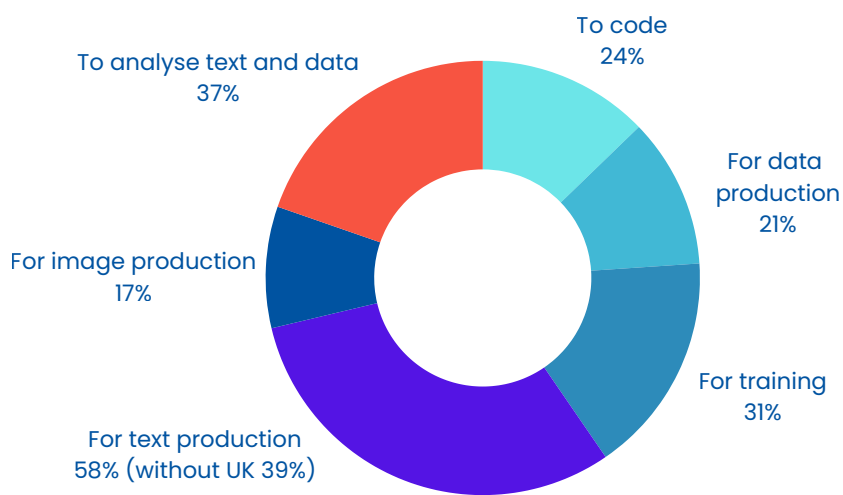
[4] Tom Jenkins, 'How AI Can Boost Predictive Maintenance In Manufacturing', 23 February 2024

[5] BMW "Smart maintenance using artificial intelligence", 27 November 2023

c. In employee support

AI is largely used to support employees. Around 58% of surveyed companies explained that their employees are using AI to produce text, and 37% analyse text and data in the MET companies. This is due to the existence of simple and accessible tools such as ChatGPT or DeepL.

AI has also started to appear in technical tasks such as data production (21%) and coding (24%). A notable example of a manufacturing company utilising AI for coding is Foxconn, the world's largest contract electronics manufacturer. Foxconn has developed its own AI model named FoxBrain, which is designed to enhance data analysis, mathematical computations, reasoning, and code generation within the company's manufacturing processes¹.



AI can help replace skills such as STEM ones and coding. It helps to increase skills by using AI to train employees. According to the Ceemet survey, in MET industries, 31% of respondents are using AI to upskill and reskill workers.

For example, Siemens has established the Digital Academy, an in-house facility offering training in Industry 4.0 technologies such as AI, cloud computing, and cybersecurity.

6. Does your company use algorithms or AI in support for employees and if yes, for which purposes?

Schneider Electric² did the same and has implemented a talent marketplace using AI to connect employees with relevant training, projects, and mentorship opportunities, fostering internal growth and reducing turnover.

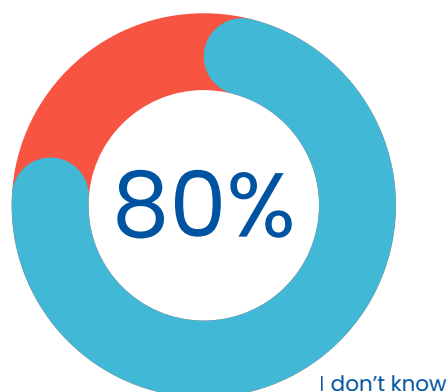
These figures, particularly those relating to employee support, may seem low compared to the popularity of text production and translation tools. It is true that 80% of participating employers in the MET industries say they do not know whether their employees use artificial intelligence tools at work.

In this survey, a majority of respondents explain that they don't know the proportion of their employees who are using AI at work .

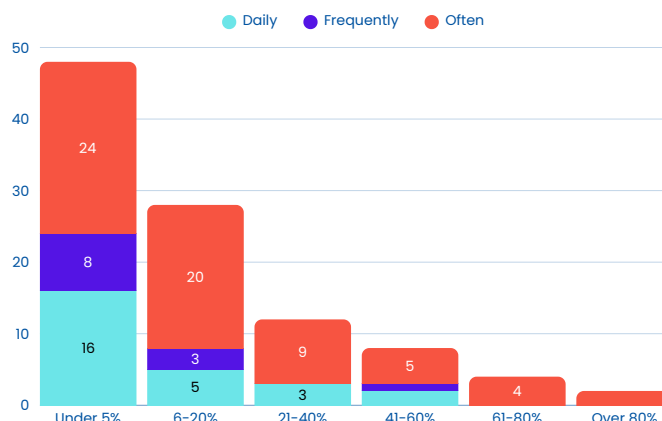
[1] Azilen, "AI in Manufacturing: Navigating Innovations, Challenges, and Future Trends", 2025

[2] OEM, [Umesh Yellaboina](#), "Reskilling the Manufacturing Workforce for the Digital Age", 14 June 2024

7. How many employees in your company use generative AI?



8. How many employees in your company use generative AI?



At this stage, MET industries estimate that between 6% and 20% of their employees are often using AI and under 5% daily. Even though the use of AI is far from widespread, its integration within companies remains unclear. On the one hand, employers do not know which employees use it, and on the other hand, the acquisition of new tools by employers is subject to different adoption procedures for employees.

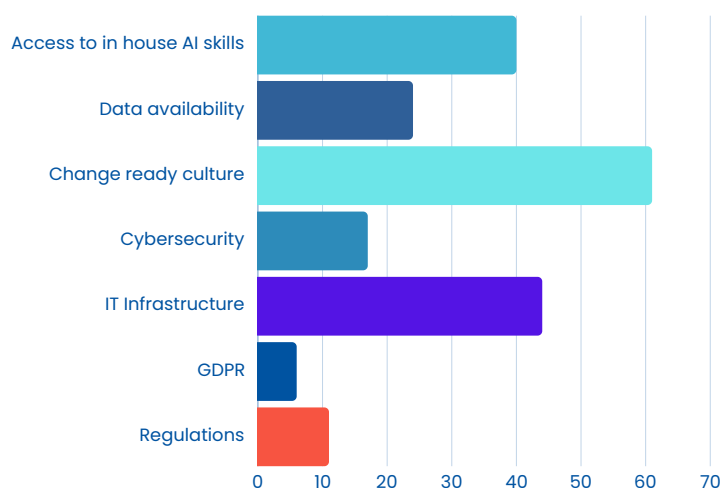
29% of the MET industries explained that the company involves employees (or teams) in the process of new AI or automation tool implementation in the workplace through consultations or discussions; 23% only the service/department which will be using the new AI tool and 6% involve the entire workforce in decisions related to the implementation of AI.

Even if 27% of the MET industries declare that their workforce is not involved in the decision process, they receive training to implement AI tools. 18% of participating companies think that their employees are using AI even if the managers don't provide specific AI tools. These different responses are mainly due to a lack of skills within companies to enable optimal integration of AI by all employees.

40% of the MET industry consider that they have a lack of access to in house AI skills.

However, the main obstacle to using AI at work is the culture of acceptance of change. This is also the most difficult obstacle to overcome and the one that will take the longest to overcome. Next come technical or security obstacles with 44% of the companies that has not the good IT infrastructure or difficulties to get the right data (24%) or are concerned about cybersecurity (17%).

9. In your opinion, what are the barriers to not using AI at work?



The MET industries observe that regulations and GDPR are also obstacles for AI adoption. It is also interesting to note that respondents to the Swedish survey explained that the most significant barrier to adopting new tools such as AI is a lack of time.

Conclusion



This survey shows that the use of AI in MET companies remains low and unclear. It is difficult to know how employees use it and how often. Many tools are free and can be used directly on the Internet. Around 20% of companies among the 30% that have AI tools, report integrating more advanced tools. The main barriers to the adoption of AI in the workplace are the culture of change and a lack of skills. However, the need to adapt to the emergence and integration of these tools is crucial to maintaining the competitiveness of European businesses. These tools will become increasingly important in the coming years.

This survey also highlighted different uses of AI in human resources, business operations and employee support, and this is only a selection of certain activities in a MET industry in Europe. It also shows that AI can be integrated and play a role throughout the entire production chain and in all departments of a company. The only exception is tasks that require human expertise and are more emotional, such as recruitment.

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