ESSCA RESEARCH
AI FOR SUSTAINABILITY INSTITUTE

forvis mazars

AI Barometer: Companies and Sustainability

Outlook for British and French companies

AACSB ACCREDITED
ASSOCIATION AMBA ACCREDITED
EQUIS ACCREDITED
FT MASTERS IN MANAGEMENT 2023 RANKING

The AI for Sustainability Institute

Founded in 2023, the "AI for Sustainability" Institute is dedicated to advancing interdisciplinary research on artificial intelligence (AI) and its contribution to a sustainable future. Created by ESSCA, the institute brings together 25 researchers and practitioners exploring AI applications across areas such as extra-financial reporting, corporate environmental, social, and governance (ESG) performance measurement, greenwashing detection, biodiversity monitoring, natural resource management, and energy optimization.

Institute members come from diverse academic and professional backgrounds, contributing expertise in fields such as mathematics, IT, management, marketing, strategy, business ethics, human resources, sociology, and finance. Their work aims to produce rigorous academic research, conduct applied studies for businesses and the public, develop practical tools to minimize environmental impacts, and train future generations in the sustainable applications of AI.

Forvis Mazars

Forvis Mazars is a global professional services network, unified under a single brand with two primary entities: Forvis Mazars, LLP in the United States, and Forvis Mazars Group SC, an integrated international partnership present in over 100 countries and territories. The network provides audit, tax, and advisory services to organizations worldwide.

Forvis Mazars includes a specialized "Data & Analytics" division focused on artificial intelligence services across four key areas: data strategy and governance, data architecture and engineering, data analytics, and data science. This division partners with organizations to evaluate their data maturity and capabilities, design data platforms and lakes, conduct descriptive and predictive analyses, and develop machine learning and AI models.

Barometer authors

Dejan Glavas is an Associate Professor of Finance and AI at ESSCA School of Management, Director of the AI for Sustainability Institute, and Editor-in-Chief of the academic journal *Bankers, Markets and Investors*. He is also the author of *Valuation and Sustainability*, published by Springer Nature, and has published extensively in peer-reviewed journals, including the *Journal of Cleaner Production*, *Finance* and *Management Review Quarterly*. His research focuses on artificial intelligence, ESG, corporate valuation, and ecological regulations. Among his notable achievements, he developed an AI-based model for predicting CO_2 emissions, featured in *International Advances in Economic Research*. Dejan has served as an expert for the European Commission on sustainability issues and teaches green finance at Ecole des Ponts ParisTech. With extensive experience as a financial and credit analyst at Fitch Ratings, Agence Française de Développement, and Société Générale CIB in London, he holds a PhD in sustainable finance from ESCP Business School.

Laurent Inard is a Partner at Forvis Mazars and a member of its Supervisory Board in France. He founded Forvis Mazars' Evaluation & Modeling practice in France in the mid-2000s and authored *Company Valuation – DCF Method*, published by Economica in 2015 with a preface by Michel Prada. As Chief R&D Officer at Forvis Mazars France, Laurent supports the development of services leveraging new technologies, particularly in data and AI. His expertise includes data access, datalake and ELT process management, data preparation, and quality assurance. He specializes in analysis and algorithmic solutions for detection, profiling, prediction, prescription, and optimization, as well as in the industrialization and deployment of solutions (in-house, cloud, or on-premises). A graduate of Ecole Centrale Paris (1995), Laurent began his career at Mazars in 1996.

Table of contents

1 Acknowledgements

First, we warmly thank the members of the AI for Sustainability Institute for their invaluable support and insights: Thomas Amadieu, Ikrame Ben Slimane, Barbara Caemmerer, Alice Crepin, Yasaman Gorji, Jean-Robert Kala Kamdjoug, Kevin Kertechian, Mohamed Makhlouf, Elisabeth Gressieux, Philippe Mouricou, Dionisis Philippas, Aude Rychalski, Orsolya Sadik-Rozsnyai, Yann Truong, Théo Alves da Costa, Sophian Aubin, Elise Berlinski, Sabrina Bruno, Mathieu Gosselin, Mathieu Scordia, and Matthew Weaver. Your expertise and dedication were essential to the success of this study.

se and dedication were essential to the success of this study.

We also express our thanks to Jean Charroin, CEO of ESSCA; Benjamin Morisse, Deputy CEO of ESSCA; Guillaume Schier, Dean and Director of Research; Raphaël Maucuer, Associate Dean; and Alistair Cheyne, Associate Dean. Special thanks to Marco Rocchi, Head of Institutional Relations at ESSCA, for his unwavering support; to Marie Le Borgne-Larivière, Research Promotion Officer, for her invaluable assistance; and to Silke Leukefeld, Research Promotion Officer, for her dedication. Our thanks also go to Emilie Autier-Bablée and Angéline David from ESSCA's Research Department for their ongoing support. Your commitment was fundamental to the success of this project.

We are also grateful to EDF for their invaluable assistance in enhancing our understanding of AI in practice—their expertise and support were crucial to this project.

Our sincere appreciation goes to Datacraft, and particularly to Isabelle Hilali and Xavier Lioneton, for their invaluable help in gathering verbatims. Their collaboration greatly contributed to this study.

We would also like to thank Alstom, with a special mention to Guillaume Rabier and Nenad Mijatovic, as well as Saint-Gobain, particularly Benoît Lepetit and Marijana Milicevic, for their significant contributions.

Our gratitude extends to Aleksandar Protic and the Tesla Network he founded, and to Weather Trade Net and Elena Maksimovich, for their support and valuable insights.

Many thanks to Sandy Vétillart, Deputy Mayor of Boulogne-Billancourt, for her support in this project, and to Christine Lavarde, Senator for Hauts-de-Seine, for her valuable feedback on our work.

Lastly, our warmest thanks go to Mathieu Joubrel of ValueCo, whose detailed explanations of AI in the fintech context greatly enriched our understanding and analysis.

Your contributions and expertise were invaluable to the production of this report.

.

2 Foreword

AI and sustainable development dominate contemporary discourse, yet their intersection remains largely unexplored beyond discussions of data centres' growing energy footprint. AI's rapidly expanding capabilities inspire both awe and apprehension, presenting opportunities for societal advancement alongside potential risks. In response, regulatory frameworks like Europe's Digital Services Act (DSA) and the EU AI Act are emerging to address important concerns: individual privacy, algorithmic transparency, bias mitigation, and human oversight—all fundamental to both social equity and environmental sustainability.

AI holds transformative potential for advancing sustainable development, arguably humanity's defining challenge in the 21st century. Its applications frequently achieve the dual objectives of economic efficiency and environmental stewardship, exemplified by AI systems that optimize energy consumption and minimize resource inputs in industrial processes. However, this promise comes with a caveat: the widespread adoption and increasing deployment of AI technologies could potentially negate these environmental gains through increased computing demands and energy consumption.

The net impact of AI on sustainable development can be positive but will require constant vigilance. The potential impacts of AI cover several areas:

- In healthcare: AI offers opportunities in detecting pathologies and recommending tailored protocols but presents risks of losing human control.
- In education, AI offers simplified access to knowledge and personalized learning materials, but there is a risk it may replace human-driven learning too extensively.
- In the field of democracy: AI facilitates access to diverse information but can also lead to bias and the radicalization of opinions.
- In maintenance: AI enables predictive forecasts that optimize waste recovery and intermodal logistics.

AI's predictive capabilities, combined with well-trained human designers and users, can turn it into a valuable asset for sustainability. In this context, understanding companies' practices and intentions regarding AI and sustainability is key.

Readers will find in this barometer an analysis of data collected mainly from French and British companies. The barometer, based on responses to a 140-question survey, offers a detailed perspective on the use of AI in business, its link with sustainability, ethics and regulatory compliance. The "AI for Sustainability" Institute and Forvis Mazars hope that the findings of this barometer can help economic players and public institutions better understand how AI impacts companies, their employees and sustainability issues.

3 Summary

6 key points of the barometer:

Consensus on the benefits of AI: Companies recognize the benefits of AI to improve productivity and reduce costs.

Barriers to AI implementation: Financial constraints, inappropriate strategies, integration challenges with existing systems and lack of qualified personnel are the main barriers to AI adoption.

Managing AI risks and biases: While well-known AI risks like confidentiality and privacy are recognized as intensified by AI, specific risks—such as biases, hallucinations, and the challenge of maintaining human oversight—still appear to be underestimated.

Wisdom from experimentation: Interestingly, companies that have faced concrete challenges tend to have more structured AI control and governance systems.

Environmental impact of AI: Companies view AI as a valuable tool for sustainability, especially for reducing greenhouse gas emissions and optimizing supply chains. However, accurately measuring AI's environmental impact remains challenging.

Cultural differences between the UK and France: Cultural differences between the British and the French are evident in their perceptions and applications of AI: the British tend to be more supportive and better equipped for its use, while the French take a more measured and deliberate approach to integrating AI within their companies.

This barometer study, drawing insights from over 400 IT managers primarily across France and the United Kingdom, examines the evolving landscape of AI adoption in enterprises and its links with sustainability initiatives. The research encompasses critical dimensions including AI implementation and governance, data stewardship, regulatory compliance, sustainability opportunities and risks, ethical considerations, and forecasts.

The findings reveal a growing consensus among businesses regarding AI's value proposition, with particular emphasis on its capacity to enhance operational efficiency and reduce operational costs. However, the study notably identifies a significant gap in AI use for product innovation and development, suggesting untapped potential in this domain.

Despite widespread recognition of AI's benefits, organizations face multiple implementation challenges. These range from budgetary constraints and misaligned strategic approaches to technical integration hurdles and talent scarcity. While companies demonstrate awareness of traditional risks, such as data privacy concerns, the study uncovers a concerning trend: many organizations appear to underestimate emerging challenges specific to AI deployment. These include algorithmic bias, AI hallucinations, the complexities of human-AI collaboration, and the critical necessity for human oversight mechanisms.

A striking paradox emerges between organizations' high expectations for AI regulation and their actual preparedness to implement these frameworks. This disconnection manifests notably in the widespread lack of dedicated personnel for AI implementation, management, and ethical risk oversight. Intriguingly, the research reveals that companies experiencing AI-related challenges—whether in implementation, management, or ethical considerations—often develop more sophisticated approaches to AI adoption. This pattern underscores the critical role of experimentation and organizational learning in mastering AI technologies. The "test and learn" culture prevalent among UK companies appears particularly effective in this regard, yielding demonstrable positive outcomes.

ies appears particularly effective in this regard, yielding demonstrable positive outcomes.

Organizations are increasingly moving beyond merely implementing third-party AI solutions to developing and enhancing their own AI systems. This evolution drives an expanding demand for talent that extends beyond technical AI expertise to encompass data governance and AI management capabilities. The survey highlights a need for AI literacy across traditionally non-technical roles, including human resources, sales, and corporate finance functions.

d corporate finance functions.

While companies broadly recognize AI's potential positive environmental impact, this perception remains largely intuitive rather than evidence based. Organizations struggle to quantify their AI-related emissions, a challenge further complicated by cloud-based AI implementations. Current environmental applications of AI primarily focus on greenhouse gas reduction, water management, and supply chain optimization, while opportunities in biodiversity conservation and sustainable agriculture remain largely unexplored.

Looking ahead, most organizations anticipate AI's significant influence across sectors and are planning increased investments accordingly. Two-thirds of surveyed companies acknowledge that AI adoption will necessitate substantial workforce reskilling or upskilling over the next decade. Expected AI benefits are primarily concentrated in healthcare and education, followed by environmental protection and equality advancement. Notably, younger generations demonstrate the most optimistic outlook toward AI's impact, while larger corporations and environmentally intensive sectors show significant commitment to sustainability, albeit with persistent disparities.

parities.

The study reveals distinct cultural differences between French and British approaches to AI adoption. British organizations generally maintain a more positive outlook regarding AI's contribution to business performance and show greater acceptance of AI in strategic decision-making. This optimism translates into higher AI readiness levels among UK companies compared to their French counterparts. The disparity extends to training perspectives, with French organizations expressing less confidence in AI-related training initiatives. Furthermore, UK companies demonstrate more advanced ethical governance of AI, with a higher proportion having modified projects based on ethical considerations.

training initiatives. Furthermore, UK companies demonstrate more advanced ethical governance of AI, with a higher proportion having modified projects based on ethical considerations.

Organizations broadly acknowledge AI's transformative potential and its implications for industry evolution and workplace practices. This recognition drives planned investment increases and emphasizes the fundamental importance of workforce development. However, significant work remains in fully integrating ethical, legal, and sustainability considerations into AI strategies.

6 recommendations:

Cultivate Comprehensive AI Competency

Invest strategically in workforce development through structured training programs that include technical AI proficiency, robust data governance frameworks, and ethical risk management. Organizations should prioritize building cross-functional expertise that enables responsible AI deployment while fostering a culture of continuous learning.

Foster Innovation Through Experimental Learning

Implement agile "test and learn" methodologies supported by targeted incentives. This includes expanding research tax credits for pilot programs and providing regulatory frameworks that encourage innovation laboratories. Such initiatives should balance rapid experimentation with responsible development, enabling organizations to accelerate their AI maturity while managing risks effectively.

Establish Collaborative Regulatory Frameworks

Create structured dialogue platforms connecting policymakers, industry leaders, and legal experts to develop evidence-based legislation. This collaborative approach should focus on crafting adaptive regulatory frameworks that protect stakeholder interests while enabling innovation. Regular forums should facilitate the sharing of best practices and emerging challenges to ensure regulations remain relevant and effective.

Advance Technical Leadership Excellence

Develop comprehensive engineering curricula that emphasizes model optimization and efficiency. Future leaders must master techniques for maximizing AI's economic and environmental benefits through advanced architecture design and resource optimization. This expertise becomes particularly important amid growing energy constraints and sustainability imperatives.

Standardize Environmental Impact Assessment

Mobilize public research institutions to develop standardized methodologies for measuring AI's environmental impact. Create tools enabling organizations to accurately quantify their AI initiatives' carbon footprint, establish industry benchmarks, and implement data-driven sustainability strategies. This framework should ensure consistent, comparable metrics across sectors while supporting strategic decision-making.

Accelerate Strategic Sector Transformation

Drive AI adoption in critical sectors—healthcare, education, and environmental protection—through structured knowledge sharing and demonstration projects. Document and disseminate evidence-based success stories that quantify AI's societal and environmental benefits, creating reproducible models for broader implementation. Establish sector-specific guidelines that facilitate responsible AI integration while maximizing positive impact.

4 Methodology

In January 2024, the "AI for Sustainability" institute launched a comprehensive research initiative utilizing a 140-question survey instrument. The questionnaire explored five key domains: business AI implementation, sustainability integration, ethical considerations, regulatory compliance, and future AI trajectories. Of these questions, 67 support ongoing academic research initiatives, while 73 form the foundation of this barometer study.

The survey distribution and data collection were executed in partnership with Panelabs[1], which administered the electronic questionnaire to a carefully selected panel of IT project managers and experienced AI practitioners. This targeted demographic selection ensured respondents possessed both the technical expertise to address complex questions and comprehensive knowledge of their organizations' AI initiatives.

To maintain data integrity, Panelabs implemented rigorous quality control measures. These included eliminating the fastest 5% of responses to prevent rushed submissions, filtering duplicate IP addresses to ensure single-household representation, validating IP address quality through multiple criteria (including indirect connection usage and malicious address screening), confirming geographic authenticity through IP geolocation, and analysing open-ended responses to identify and remove inconsistent submissions.

The geographical distribution of respondents primarily spans three countries: the United Kingdom (51%), France (44%), and Belgium (5%)[2]. The survey maintains a strong European focus, with 94% of respondents' corporate headquarters located within Europe, complemented by representation from North America (4%), South America (1%), and Asia/Australia/Oceania (2%). Organization sizes range from small enterprises of 1-50 employees (14%) to large corporations exceeding 10,001 employees (18%), with balanced representation across intermediate sizes, though slightly lower participation from organizations with 5,001-10,000 employees (7%).

The professional profile of respondents reveals that 89% are actively involved in IT project management, with 68% regularly engaging with artificial intelligence systems (AIS). The age distribution shows a concentration in the 30-49 range, comprising 36% aged 30-39 and 34% aged 40-49, with additional representation across younger and older demographics.

ional profile of respondents reveals that 89% are actively involved in IT project management, with 68% regularly engaging with artificial intelligence systems (AIS). The age distribution shows a concentration in the 30-49 range, comprising 36% aged 30-39 and 34% aged 40-49, with additional representation across younger and older demographics.

The study achieved perfect gender parity, with an equal 50-50 split between male and female respondents, eliminating potential gender bias. Professional hierarchy distribution demonstrates diversity, with 40% middle management representation, complemented by 23% senior management and 27% staff-level employees.

[1] Survey institute partner of numerous research and teaching institutions in France, including the Institut d'Administration des Entreprises in Paris, the Institut National de la Recherche Agronomique and the University of Lyon 2.
[2] The low proportion of Belgian respondents has led us not to include Belgian respondents in the main findings of this report.

The survey captures insights across diverse industry sectors, with services (30%) and finance (14%) representing the largest segments. Other significant contributions emerge from public administration, manufacturing, transport, construction, and retail/wholesale sectors, while specialized industries such as agriculture constitute a smaller proportion (1%) of respondents.

To ensure statistical robustness, Forvis Mazars and the "AI for Sustainability" institute implemented systematic data aggregation protocols. Sectors with fewer than 25 respondents—including construction, wholesale/retail trade, and agriculture—were excluded from individual analyses to maintain statistical validity. The healthcare sector, representing fewer than 10 respondents, was integrated into the broader services category. The final analysis focuses exclusively on sectors with minimum respondent thresholds of 30, establishing a solid foundation for meaningful insights.

lds of 30, establishing a solid foundation for meaningful insights.

For organizational size classification, the study adopted a consolidated approach by merging companies with 5,001-10,000 employees with those exceeding 10,001 employees, creating a unified category of organizations with over 5,001 employees. This optimization resulted in six distinct organizational segments: VSE (Very Small Enterprises), SME (Small and Medium-Sized Enterprises), S-MSE (Small Mid-sized Enterprises), M-MSE (Medium Mid-sized Enterprises), B-MSE (Big Mid-sized Enterprises), and LE (Large Enterprises), providing a more balanced analytical framework.

To enhance demographic analysis precision, the study consolidated age brackets by combining the 60-69 and 70-79 groups into a single "+60" category. This recalibration achieves more equitable age distribution while maintaining statistical integrity throughout the analysis.

For analytical clarity, the study streamlined professional classifications by excluding statistically insignificant categories ("trainee," "other," and "I prefer not to answer") and consolidating senior managers and executives into a unified "Top Management" category, enabling more focused analysis of the survey population.

5 Glossary

VSE: Very Small Enterprises, businesses with a limited number of employees, typically fewer than 50.

SME: Small and Medium-sized Enterprises, larger than VSEs but still within the SME category.

S-MSE: Small Mid-sized Enterprises, at the lower end of the mid-sized enterprise scale, usually with 50 to 250 employees.

M-MSE: Medium Mid-sized Enterprises, with more employees and turnover than S-MSEs, generally ranging from 250 to 500 employees.

B-MSE: Big Mid-sized Enterprises, the largest of the mid-sized enterprises, often with 500 to 1000 employees.

LE: Large Enterprises, companies with more than 1000 employees and substantial revenues.

AI: Artificial Intelligence.

DMS: Data Management System.

AIS: Artificial Intelligence System.

Utilities: Sector encompassing transport, telecommunications, electricity, gas, and health services.

6 Companies and artificial intelligence: what you need to know

6.1 AI and uses

6.1.1 To remember

16% of companies have not invested in AI.

22% of companies are using or planning to use AI in strategic decision-making, yet do not feel ready to manage the disruptions and risks of AI.

50% of respondents already believe that AI has been beneficial to business performance; **10%** of respondents do not.

35% of uses focus on productivity and costs, **28%** on novelty and offers.

32% of AIs work with structured data, **24%** with language and **27%** with images and sounds, illustrating the widespread use of deep learning technologies.

6.1.2 Overview table

16%	of companies indicate that they have not invested in artificial intelligence, a rate that is at 13% outside the VSE sector.
50% **10%**	50% of respondents already consider that the use of AI has had a beneficial impact on their company's performance, 30% think it's still too early to say, and 10% are negatively oriented.
80/20	80% of companies use fewer than 10 AI systems (including 42% fewer than 5), and 20% of companies use more than 10 (including 3% more than 50).
23%	of companies invest in AI with a clearly identified need, 31% do so defensively and 29% are guided by decision-makers or consultants.
38%	of AIs used within the company are used by the IT department, revealing the room for maneuver in the dissemination of AIs within the company.
66%	of companies indicate that they are exploring innovation and the development of new products and services as interesting vectors of competitiveness.
41%	of companies are considering or have already used AI for strategic decision-making.
32%	of AIs are related to the "detect-predict-recommend" triptych, while uses related to images and sounds represent 27% and those related to language 24%.
35%	of uses are aimed at productivity-cost gains, 28% at innovation.

"Thanks to the ARIIA tool, ENEDIS detects unnecessary customer intervention requests and has enabled us to avoid 30,000 pointless trips in 2023." - Manager at EDF

"More recently, a new generation of technologies [...] has made it possible to better understand unstructured data.

Numerous use cases are currently being deployed, such as: requirements analysis in customer calls for tender to speed up analysis and allocation to different experts, qualitative analysis of documentation, help with writing computer code and analysis of old computer code potentially written in computer languages less widely used today." - Guillaume Rabier, VP Markets & Synergies, Alstom

6.1.3 Answers

Despite significant industry-wide investment in AI, a notable adoption gap persists: approximately one in six companies remains uninvested, with this figure dropping to one in eight among larger enterprises while rising to one-third among very small enterprises (VSEs).

The distribution of Artificial Intelligence Systems (AIS) deployment reveals distinct organizational maturity levels: nearly half of companies operate fewer than five AIS, while 20% utilize more than ten systems, with a select 3.3% implementing over fifty solutions.

ng over fifty solutions.

A compelling 50% of respondents affirm AI's positive impact on organizational performance—a significant finding, despite 10% expressing contrary views. This positive assessment becomes particularly noteworthy when considering several contextual factors:

- Initial AI investment motivations often lacked strategic precision: while 25% of organizations responded to clearly identified needs, 60% pursued AI adoption through defensive reasoning (31% citing fear of falling behind) or through external influence (29% following decision-maker or consultant recommendations).
- ollowing decision-maker or consultant recommendations).
- The concentration of AI implementations within IT departments (38%) suggests either limited cross-functional adoption or challenges in transitioning from experimental to production environments.
- Strategic ambiguity consistently emerges as a primary obstacle to successful implementation (detailed in AI and Management section).

Current AI business applications reveal distinctive patterns:

- Primary Objectives: Operational efficiency and cost reduction drive 35% of implementations, while innovation initiatives—encompassing new products, services, business models, and revenue streams—account for 28% of deployments.
- Technical Approach: One-third of AI systems leverage the "detect-predict-

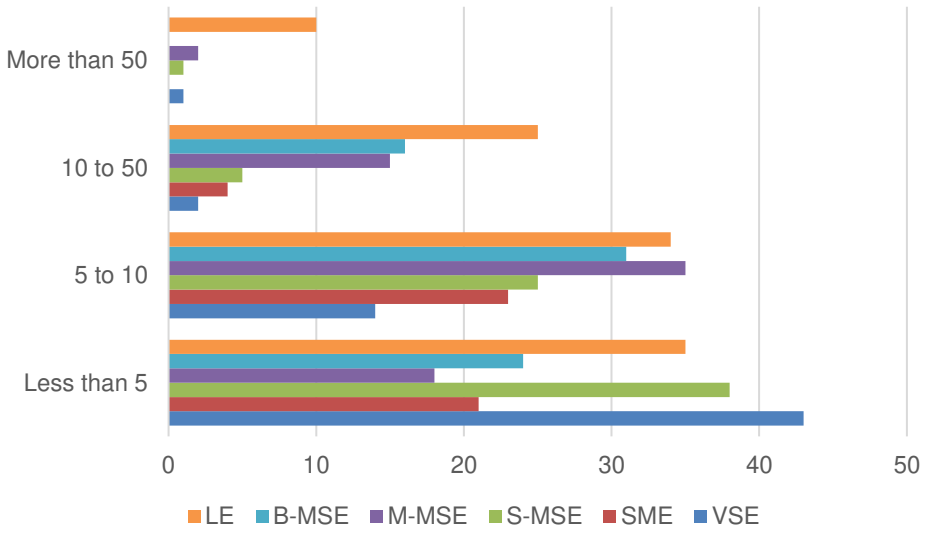
recommend" framework, particularly effective with structured data. Language, image, and sound processing applications, powered by deep learning Transformer technologies, represent over 50% of implementations.

Notable cultural differences emerge between French and British approaches:

- French organizations demonstrate stronger inclination toward language processing and chatbot applications, while British counterparts favour image and sound processing solutions—each presenting unique ethical considerations regarding bias and user protection.
- British organizations show greater openness to AI in strategic decision-making (49% versus 31% for French companies), a use case demanding exceptional standards in system mastery, explicability, human oversight, and accountability. While 46% of these organizations express readiness to manage AI-related disruptions and risks—significantly above the 26% average—this simultaneously indicates that 54% of companies pursuing strategic AI applications acknowledge preparedness gaps. Excluding organizations deliberately building capability before deployment, those expressing readiness (22% of total companies) may demonstrate more conservative risk assessment approaches.
- tely building capability before deployment, those expressing readiness (22% of total companies) may demonstrate more conservative risk assessment approaches.

6.1.3.1 How many AI-based systems do you think your company uses?

80% of companies use fewer than 10 AI systems, 20% use more, of which a fraction of 3% use more than 50 (the vast majority of which are GEs):



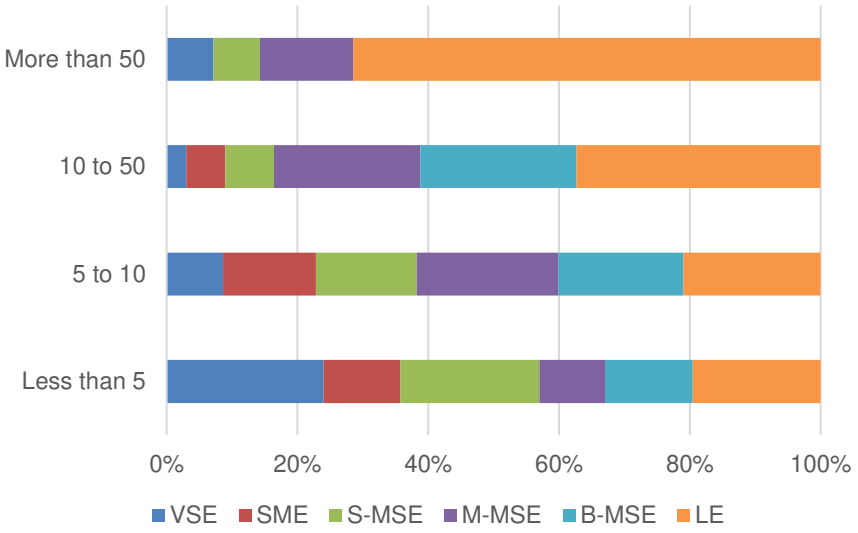
Companies using more than 10 AIS represent:

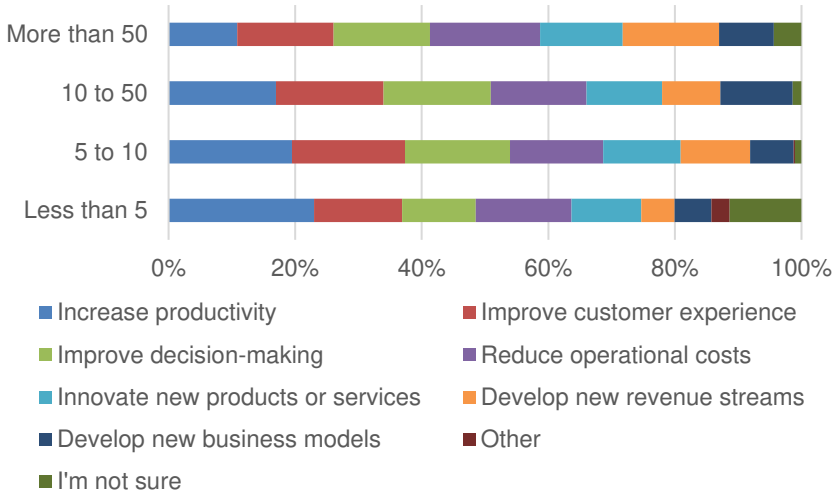
10% of VSEs, SMEs and S-MSE,

25% of other MSEs

33% of LEs

In other words: two-thirds of LEs use fewer than 10 AI systems.

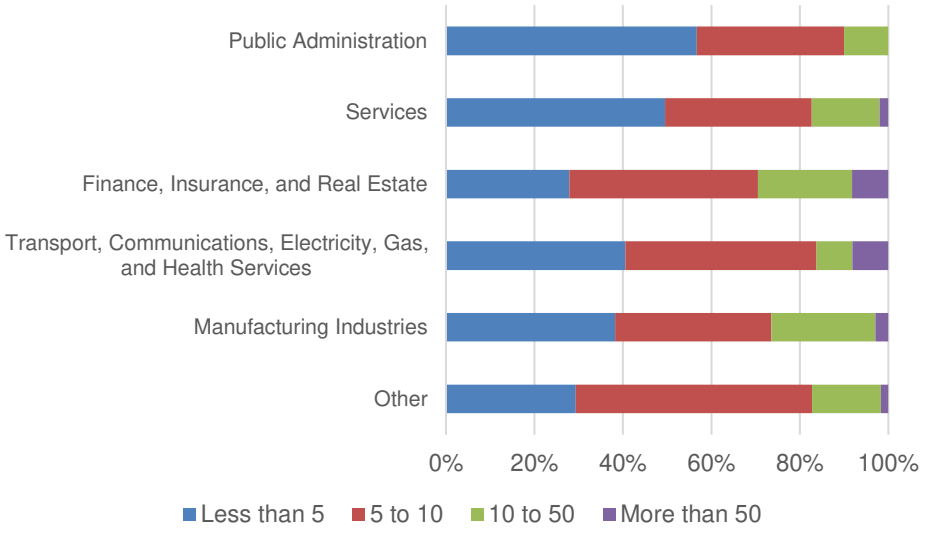




The greater the number of AIS within a company, the greater the number of uses linked to innovation and novelty, and the lower the number of uses linked to productivity.

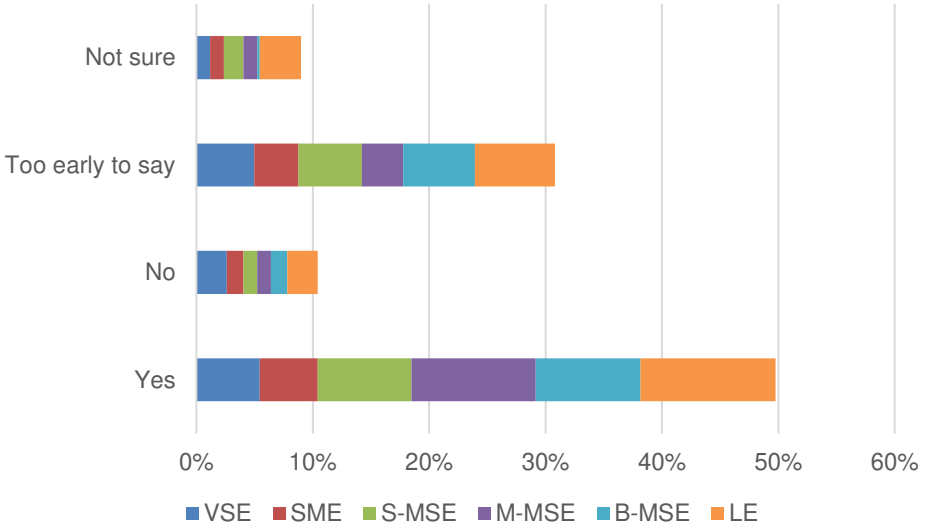
It seems that the first AIS implemented by companies are strongly oriented towards productivity gains and cost reductions, while subsequent AIS diversify towards customer experience, decision-making and innovations. Beyond 50 AIS, innovations take on even greater importance, but operational cost reductions remain the main focus.

At sector level, the financial and utilities sectors have the most AIS. Public administration appears to lag behind, with 90% of respondents mentioning fewer than 10 AIS.



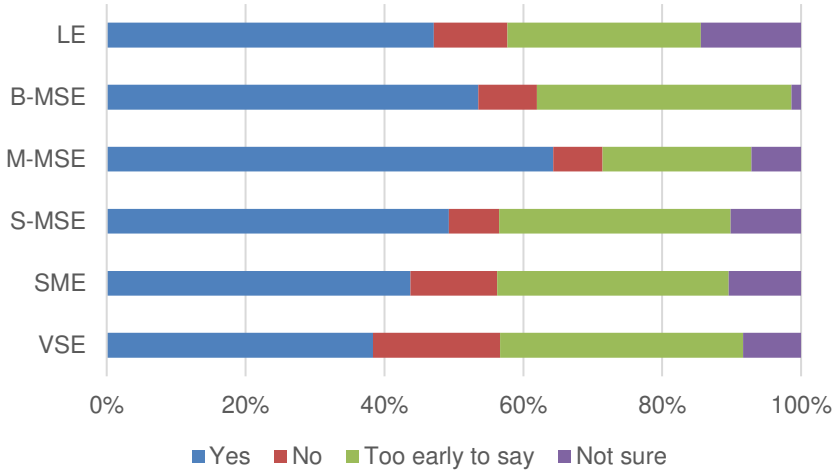
6.1.3.2 Do you think investment in AI has been beneficial to your company's performance?

About 50% of respondents are already convinced that AI has had a beneficial impact on their company's performance, with about 10% believing it has not:

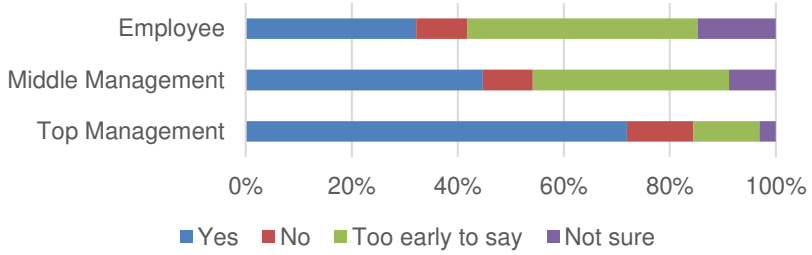


There are cultural differences, with 43% positive opinions among French respondents and 54% among British respondents.

MSEs stand out, both in terms of the number of positive and negative responses.



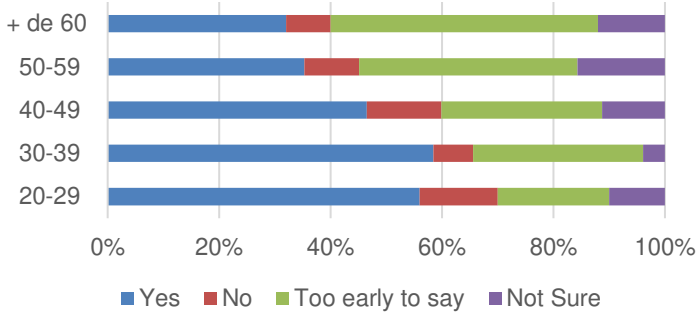
Over 70% of top managers are positive about the impact of AI on their company's performance.



It should be noted that for other staff categories, the rate of positive responses is more moderate, but does not lead to an increase in negative responses.

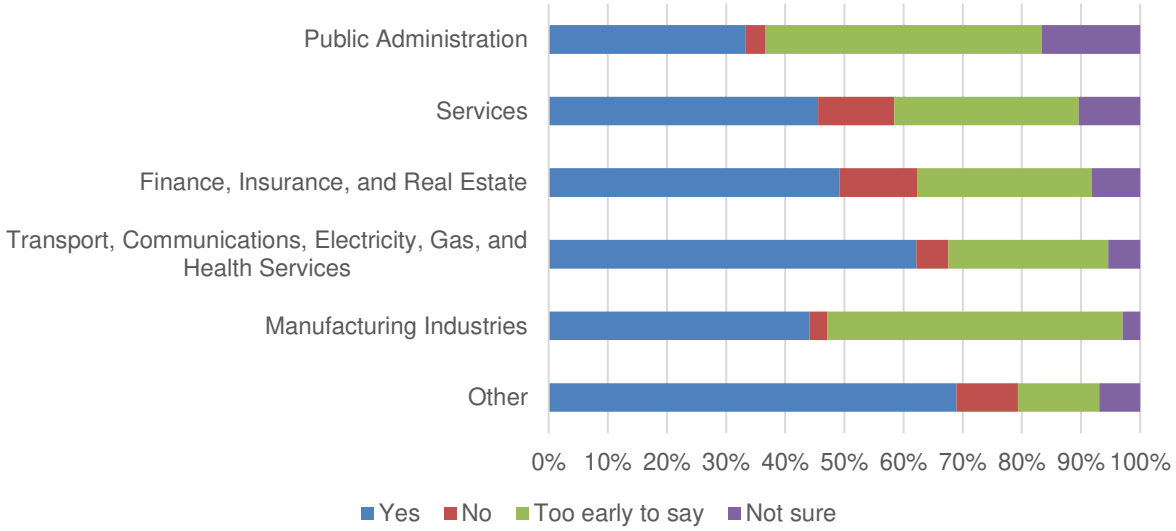
The most optimistic people are those under 40, with around 57% positive responses.

The 40-49 age group has a relatively high rate of negative opinions, at around 15%.



At sector level, the utilities sector shows the highest level of positive opinions (62% yes to 5% no).

Public administration, for its part, presents the most nuanced opinions, with only a third of respondents positive... but also only 3% negative.



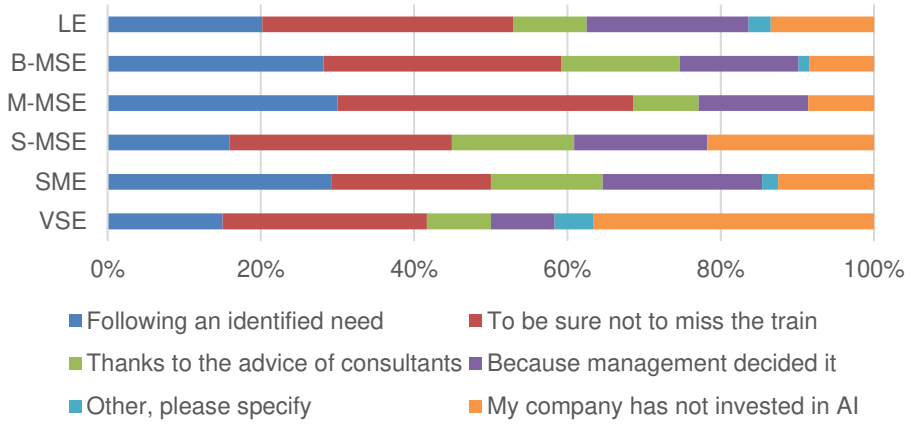
6.1.3.3 Why has your company invested in AI?

16% of respondents say their company has not invested in AI, and 60% give relatively imprecise reasons (31% don't want to "miss the train", 29% are acting at the behest of top management or consultants).

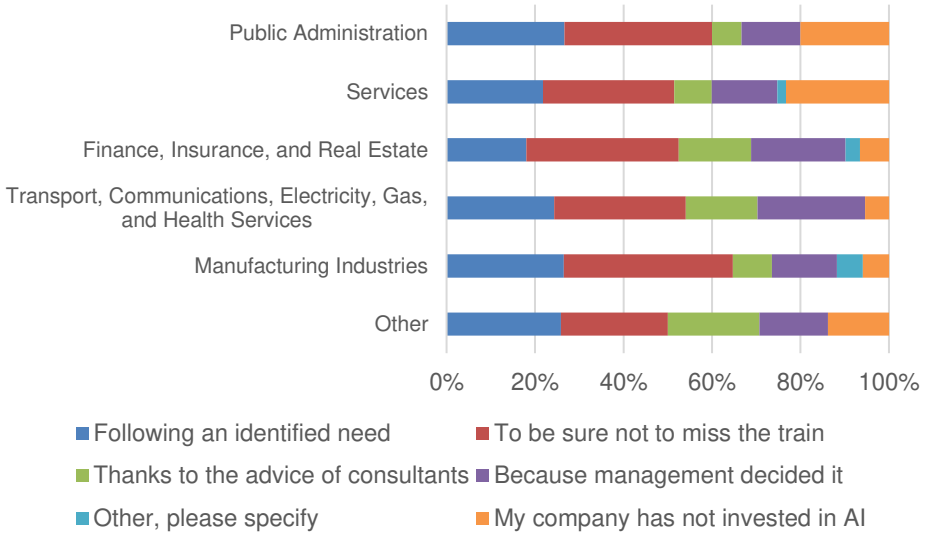
Finally, only 23% of respondents indicate that investments in AI were initiated to meet a previously identified need.

MSEs see their investments motivated by specific needs, while for LEs, management orientations contribute over 20% to AI investment decisions.

For their part, VSEs are struggling the most to invest, with 37% indicating that they have not invested in AI.



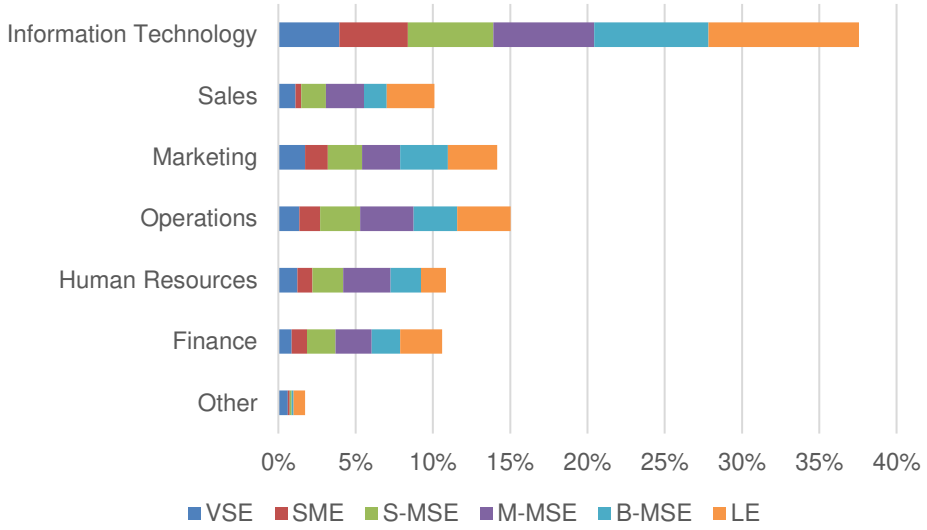
At the sector level, the service sector and public administration stand out, with approximately 20% of companies reporting a lack of investment in AI. In contrast, the financial sector is notable for its low rate (18%) of AI investments driven by a clearly identified need.



6.1.3.4 Which departments do you think use AI the most in your company?

(1.9 responses per respondent)

The IT department clearly leads in AI use, accounting for 37% of responses. Trailing behind, operations and marketing each contribute around 15%, rounding out the top three.



However, this result must be viewed in light of the respondents' departmental backgrounds, as our panel primarily consists of IT, data, and digital professionals. Nonetheless, even when considering only responses from individuals outside the IT, data, and digital domains, the IT department still ranks highest among AI users (23%).

Several factors may explain IT's prominence in AI use: (i) the department's familiarity with technology likely positions it as an early adopter of AI, indicating room for growth in other departments; or (ii) the IT department may be incubating AI initiatives that are not yet mature enough to be implemented across other areas.

n other departments; or (ii) the IT department may be incubating AI initiatives that are not yet mature enough to be implemented across other areas.

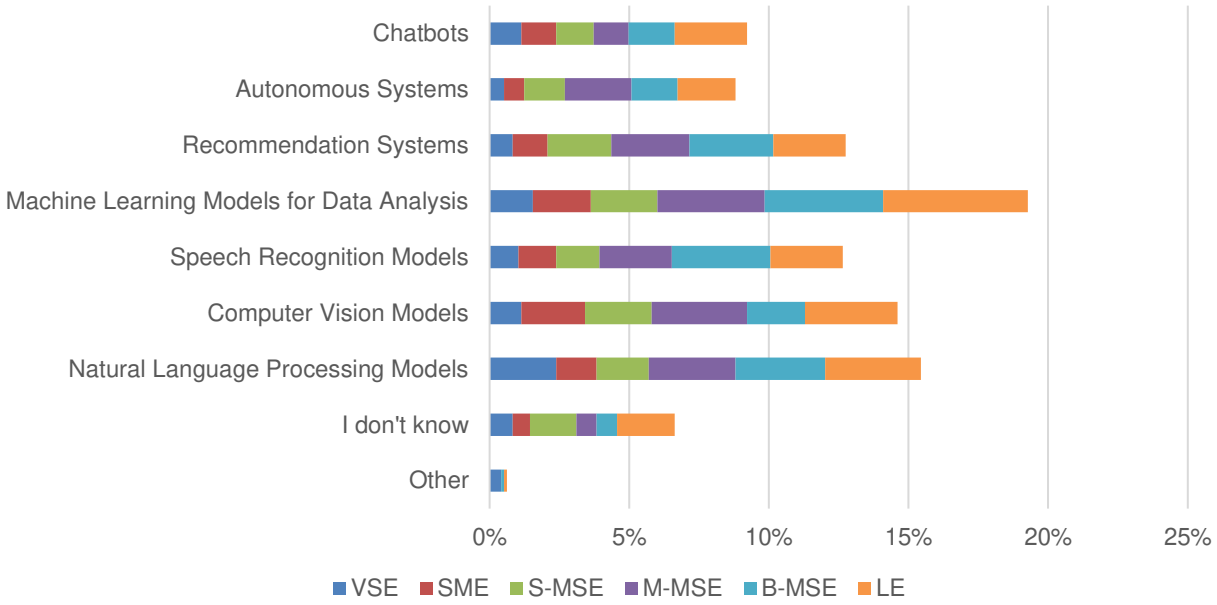
In both cases, AI adoption in other departments could expand in the future. At the sector level, utilities stand out for their extensive AI use in operations, while the financial sector demonstrates the greatest diversity of applications beyond the IT department. It is worth noting that these two sectors are also where 9% of companies report using more than 50 AI systems, potentially explaining the broader integration of AI across various departments.

6.1.3.5 To the best of your knowledge, what AI models are used in your company?

(2.3 responses per respondent)

The Top 3 AI models used are as follows:

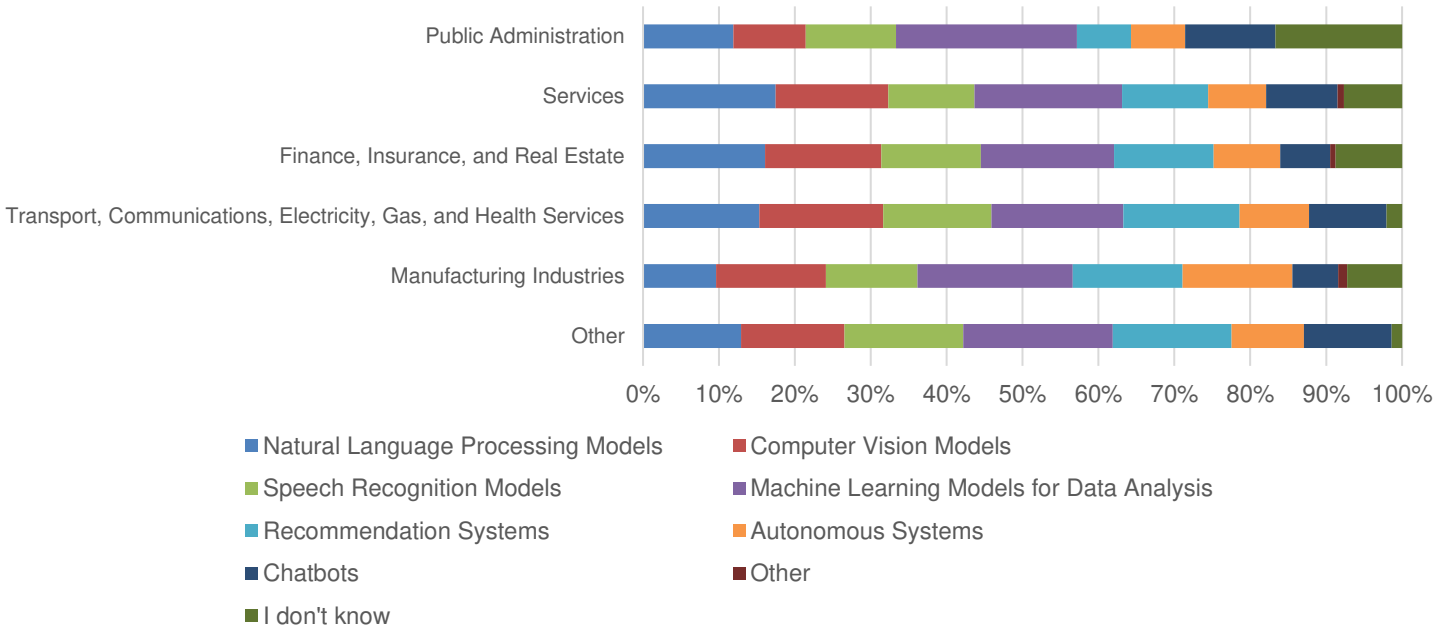
- AI for data analysis (patterns, prediction, decision)
- AI for natural language processing
- AI for image and video processing



The following groupings emerge:

- **32% for machine learning models focused on "detect/predict/recommend"** functions (e.g., data analysis, recommendations)
- **27% for deep learning models in "sound and image"** (e.g., vision models, speech recognition)
- **24% for deep learning models in "language"** (e.g., natural language processing, chatbots)
- **9% for embedded systems**

Deep learning models thus appear widely adopted within companies, representing 51% of responses. Although analysis models (detection, prediction, decision-making) are the most used, other model types show similar usage frequencies and vary according to subgroups. For instance, there are differences in model preference between French and British respondents: French respondents favour "language" models over "sound and image" models, while the reverse is true for British respondents.



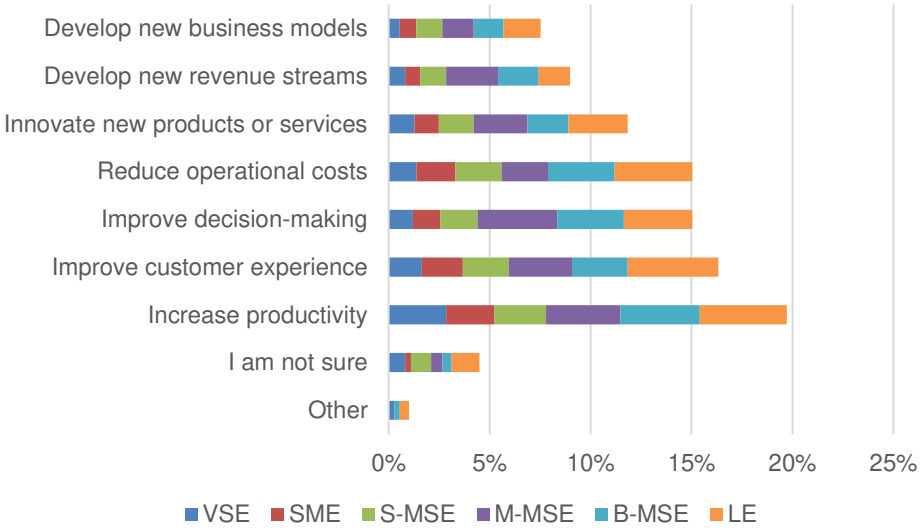
At the sector level, several specific patterns emerge:

- **Data Analysis**: Public administration, with its extensive and varied data sets, is particularly well-suited for data analysis models.
- **Natural Language**: These models are more prevalent in the services sector, where significant, often unstructured, textual data can be leveraged.
- **Vision**: Utilities show a marked interest in vision models.
- **Recommendation**: These models are prominent in the utilities sector and, to some extent, in retail. However, the presence of individual customer contact does not necessarily drive adoption; for instance, public administration makes limited use of recommendation models.
- **Voice**: The services sector appears to lag slightly in adopting voice-based models.
- **Chatbots**: These models are increasingly used in public administration, likely due to efforts to equip public portals with virtual assistants that guide users through various procedures.
- **Autonomous Systems**: These niche models are, unsurprisingly, more prevalent in the industrial sector.

6.1.3.6 To your knowledge, how is AI used within your company?

(2.6 responses per respondent)

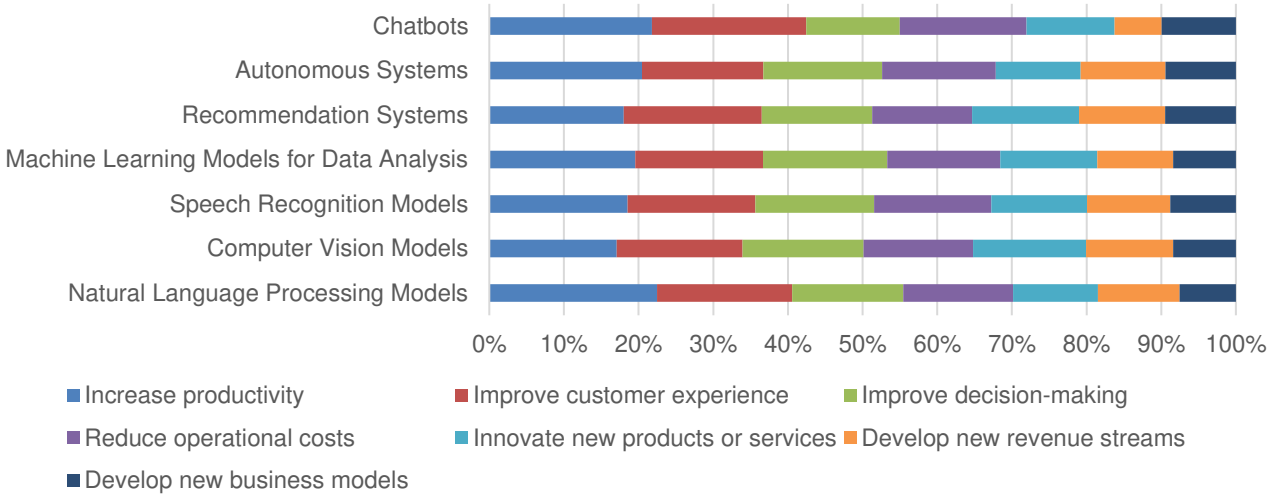
Increased productivity ranks highest among usage objectives, followed closely by three other key goals: enhancing customer experience, improving decision-making, and reducing operating costs.



The following groupings highlight the main objectives of AI use:

- **35%** focus on operational performance (productivity and cost reduction)
- **28%** are directed toward innovation and new offerings (new products and services, revenue streams, and business models)
- **16%** aim to improve customer experience
- **15%** support decision-making processes

These objectives leverage a full range of AI models, with some distinct variations (excluding “other” and “do not know” responses):



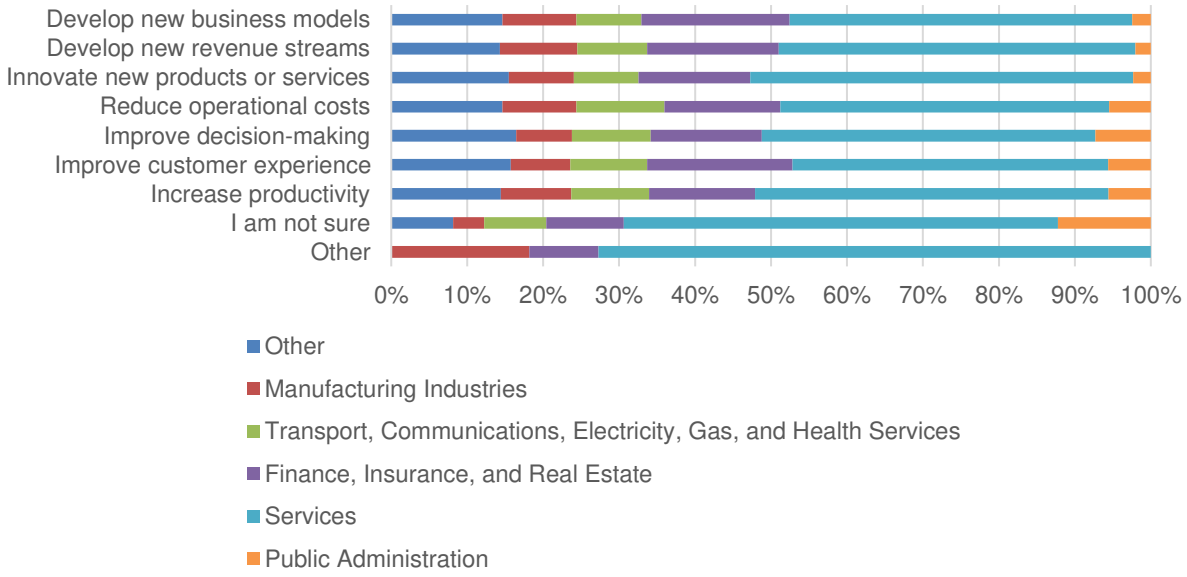
Data analysis and recommendation models ("detect, predict, recommend") are more frequently applied in decision support contexts, which is unsurprising given their focus on structured data analysis, often central to decision-making processes. These models are generally more interpretable than generative models, for instance, which is valuable when decisions need clear documentation.

For productivity gains, language models are more commonly used than for other objectives, as they serve as effective assistants in creation and composition tasks, helping to avoid starting from scratch. Recently, the integration of Retrieval-Augmented Generation (RAG) modules has further enhanced these models, enabling quicker document retrieval for information gathering or for extracting specific data from working documents.

in creation and composition tasks, helping to avoid starting from scratch. Recently, the integration of Retrieval-Augmented Generation (RAG) modules has further enhanced these models, enabling quicker document retrieval for information gathering or for extracting specific data from working documents.

Chatbots also contribute to enhancing customer experience.

Finally, in the pursuit of innovative offerings, computer vision models (for imaging and video) are used more extensively than for other objectives.



For productivity and cost objectives, the utilities, industry, and public administration sectors lead at 38%, while the services and finance sectors are slightly lower, under 34%.

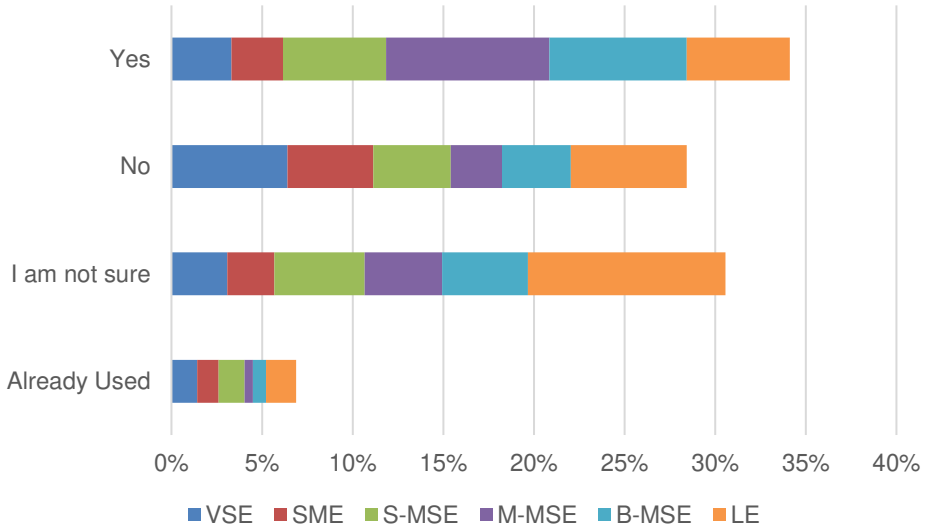
In the area of innovation and research, industry and finance stand out, each with just over 30%, while public administration trails significantly at 13%.

Regarding customer experience, the financial sector shows the greatest focus (20%), followed by public administration at 18%.

Lastly, for decision support, public administration is notably concentrated on this goal, with 21% compared to an average of 15% across sectors.

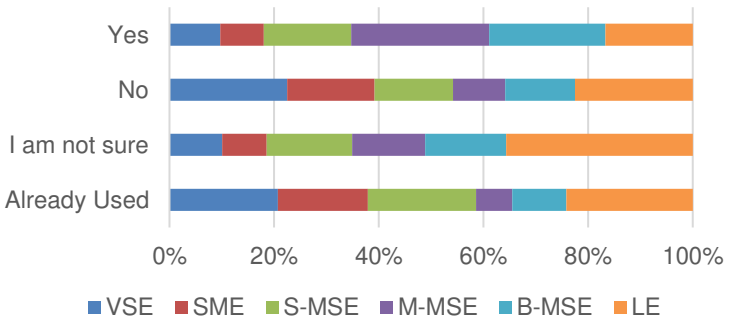
6.1.3.7 Is your company considering using AI for strategic decision-making?

41% of companies have already or plan to use AI for strategic decision-making (7% have already used it), while 28% have no plans to do so:



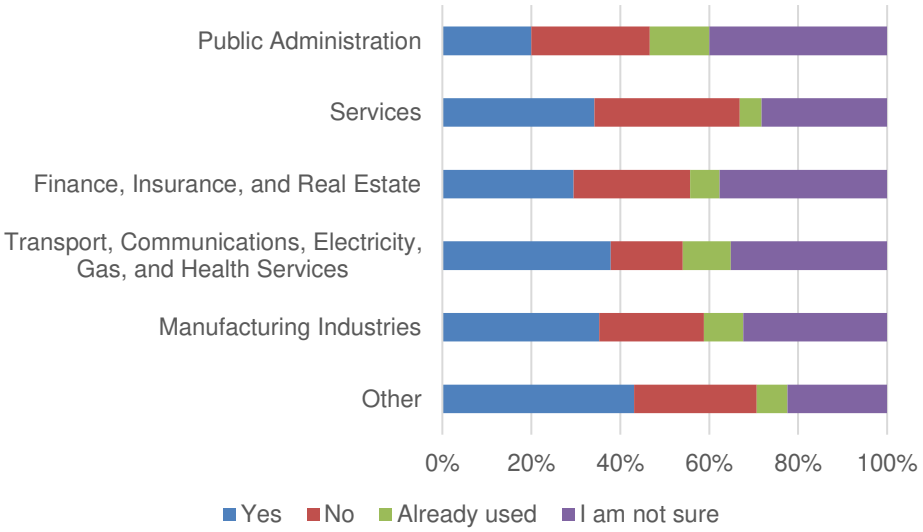
It is notable that LEs seem the least inclined to use AI for strategic decision-making. However, this finding should be viewed in context, given the high rate of abstention in responses. Decision-making information often remains concentrated among top executives, making it less likely to be disseminated to other levels within a large enterprise.

MSEs appear to be the most daring when it comes to the incursion of AI into strategic decision-making, but it should also be noted that it's the VSEs and SMEs that declare having already used it the most (for around 10% of cases).



AI use in strategic decision-making varies not only by company size but also reflects cultural differences, with French respondents noticeably more cautious than British respondents (30% of French respondents in favour versus 50% of British respondents).

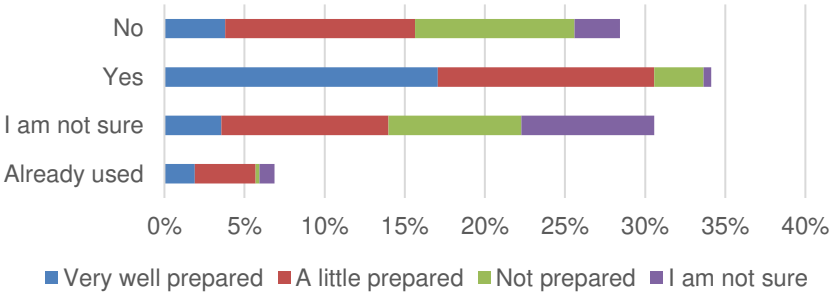
Significant differences also emerge between sectors. The utilities sector is the most inclined to employ AI in strategic decision-making (49%), while the financial sector and, especially, public administration are the most cautious, with 35% and 32% in favour, respectively.



Public administration presents an interesting case in its use of AI for strategic decisions. Only 20% of respondents plan to use AI for this purpose, which is relatively low. However, this sector also has the highest proportion of respondents indicating they are already using AI in strategic decision-making, at 12%.

Additionally, it is noteworthy that respondents' assessments of their company's preparedness for potential AI risks and disruptions correlate with the question of AI's role in strategic decision-making:

Respondents who are positive about the use of AI in strategic decision-making are the most likely to say they are very prepared, which is to be expected...



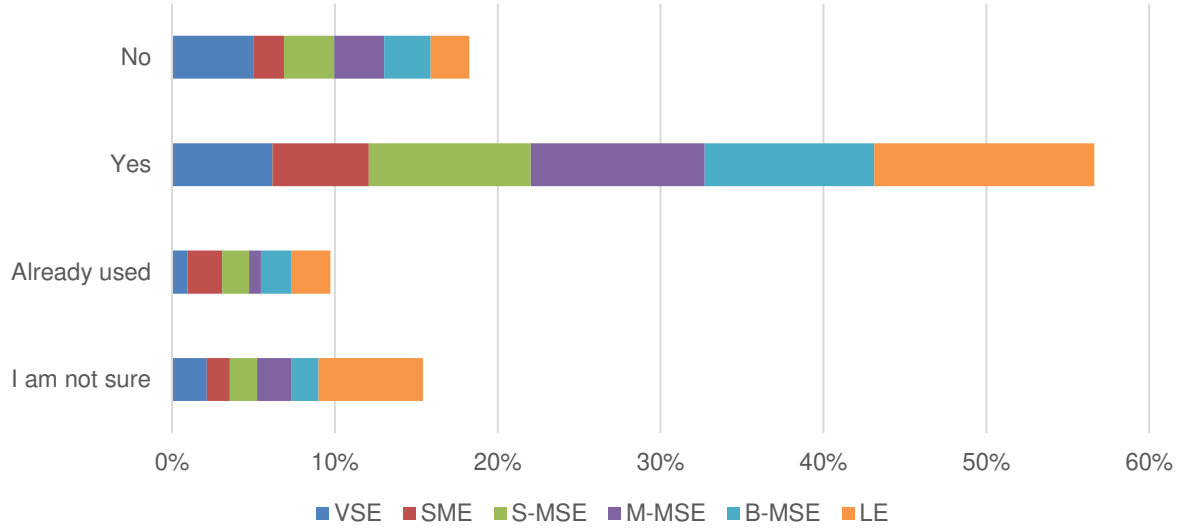
... but the fact remains that more than half of them, representing a total of 22% of respondents, feel little or unprepared.

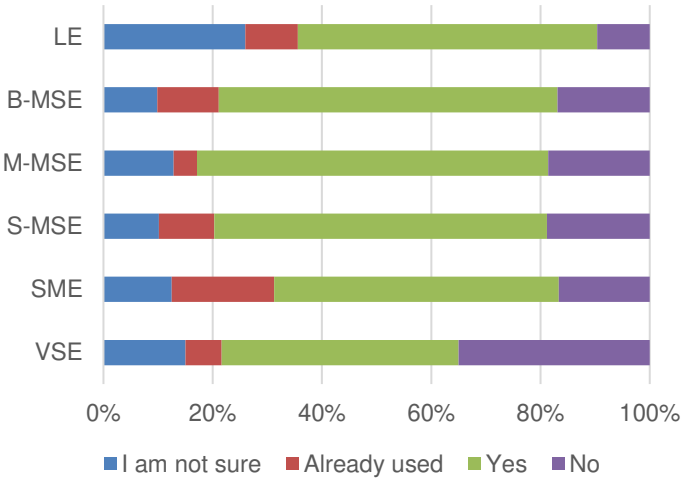
It is possible that companies interested in using AI for strategic decision-making are currently holding back because they feel insufficiently prepared to handle the associated risks and disruptions. However, this explanation doesn't fully apply to those already using AI in strategic decisions, as two-thirds of them report that their company is only slightly or not at all prepared.

These 22% of respondents represent companies generally less risk-averse regarding AI use than others. Conversely, it's notable that 8% of companies either don't want or are uncertain about using AI for strategic decision-making, despite considering themselves very well prepared to manage AI risks. In other words, companies that feel well-equipped to handle risks are less likely to oppose using AI in strategic decision-making.

6.1.3.8 Is your company exploring the use of AI for innovation and the development of new products or services?

67% of companies are exploring the opportunities for innovation or the development of new products that AI can generate (10% are already doing so), while 18% are not.





MSEs are the most proactive in this area, while VSEs face the greatest challenges. At the sector level, utilities appear to be the most enterprising.

Public administration shows the highest level of current AI usage but the lowest level of future intention. Finally, the service sector has the highest proportion of negative responses, with 22% indicating no intention to use AI for innovative services.

6.2 AI and management

6.2.1 To remember

22% of companies have already experienced major implementation issues. These companies have learned lessons in terms of human resources, training, and the perception of their organizational and human readiness.

Around **45%** of the problems encountered relate to resources (financial, strategic, IT integration, staff shortages), **30%** to data and **25%** to trust and responsibility issues specific to AI.

Only **26%** of companies believe they are prepared to deal with the risks and disruptions arising from the use of AI (less than 20% for GEs). Even so, **40%** of them have no plans to provide AI training to their employees, and **31%** have no dedicated team for AI implementation and management.

AI introduction strategies are diversified: **30%** of companies predominantly use external AI, **26%,** AI that they refine, **23%**, AI developed in-house. The latter two approaches are used more frequently when company size is higher.

6.2.2 Overview table

22%	of companies have already encountered significant problems when implementing AI, and in 44% of cases, the problems related to strategy and/or technical and human resources.
49% 31%	49% of companies have a team dedicated and/or responsible for AI implementation and management, but only 6% plan to do so in the near future, bringing to 31% the number of companies that do not have such a team and do not expect to do so in the future.
30%	of companies use AIS developed externally.
26%	of companies have an AIS that is mostly of external origin, but which has been trained or refined using internal data.
23%	of companies develop their AI systems in-house. In other words, almost a quarter of companies have the technological resources to develop their AI.
26%	of respondents consider that their company is well prepared to manage the potential disruptions and risks associated with the use of AI, a rate that rises to 52% when the company has already experienced problems.
32%	of respondents consider that employee training is the only way to manage potential disruptions and risks associated with the use of AI, a rate that rises to 55% when the company has already problems.
39%	of companies neither provide nor plan to provide AI training for their staff, a rate reduced to 16% for companies that have already experienced problems.

"Alstom encounters the classic problems of artificial intelligence systems:

- *Access to data for legal reasons (data sharing between players in the rail system) or technical reasons (old equipment, insufficient connectivity, etc.).*
- *Data quality and lack of standardization.*
- *Alstom favours the augmented intelligence model, where the employee remains in control of AI production. A prerequisite is therefore to build confidence in the results, a confidence made difficult by the lack of demonstrability of AI systems (black-box operation).*
- *The availability of IA business and technical expertise.*
- *Integrating AI systems into everyday tools to improve the employee experience" - Guillaume Rabier, VP Markets & Synergies, Alstom.*

6.2.3 Answers

The challenges posed by AI are far from theoretical: 22% of companies report having already encountered significant issues when implementing AI, with imaging/voice and recommendation models being particularly prone to problems.

Approximately 45% of these challenges relate to strategy and financial, human, and IT resources; 30% involve data issues; and 25% concern trust and responsibility. While SMEs often struggle with the cost and quality of data, large enterprises (GEs) face challenges such as poorly defined strategies and a shortage of qualified personnel.

ned strategies and a shortage of qualified personnel.

Companies that have faced difficulties with AI have often adapted their organizational approaches in response. For instance:

- 55% of companies now have (or plan to have) a dedicated team for AI implementation and management, a rate that rises to 92% among those that have encountered issues.
- 26% of companies feel prepared to handle AI-related challenges and risks, compared with 52% of those that have experienced difficulties.
- 32% believe their employee training is adequate, increasing to 55% among companies with prior issues.
- 53% of companies offer or plan to offer AI-related training for employees, rising to 81% among companies that have encountered challenges.

Companies are employing various strategies to integrate AI, ranging from purchasing AI solutions, refining external AI with internal data, to developing AI in-house:

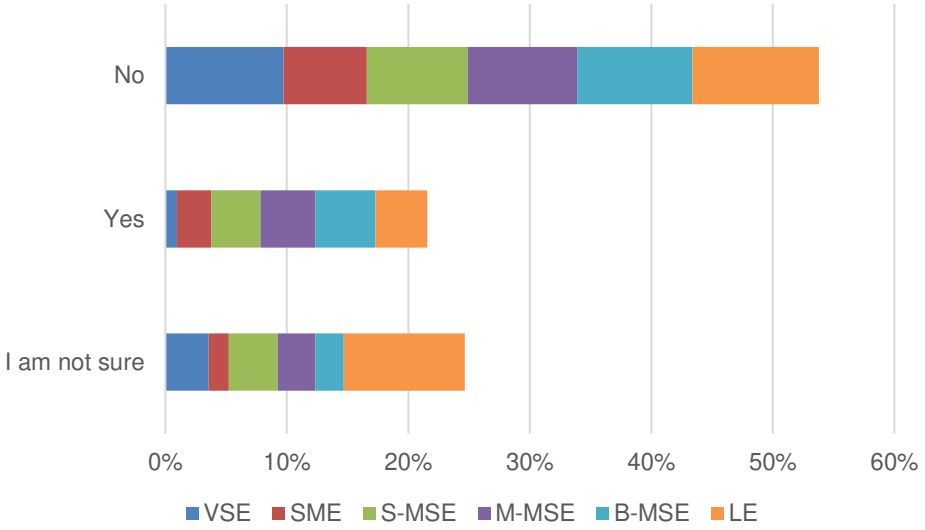
- 32% have a diversified approach, balancing purchasing, refining, and in-house development.
- 34% focus on a single dominant strategy (14% on purchasing, 9% on refining, and 11% on in-house development).
- 19% pursue hybrid strategies, combining several approaches; meanwhile, 16% have not invested in AI at all.

Predominantly internal strategies, whether through full in-house development or refining external AI, are more common among larger companies. These approaches offer the potential for unique competitive advantages but demand high levels of skill and management maturity. Companies favouring internal development tend to be highly organized, with 69% having a dedicated AI team, compared to 55% overall.

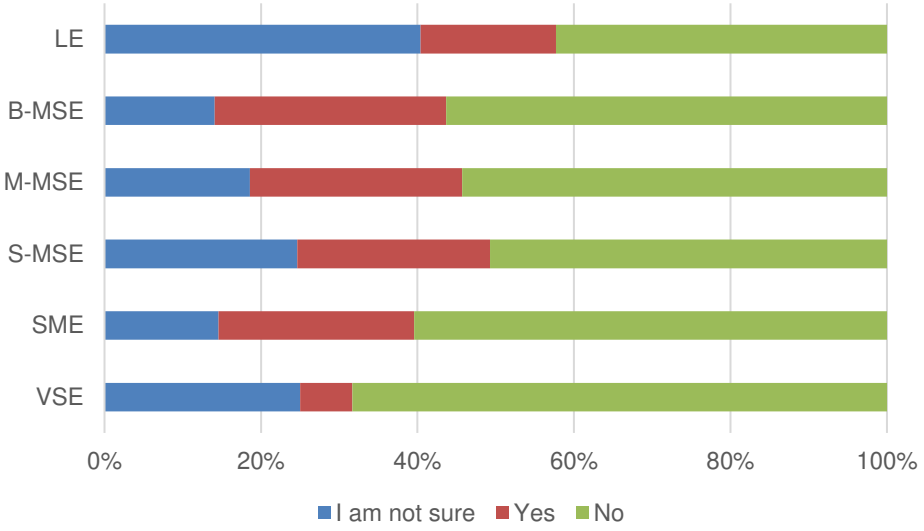
Finally, country-level differences reveal that while French companies are open to skill-intensive strategies like internal development, they express more caution regarding their level of preparedness. Only 18% of French companies feel prepared (versus 34% in the UK), and 29% report being completely unprepared (compared to 15% in the UK).

6.2.3.1 Have you ever encountered significant problems when implementing AI within your company?

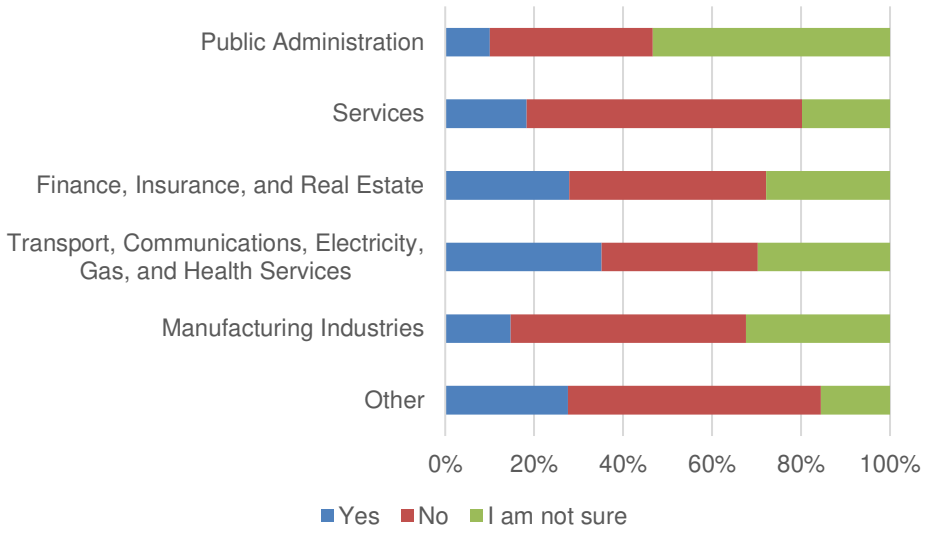
22% of respondents say they have already encountered major problems:



This response rate is relatively consistent for SMEs and MSEs, ranging from 25% to 30%. VSEs and LEs show lower response rates, though the result for LEs should be viewed with caution due to a high abstention rate.

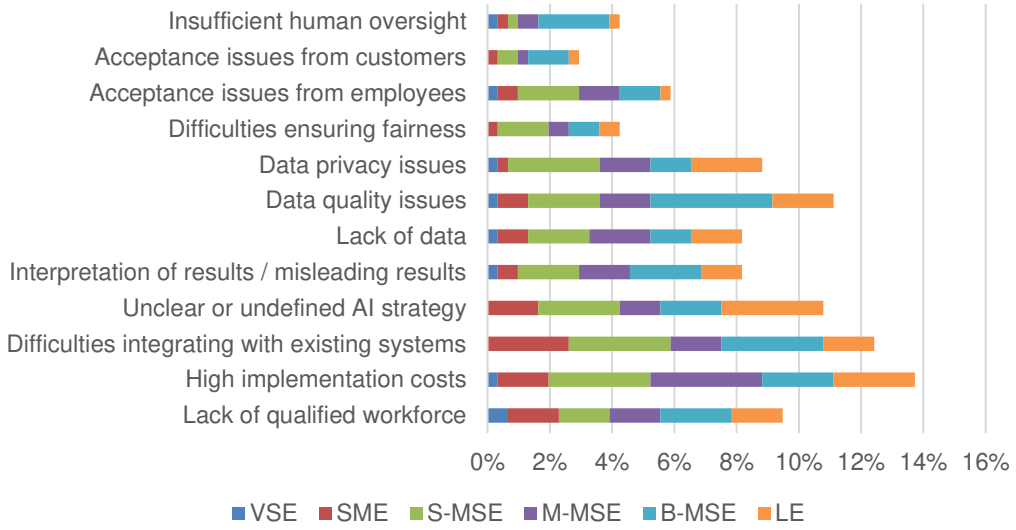


Utilities report encountering problems most frequently (35%), whereas public administration appears to have faced relatively few issues (10%). However, this result should be interpreted cautiously, as the high abstention rate in public administration suggests that information on challenges may be less widely shared within this sector compared to others.


Public Administration
Services
Finance, Insurance, and Real Estate
Transport, Communications, Electricity, Gas, and Health Services
Manufacturing Industries
Other
0%
20%
40%
60%
80%
100%
Yes
No
I am not sure

6.2.3.2 What was the nature of the problem(s)?

Respondents were presented with 12 potential issues to help identify the most encountered problems:

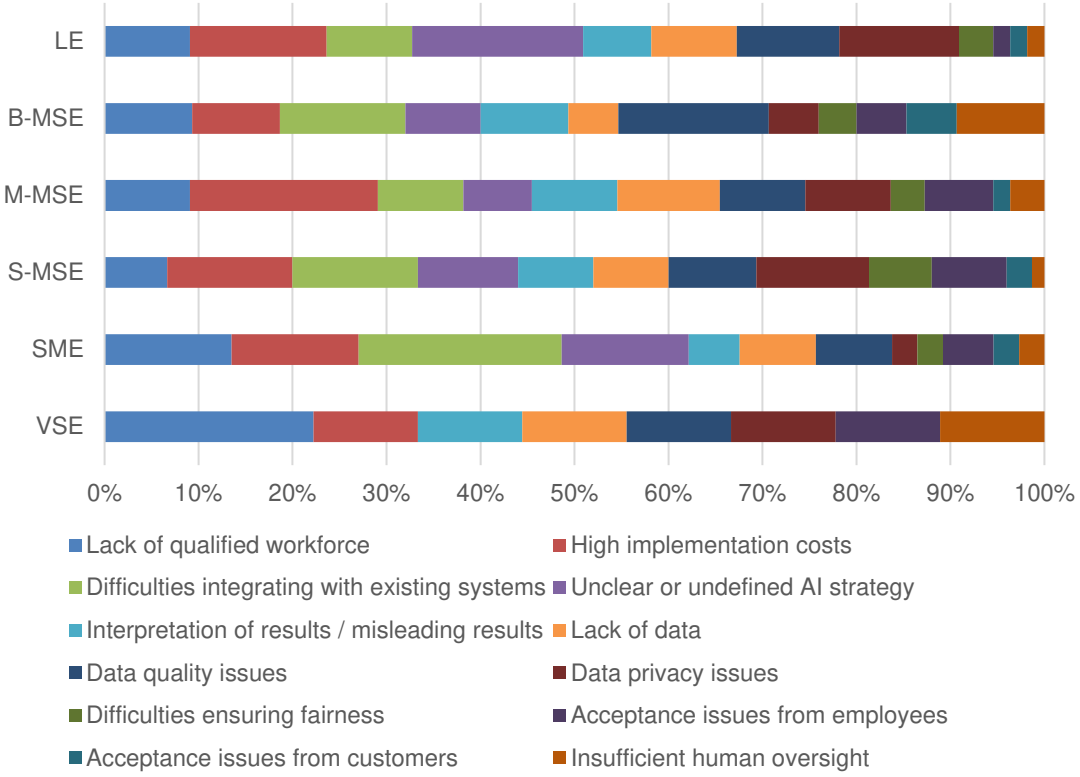


The most frequently cited challenges surrounding AI adoption relate to implementation costs and integration complexities—common obstacles for IT-intensive projects. While these issues are significant, they are by no means the only hurdles organizations face. AI introduces unique challenges, including the need for high-quality resources, such as specialized skills and reliable data. Additionally, it brings forward relatively new concerns, such as interpreting results, ensuring fairness, and addressing ethical considerations that were less prominent before the advent of AI.

The 12 problems can be segmented according to two reading grids presented below:

Project & Implementation		Resources & Responsibility	
Problems relating to IT projects Cost, Quality, Integration, Strategy	**47%**	**Strategy and human and IT resources** Costs, Integration, Staff shortages, Strategy	**44%**
AI-specific problems Lack of personnel, Interpretation and reliability, Lack and confidentiality of data	**34%**	**Data** Data quality, Data gaps, Confidentiality	**29%**
Problems related to human-machine interaction Personal and customer acceptability, Fairness, Human control	**19%**	**Trust and Responsibility** Interpretation and reliability, Personal and customer acceptability, Fairness, Human control	**26%**

The problems reported vary widely according to company size:

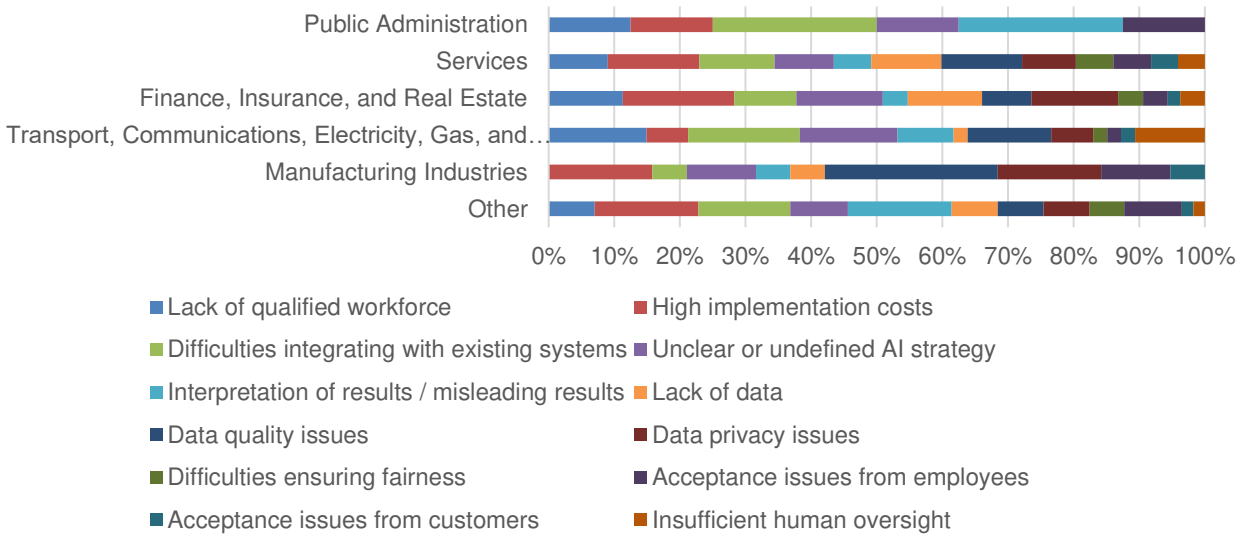


For large enterprises, AI strategy ranks as the top concern, with a notable emphasis on the shortage of skilled personnel. For SMEs, challenges differ, shifting from data quality issues in larger companies to implementation costs in mid-sized ones. SMEs often encounter highly operational issues related to system integration, whereas VSEs primarily face data challenges, including concerns around data confidentiality and limited data volume. Interestingly, data access and quantity issues are commonly reported by VSEs but less so by SMEs.

by VSEs but less so by SMEs.

Geographical differences also play a role: while both French and British respondents cite costs as a significant barrier, French respondents identify the shortage of qualified personnel as their second major challenge.

The sectors also declare a differentiated occurrence of implementation problems (same list of problems as the previous graph):



In the services sector, lack of data ranks among the top five obstacles, reflecting a unique challenge in this often-fragmented market compared to the more data-rich financial or utilities sectors. For the financial sector, AI-specific issues are notably prominent among the top concerns, possibly suggesting a level of maturity in addressing foundational IT challenges and moving toward more advanced AI-related matters. In the industrial sector, data quality takes precedence over costs; this may be partly due to the nature of data in this field, which often includes unstructured information from sensors and other sources within the physical environment. The systematic and digital collection of such data frequently lacks depth and consistency, posing distinct challenges.

hysical environment. The systematic and digital collection of such data frequently lacks depth and consistency, posing distinct challenges.

Are certain AI models more prone to these issues than others? This question warrants further investigation:

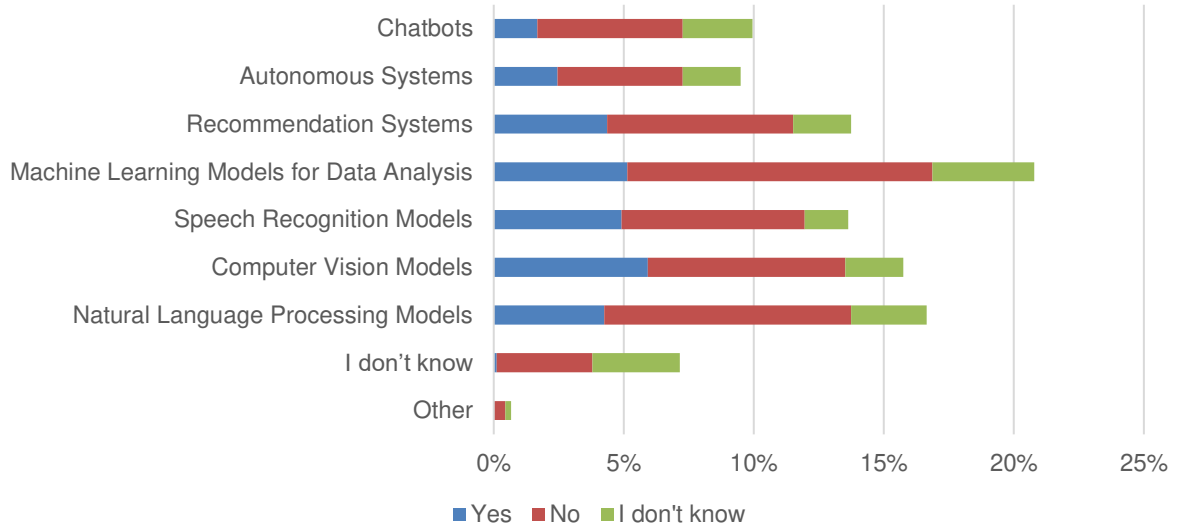
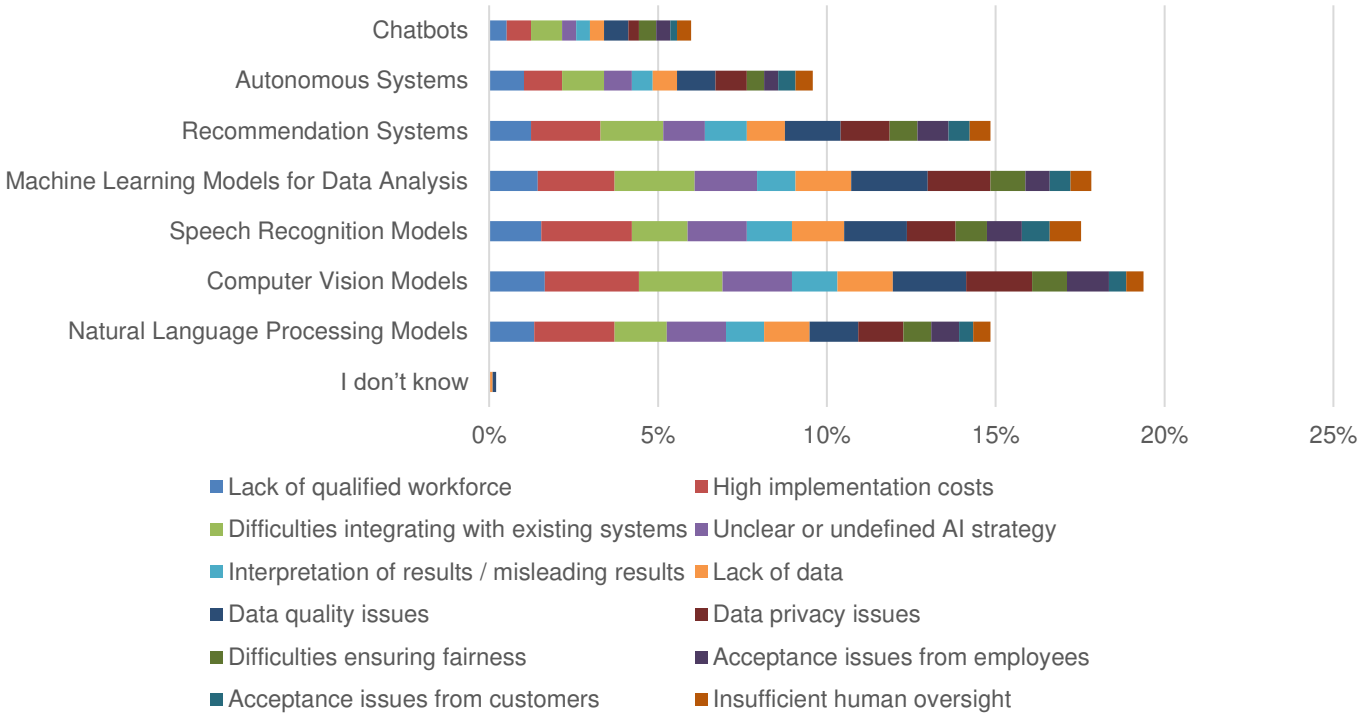


Image and sound models appear to be disproportionately represented among reported issues, with recommendation systems also contributing to challenges, albeit to a lesser extent. In contrast, chatbots seem to present fewer implementation difficulties.

The types of problems also differ according to the models declared:



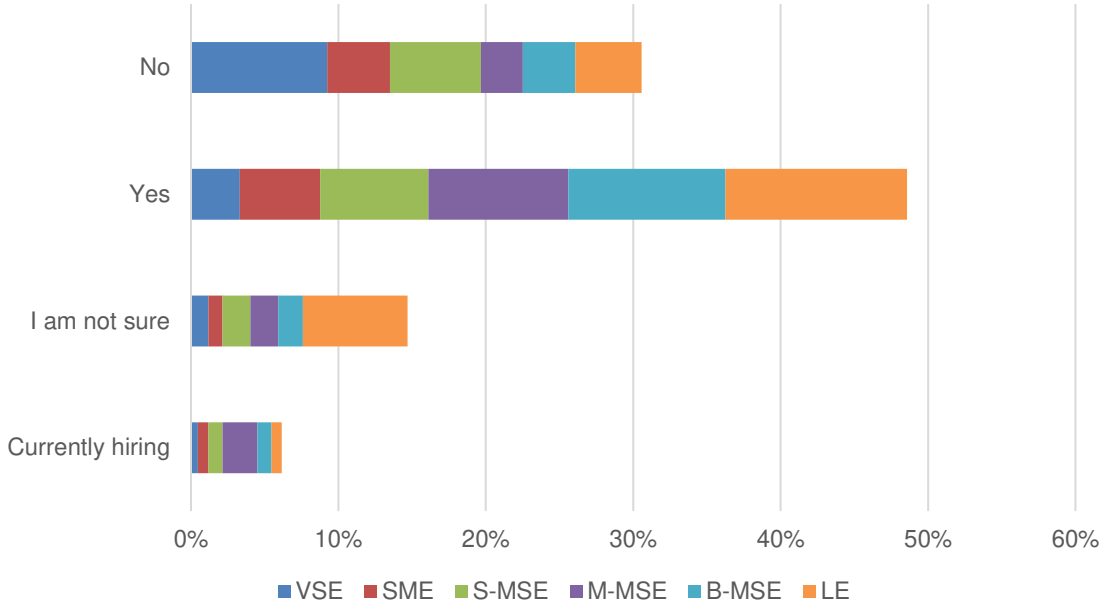
- **Strategy and Resources (human, IT):** Natural language models, more than other types, tend to present challenges related to cost and strategic alignment. The rapid emergence of large-scale language models has prompted many companies to dive into exploring these technologies, often without a fully developed vision of their applications or intended purposes. Imaging models similarly face substantial strategic challenges. For chatbots, integration issues are the primary concern, while the shortage of qualified personnel affects all models, including autonomous systems.
- ng autonomous systems.

- **Data:** Machine learning models used for analysis—such as detection and prediction—frequently encounter data-related issues, especially around data quality. Data scarcity does not appear to be limited to a single data type, as many deep learning models now arrive pre-trained. In organizations, data mining for refining or specializing models often demands accessible data volumes, which presents its own set of challenges.

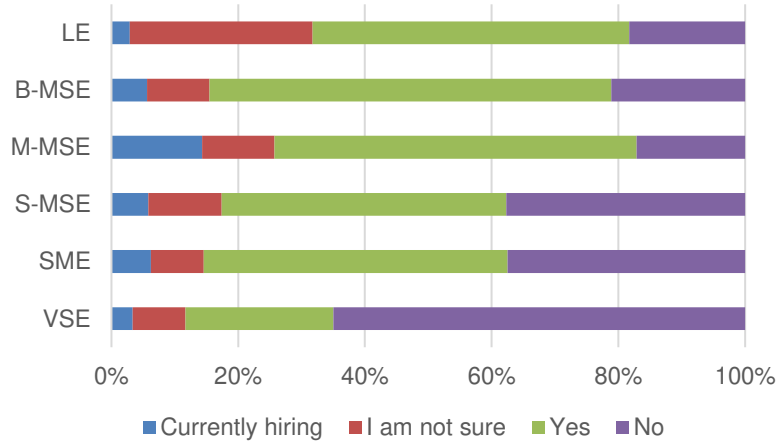
- **Trust and Responsibility:** The AI systems most exposed to trust-related concerns include chatbots (issues of fairness, employee acceptance, and control), voice models (interpretation and customer acceptance), and recommendation models (interpretation and user acceptance). Notably, in recommendation models, interpretation issues seem to pose a greater challenge than fairness.

6.2.3.3 Does your company have dedicated staff or a team responsible for AI implementation and management?

49% of companies have such staff, rising to 55% if future hires are included:



This result is highly dependent on the size of the companies considered.



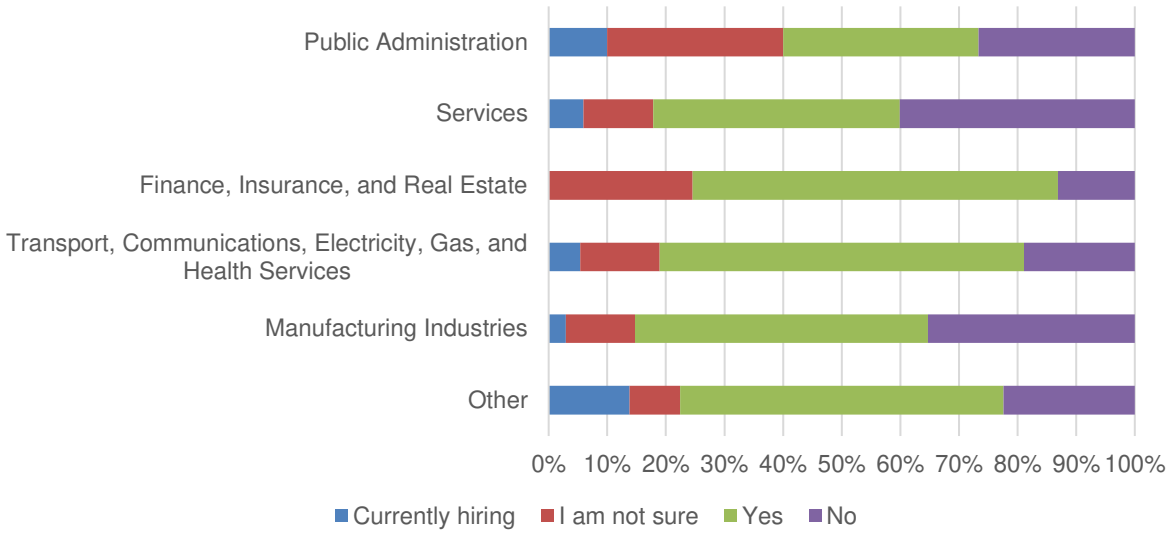
Unsurprisingly, very few VSEs declare that they have dedicated staff (just under 25%, which is nevertheless not negligible).

Positive responses are at their highest for M and B-MSEs, with over 70% positive responses, including future hires (for LEs, the number of abstentions limits the scope of the result to around 50%).

Notably, nearly 20% of LE respondents report lacking a dedicated AI team—a significant proportion. While some LEs act primarily as users of externally developed AI solutions, others depend on their general IT or R&D departments, which are not specifically focused on AI, to implement these systems.

Country-level differences are also substantial: 35% of French respondents indicate they do not have a dedicated AI team, compared to 25% of British respondents.

Finally, at the sector level, noteworthy differences also emerge, as illustrated in the following figure.

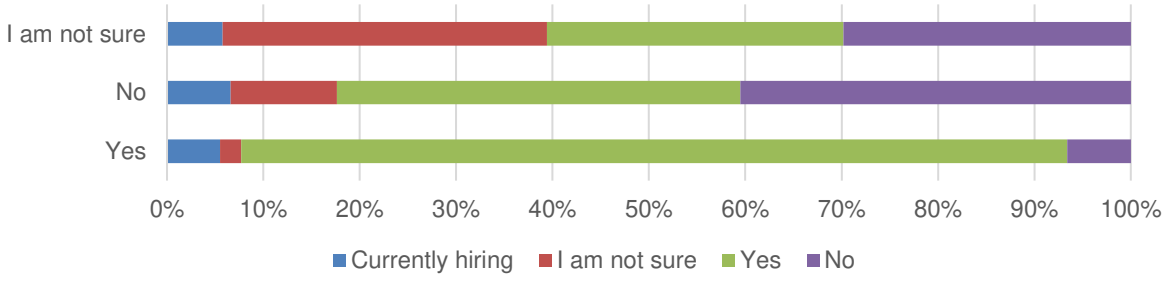


The financial and utilities sectors report positive rates of over 60% for having dedicated AI teams, while the public administration sector trails with a rate of 27%, which is affected by a high abstention rate.

Considering the regulatory landscape, including frameworks like the EU AI Act, which emphasizes specific risks in areas such as public administration, critical infrastructure (utilities), and finance (life insurance, credit), it is notable that 15% to 27% of organizations in these sectors lack a dedicated team for AI implementation and management. These figures underscore a significant gap in sectors where regulatory and operational risks are heightened.

In the service sector, which is largely comprised of small businesses, teams are often multi-skilled and less specialized. It's unsurprising, therefore, that many of these companies struggle to allocate dedicated AI personnel.

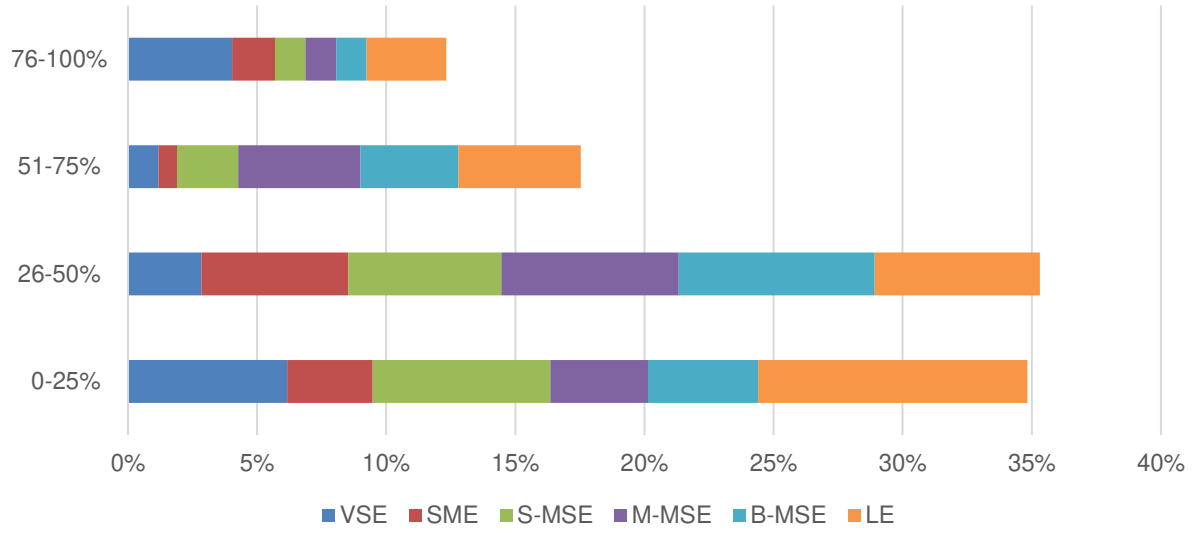
Finally, it's worth noting that companies with prior experience in AI implementation issues are significantly more likely to have established or plan to establish a dedicated AI team, with over 90% indicating current or intended hiring.



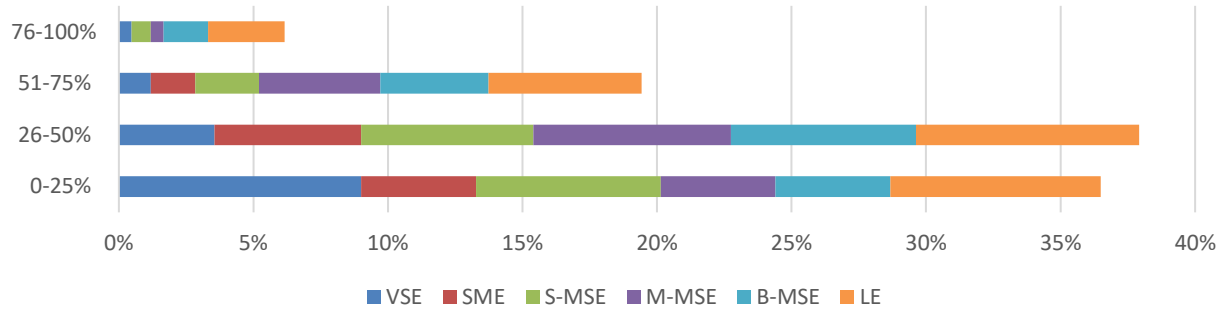
As a result, many of these companies have set up an organization to reinforce their system.

6.2.3.4 What percentage of the AIS used by the company (algorithm and data) is fully developed externally / purchased but trained or refined using internal data / fully developed internally?

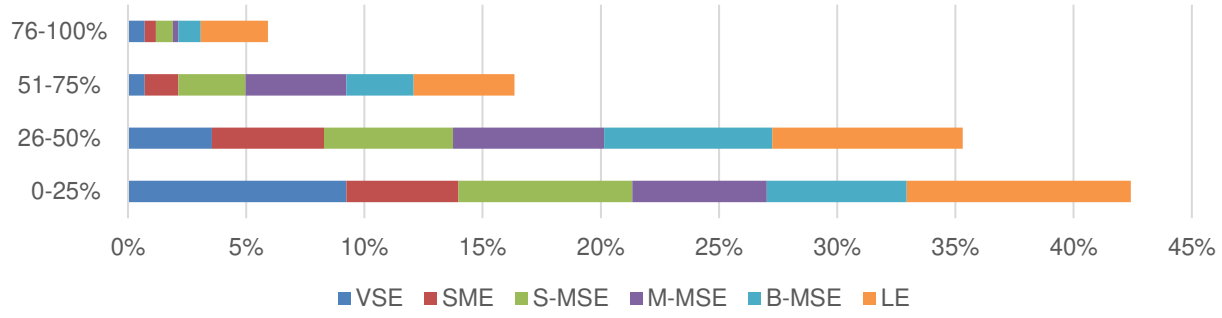
% fully developed externally:



% purchased but trained or refined using internal data:



% totally developed in-house:



Some 24% of companies have chosen a quasi-exclusive approach (>75%):

- Nearly 12% of companies say they rely almost exclusively on outsourcing
- 6% of companies resort to refining external models,
- 6% of companies develop their AIS in-house.

Looking beyond exclusive strategies, and focusing on strategies with a dominant position (>50% of AIS), the following table can be drawn up:

		Internal	
External	Refined	0-50%	51-100%
0-50%	0-50%	48%	11%
	51-100%	9%	3%
51-100%	0-50%	14%	2%
	51-100%	7%	7%

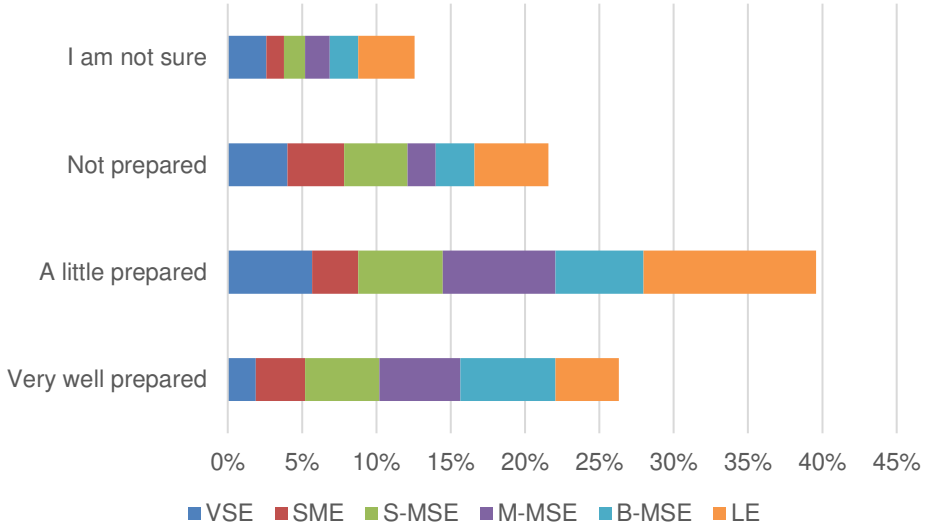
Company strategies for AI adoption can be summarized as follows:

- **16%** of companies have not invested in AI.
- **32%** of companies adopt a highly diversified approach, balancing purchasing, refining, and developing AI solutions without a single dominant strategy.
- **34%** of companies pursue a dominant strategy: 14% focus on purchasing, 9% on refinement, and 11% on in-house development.
- **12%** of companies employ a dual strategy, primarily by purchasing external AI solutions and refining many of them (7%).
- **7%** of companies engage in all three strategies—purchasing, refining, and developing—which suggests a hybrid approach that combines external AI with complementary in-house efforts.

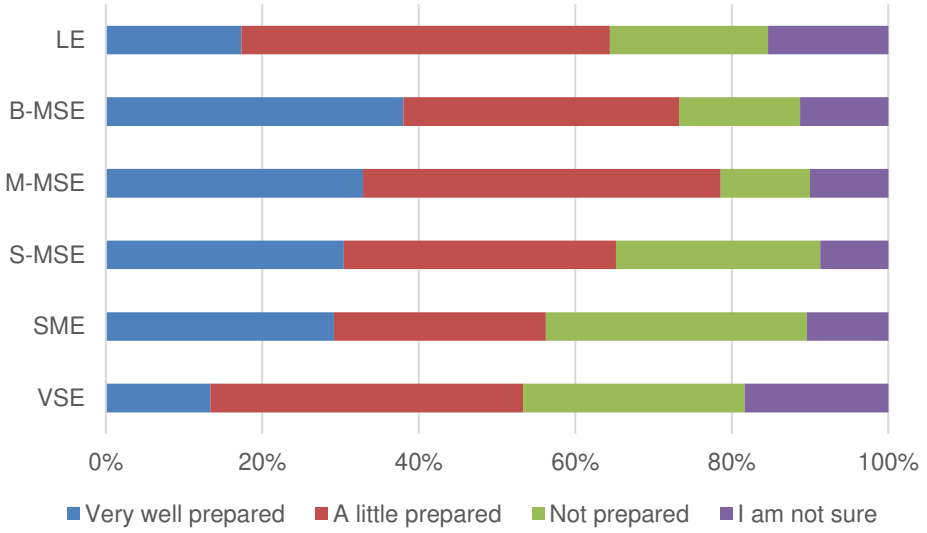
In companies with fewer than five AI systems, in-house development or refinement of AI solutions is uncommon. This is often because these companies either view such activities as outside their core expertise and thus prefer to acquire external AI solutions, or they are in the early stages of AI exploration and start by gaining familiarity with AI applications through external tools.

6.2.3.5 In your opinion, how prepared is your company to manage potential disruptions or risks associated with the use of AI?

26% of companies say they are very well prepared to deal with AI disruptions and risks. Conversely, 62% of companies believe they are little or not at all prepared:

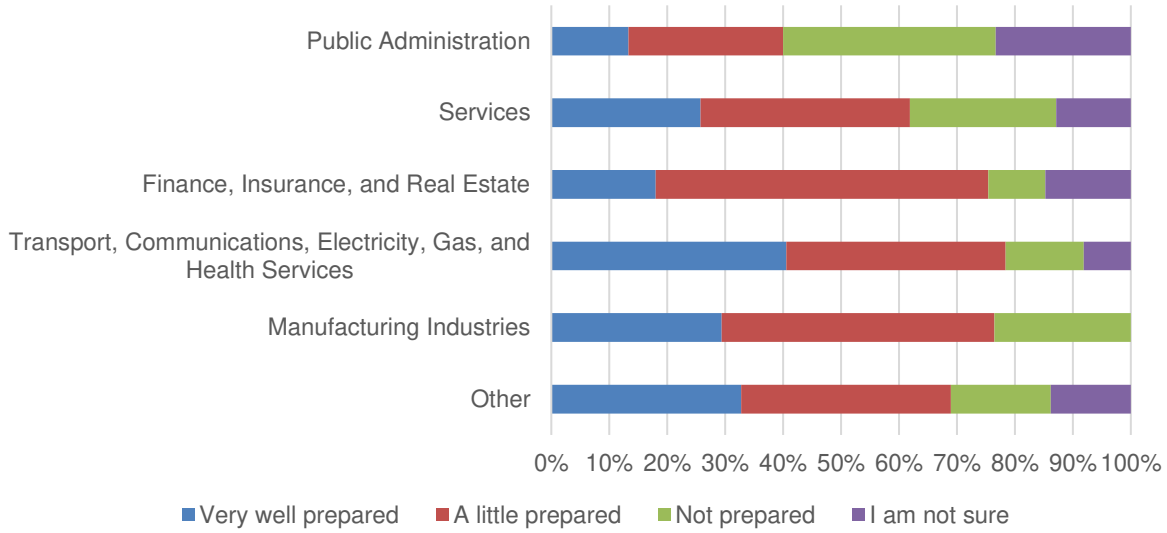


Smaller companies overwhelmingly feel that they are minimally or not at all prepared for AI adoption. Surprisingly, only a small proportion of large companies—just 18%—consider themselves well-prepared, while a notable 20% of large companies feel entirely unprepared:

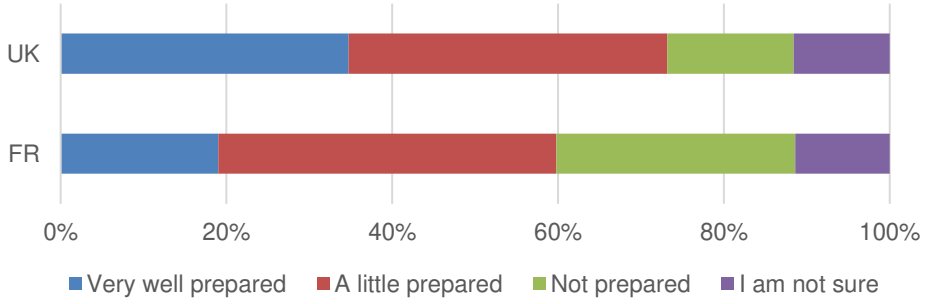


By sector, the utilities sector reports the highest preparedness for AI, with 40% of companies indicating they are very well-prepared and 78% feeling prepared overall. The financial and industrial sectors follow closely behind.

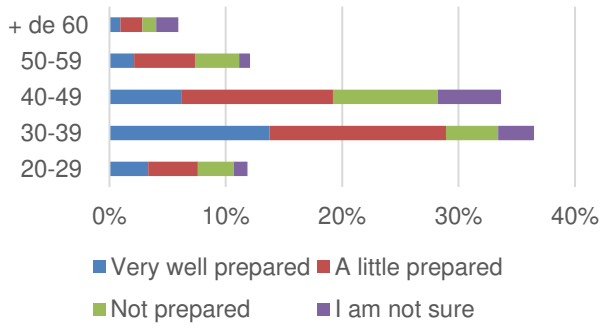
In contrast, the services sector shows a lower overall preparedness rate at 62%, while public administration lags significantly, with only 40% of respondents indicating any level of readiness. Notably, only 13% of public administration respondents consider their organizations well-prepared, while 37% feel they are not prepared at all.



There are significant differences between countries, with 18% of French respondents saying they are prepared, and 28% saying they are totally unprepared, in stark contrast to the UK (34% and 15% respectively).

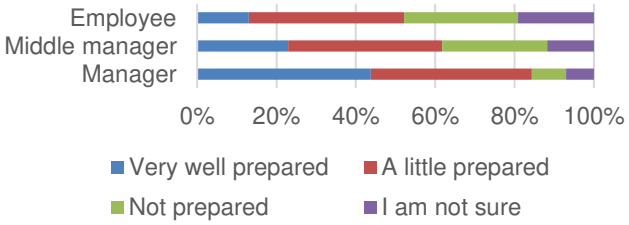


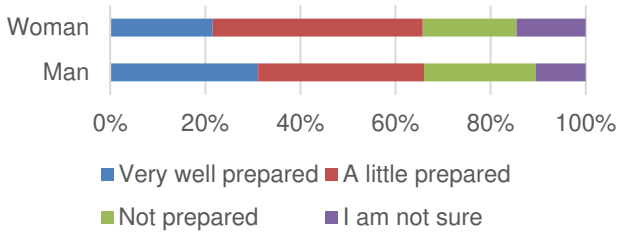
Not only does this question differ from one country to another in terms of culture, but there are also major differences in perception between respondents.



Among age groups, 30-39-year-olds are the most likely to believe their business is prepared for AI, while confidence drops among 40-49-year-olds, with fewer than 60% feeling positive. Those over 60 are the least optimistic about their organization's readiness.

Positions vary widely on this issue, with employees being very reserved, with only 12% considering their company to be very well prepared.



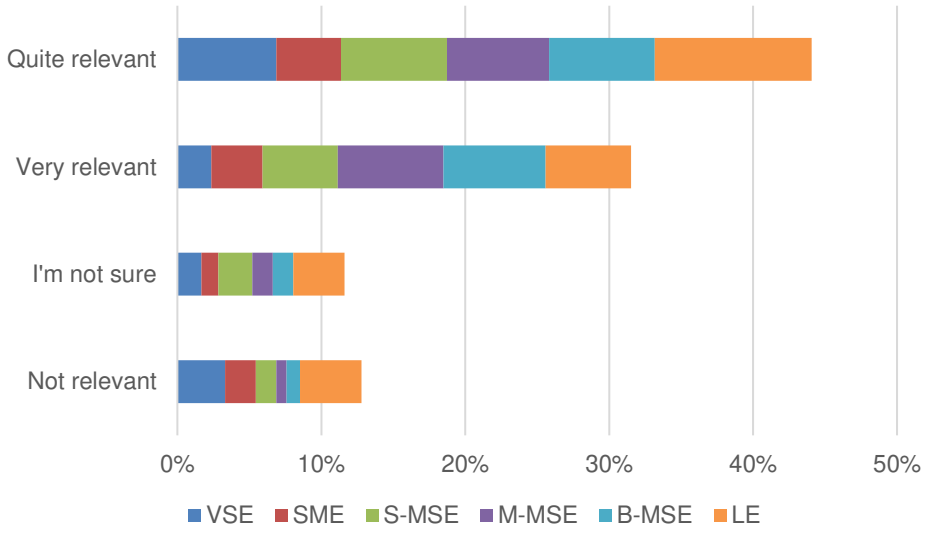


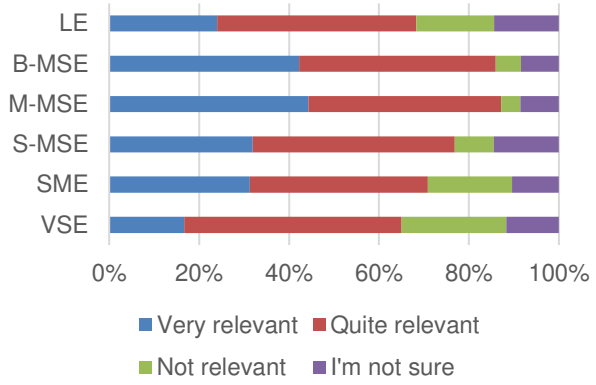
A noticeable gender difference emerges in assessments of AI readiness: women tend to be more cautious, with 22% considering their companies very well-prepared compared to 31% of men. Additionally, 15% of women feel their company is unprepared, compared to 11% of men.

Finally, it is worth noting that companies feeling well-prepared for AI are significantly more common among those that have already encountered AI implementation challenges, suggesting that these organizations have learned from past difficulties and grown stronger as a result.

6.2.3.6 In your opinion, how relevant is the training of your employees in managing potential disruptions or risks associated with the use of AI?

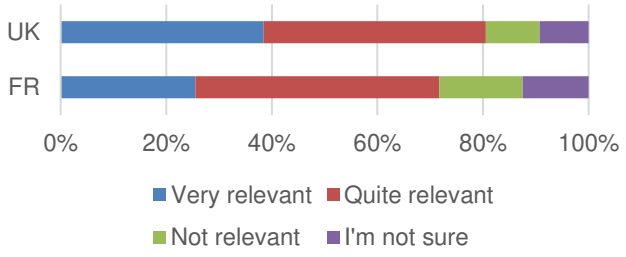
For 32% of respondents, employees are considered very well-trained in AI. The most common response, however, is more cautious, with 44% indicating that training is fairly relevant. Only 13% of respondents feel that current training is inadequate

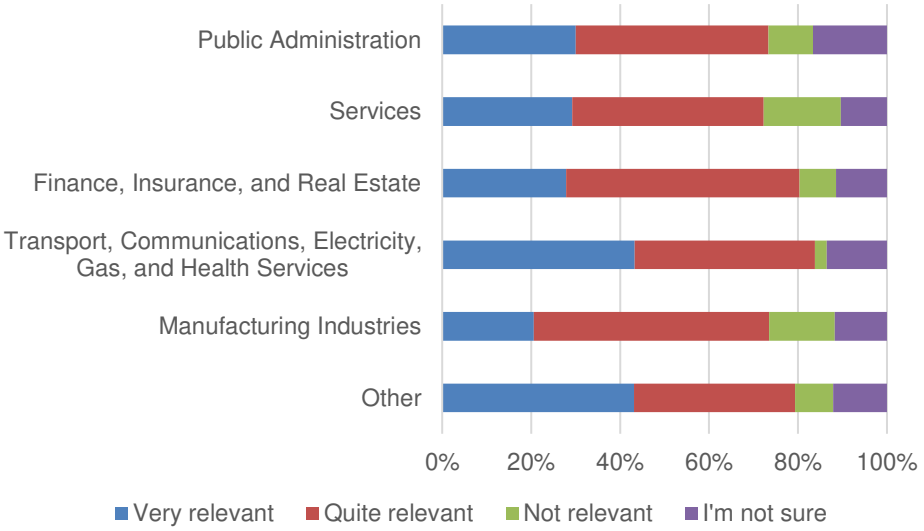




The most critical responses come from companies at both ends of the size spectrum—VSEs, SMEs, and LEs—with 15-20% of respondents in these groups rating the training as inadequate.

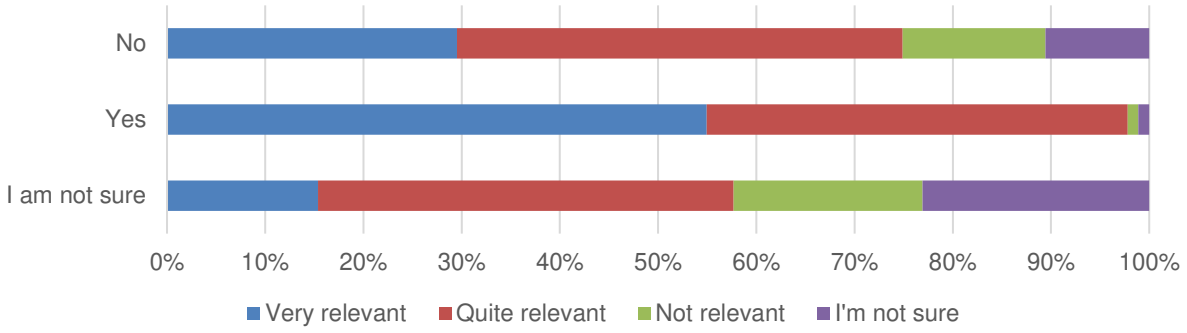
British respondents view themselves as more prepared than their French counterparts, with more of them rating their training courses as very relevant (39% in the UK versus 25% in France) and fewer considering their training inadequate (10% in the UK compared to 17% in France).





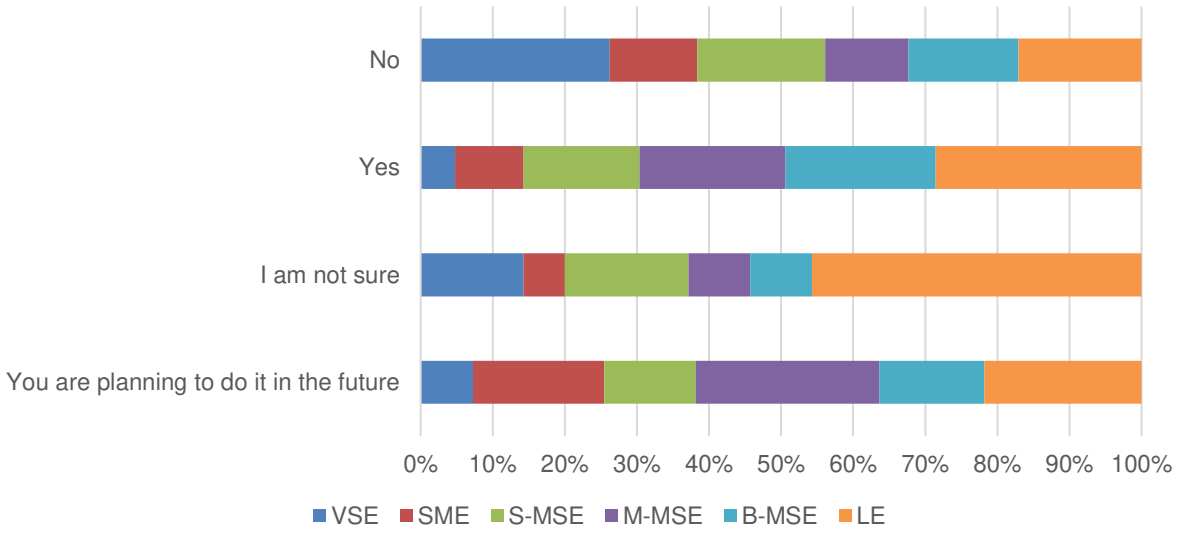
The utilities sector stands out positively, with 40% of respondents rating their training courses as very relevant, and 83% expressing positive opinions overall. Across all sectors, positive responses exceed 70%, though differences emerge at the extremes. For instance, the industrial sector seldom views its training as very relevant (only 20%), while 18% of respondents in the services sector find their training inadequate. Public administration ranks slightly higher than these two sectors on this measure.

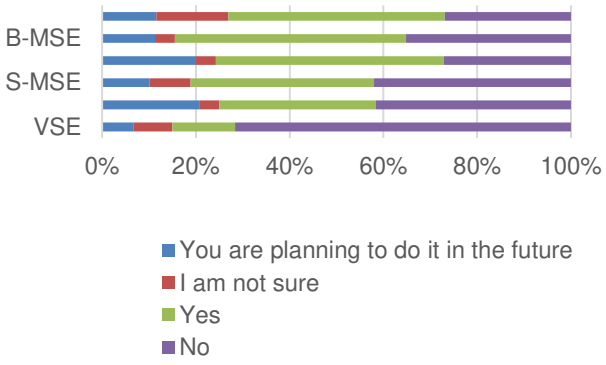
Lastly, it's worth noting that companies that have faced AI implementation challenges are significantly more likely to view their employee training as relevant:



6.2.3.7 Does your company offer AI training for employees?

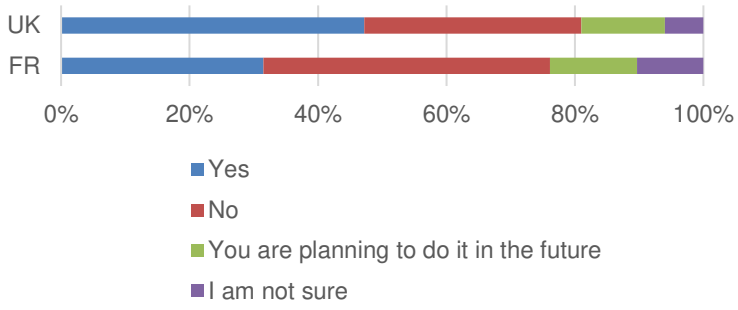
Responses are nearly evenly split, with 'Yes' and 'No' each at around 40%. However, it is important to consider the 13% of respondents who indicated that their company plans to introduce AI training.

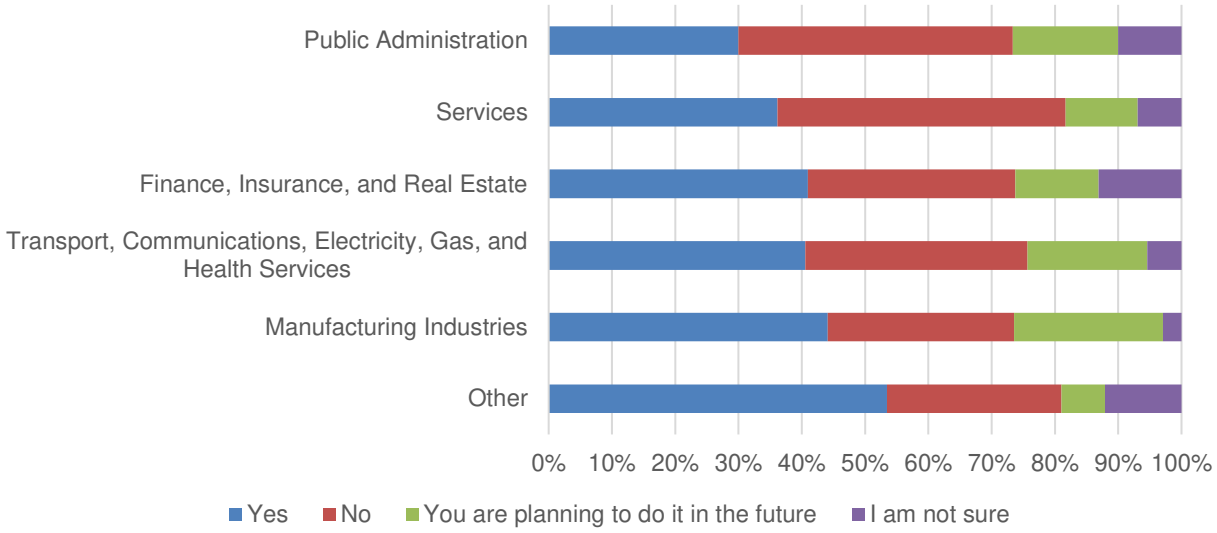




VSEs are notably lagging in terms of training. On the other end of the spectrum, LEs are not necessarily the most advanced; delivering training to a substantial portion of their workforce requires agility to bridge the gap between planning and implementation. It is the MSEs that show the most dynamism on this front, particularly when considering upcoming training initiatives.

UK respondents reported that 59% of companies offer or plan to offer training courses, compared to 45% of French respondents—a notable discrepancy.



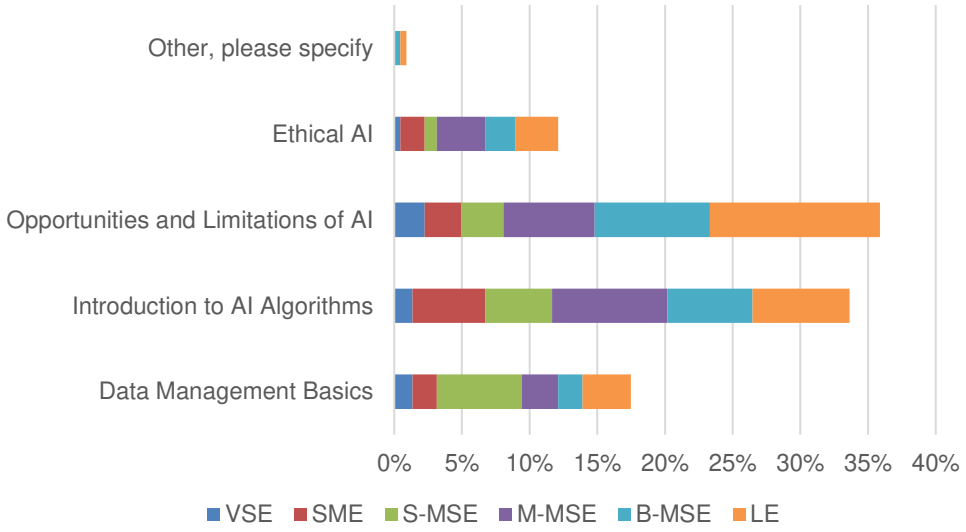


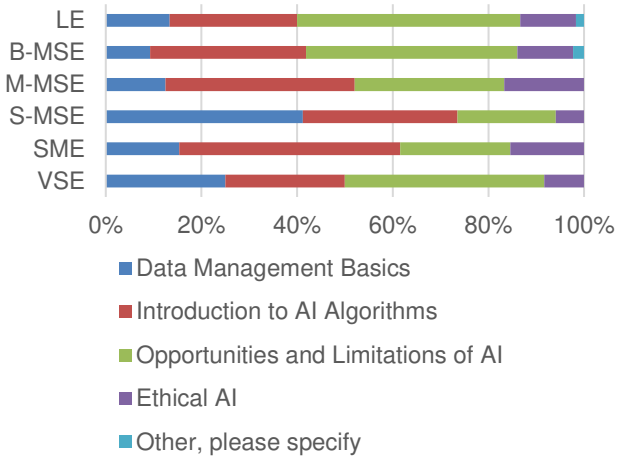
The industrial sector is highly proactive regarding current and upcoming training, with a rate of 68%, while the public administration sector lags behind at 45%.

6.2.3.8 What is the main objective of the training?

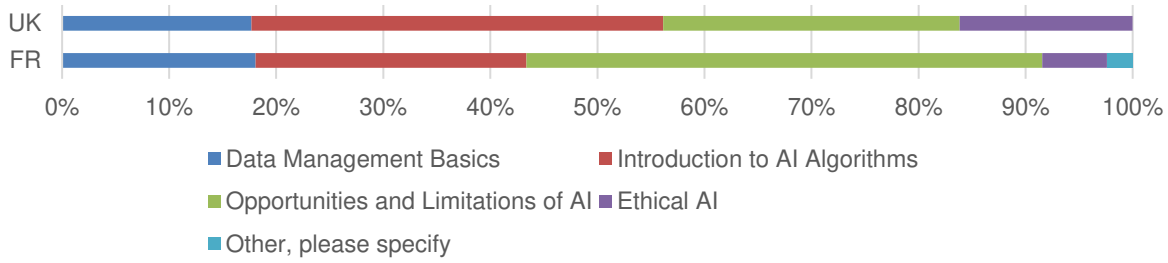
Among the four proposed training objectives, two stand out: 'opportunities and limitations of AI' (36%) and 'introduction to AI algorithms' (34%). By contrast, 'basics of data management' (17%) and 'ethical AI' (12%) lag behind.

This means that responsibility-oriented training—covering AI's opportunities, limitations, and ethics—accounts for 48% of responses, while more technical training—focused on algorithms and data management—makes up 51%.

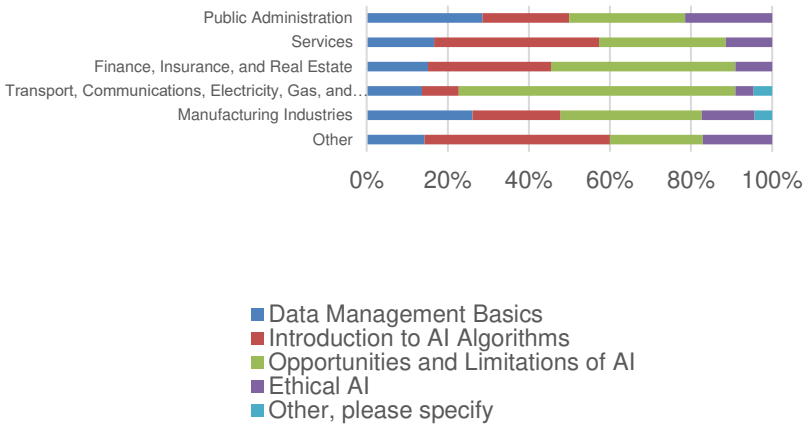




In 61% of cases (48% for 'opportunities and limitations' and 13% for 'ethics'), LEs seem to prioritize less technical training content. In contrast, SMEs and MSEs tend to focus more on technical training, particularly in algorithms and data management.



The focus of AI training courses varies significantly between countries. British respondents place more importance on technical aspects, particularly AI algorithms (39%), while ethics receives some noticeable attention (17%). In contrast, French respondents prioritize training on AI's opportunities and limitations (49%), with minimal emphasis on ethical issues (6%).



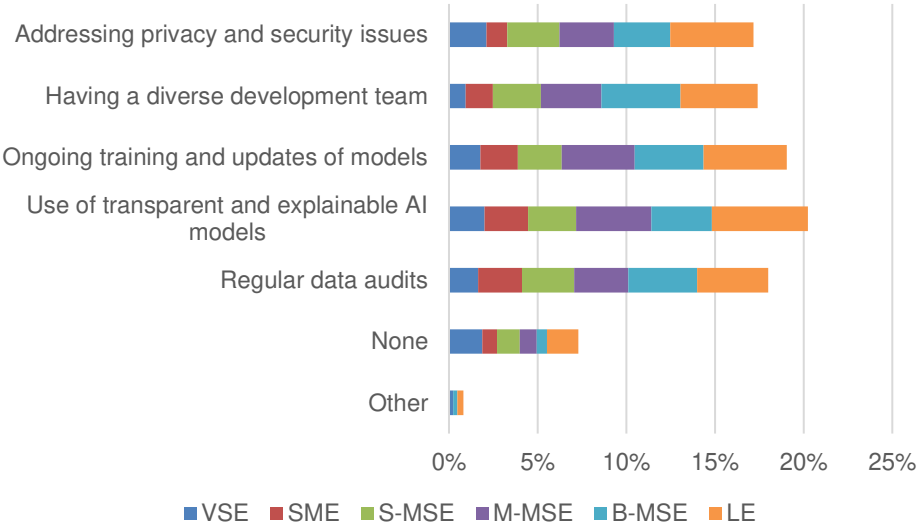
The utilities and financial sectors emphasize training on the opportunities and limitations of AI but appear to lag behind in ethical AI training. In contrast, the services sector places a stronger focus on algorithmic techniques.

Public administration, meanwhile, offers a more balanced approach, with training that addresses all four objectives.

6.2.3.9 Which of the following best practices for AI applications does your company implement?

2.0 responses per respondent

The five practices submitted to respondents were fairly evenly balanced, all garnering between 17% and 20% of votes.



The order of best practices is almost reversed between French and British respondents:

FR	GB
Privacy and Safety	Transparency / Explicability
Diversified Development Team	Continued Model Updates
Transparency / Explicability	Regular Audits

French respondents appear to prioritize best practices centred on user protection, with a focus on confidentiality and security, team diversity (addressing equity bias), transparency, and accountability. In contrast, British respondents lean more towards performance-oriented practices, emphasizing measures to prevent model obsolescence through regular updates and data auditing—seen both as risk prevention (intellectual protection) and as a means of ensuring data quality, which is essential for performance.

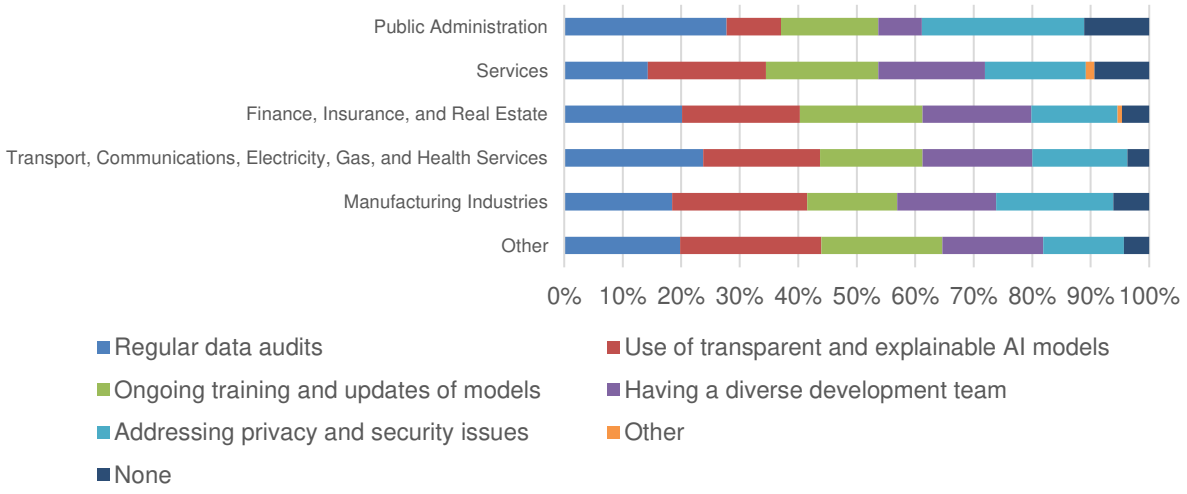
However, performance also contributes to user protection, underscoring that best practices are not a simple choice between user protection and performance; both aspects are interconnected and complementary.

Public administration places a strong emphasis on confidentiality, security, and data auditing, though model explicability and team diversity are rarely prioritized. The financial sector, by contrast, balances four of the five best practices but ranks data confidentiality and security lower—perhaps because these fields are inherently accustomed to managing these aspects.

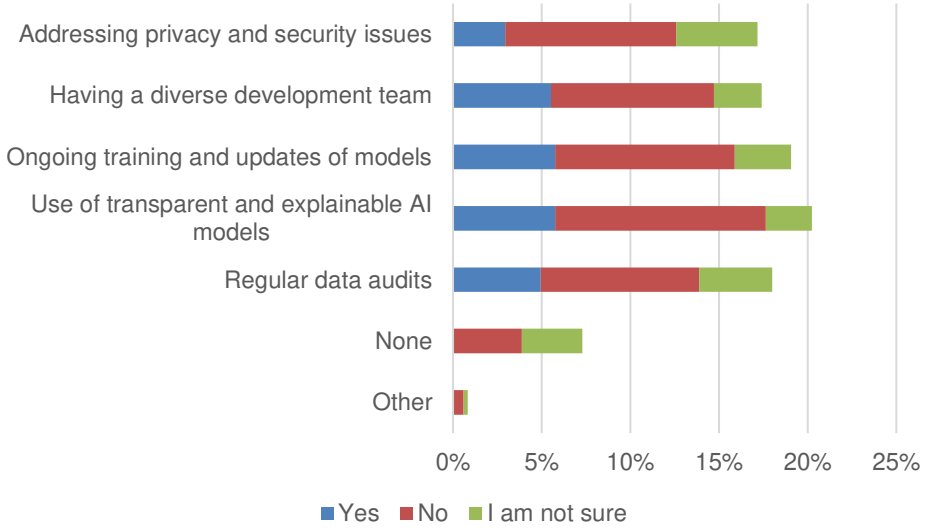
In the utilities sector, data auditing is the top priority, likely due to the sector's large data volumes and the corresponding challenges in data management. The industrial sector prioritizes model explicability, particularly for embedded systems and other operational applications where controlled outcomes are essential.

in data management. The industrial sector prioritizes model explicability, particularly for embedded systems and other operational applications where controlled outcomes are essential.

Finally, it is notable that perceptions between male and female respondents show minimal difference, with 17% of both groups emphasizing the importance of a diverse development team.



Companies with significant AI implementation problems also prioritize best practices differently:



Top best practices for these companies include regularly updating models and establishing a diverse development team, with data audits also strongly represented. In contrast, confidentiality and security concerns are given less emphasis.

6.3 AI and data

6.3.1 To remember

20% of companies have not invested in data management systems, including large enterprises**.**

39% of companies rate their data management experience as moderate to limited, and **13%** describe it as weak to non-existent.

19% of respondents consider AI performance highly sensitive to data quality, 37% see it as moderately sensitive, and **22%** believe it is minimally or not at all sensitive.

For companies that have encountered AI implementation issues, these rates shift: **36%** report high sensitivity**, 53%** moderate sensitivity, and only **10%** minimal sensitivity.

49% of respondents are open to data-sharing practices that respect personal data confidentiality.

6.3.2 Overview table

20%	of companies have not invested in data management systems.
39%	of companies feel they lack a strong track record in data management, with 13% reporting minimal or no experience.
44%	of information collected by companies comes from internal sources (such as purchasing, sales, HR), while 38% comes from external sources (such as customers and social networks).
19%	of respondents believe that data quality significantly impacts AI's effectiveness, while 22% think it has little to no effect. For companies that have encountered AI implementation challenges, these rates increase to 36% and 10%, respectively.
49%	of respondents feel their company is open to adopting data-sharing practices that respect confidentiality.
33%	of companies use model-based protections to guard AI against data copying and theft; 28% use protections that target the data itself, and another 28% use access control measures.

6.3.3 Answers

20% of companies have not invested in data management systems (DMS), bringing the total percentage of companies that have not invested in either AI solutions (AIS) or DMS to 30%. Meanwhile, 22% of companies believe that data quality has minimal or no impact on AI performance. This sentiment is notably higher among French respondents (29%) but significantly lower among companies that have already faced AI implementation challenges (10%).

French respondents, while appearing less concerned about data quality, show greater interest in collecting and using external data sources, such as customer insights or social media. However, they also demonstrate a greater reluctance toward data sharing. Overall, 49% of respondents are open to data-sharing practices, though interest is more tempered in highly regulated sectors, such as finance and public administration, where restrictions are more stringent.

show greater interest in collecting and using external data sources, such as customer insights or social media. However, they also demonstrate a greater reluctance toward data sharing. Overall, 49% of respondents are open to data-sharing practices, though interest is more tempered in highly regulated sectors, such as finance and public administration, where restrictions are more stringent.

61% of companies consider themselves experts or experienced in data management. Yet, even among this group, a third are unconvinced that data quality has a substantial or moderate effect on AI performance.

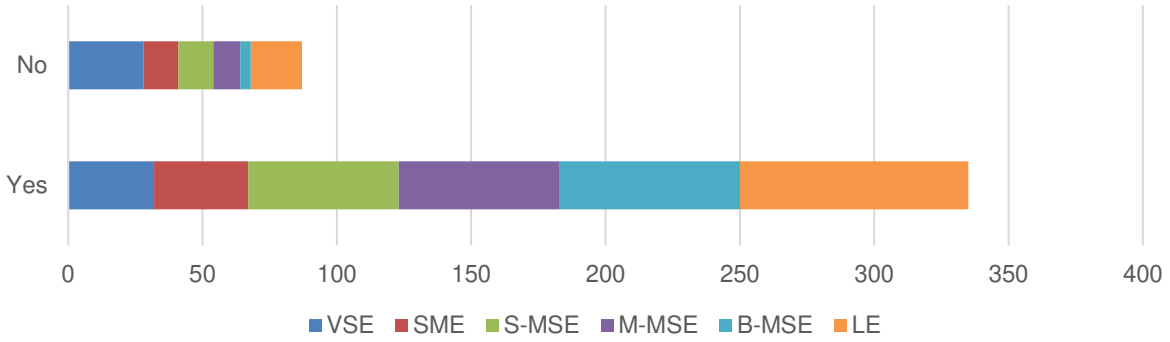
unconvinced that data quality has a substantial or moderate effect on AI performance.

When it comes to data protection, encryption ranks as the top best practice. Companies also employ a range of other methods to secure both models and data and to control access to models.

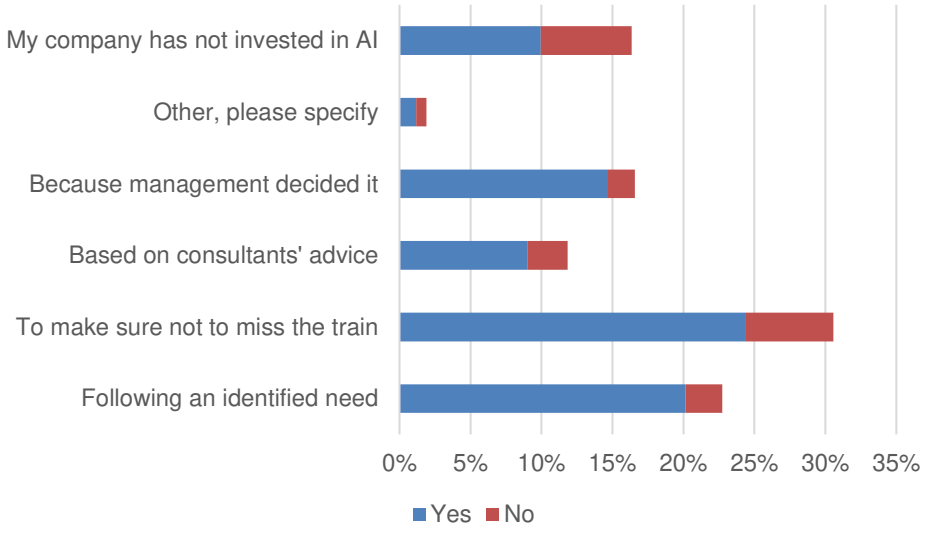
Despite many companies viewing themselves as advanced in data management, a significant number still underestimate the role of data quality in maximizing AI’s potential. Cultural differences, particularly in France, reveal a hesitancy toward data sharing, even as interest in using external data sources grows. To fully realize AI's benefits, companies need to deepen their understanding of data quality and adopt more integrated and secure data management practices.

6.3.3.1 Has your company invested in data management systems?

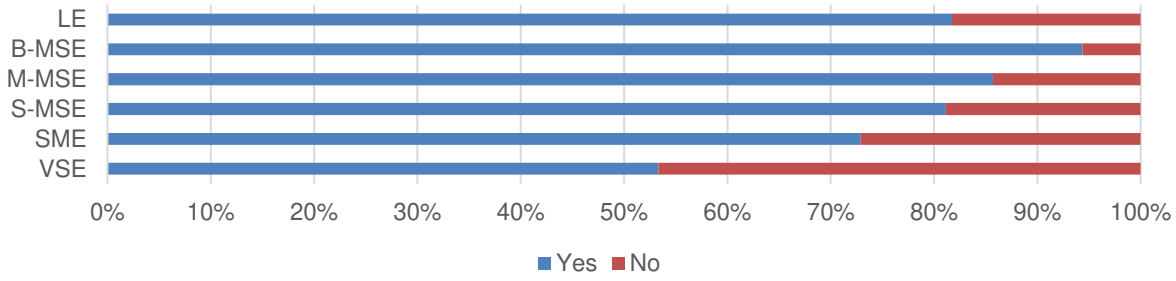
Nearly 80% of companies have invested in data management systems (DMS)... but 20% of companies have not.



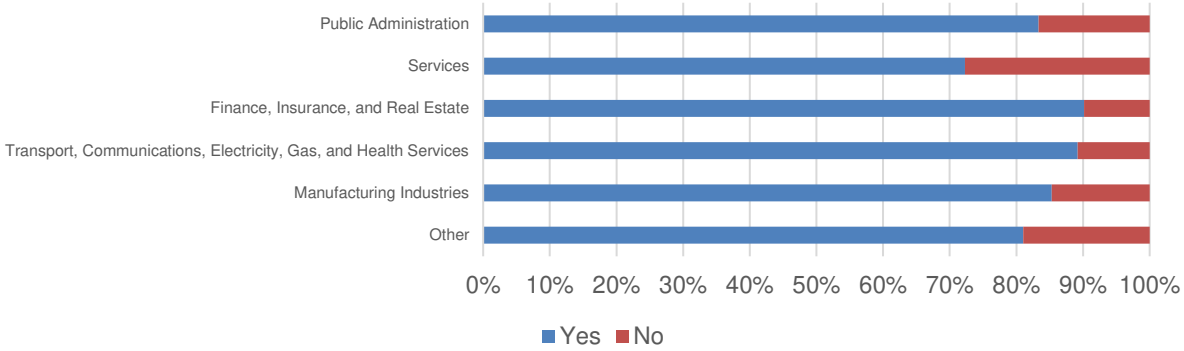
The 20% of companies that have not invested in data management systems have also not invested in AI for a third of them:



In all, 30% of companies have not invested in either AIS or DMS (including 7% in neither).



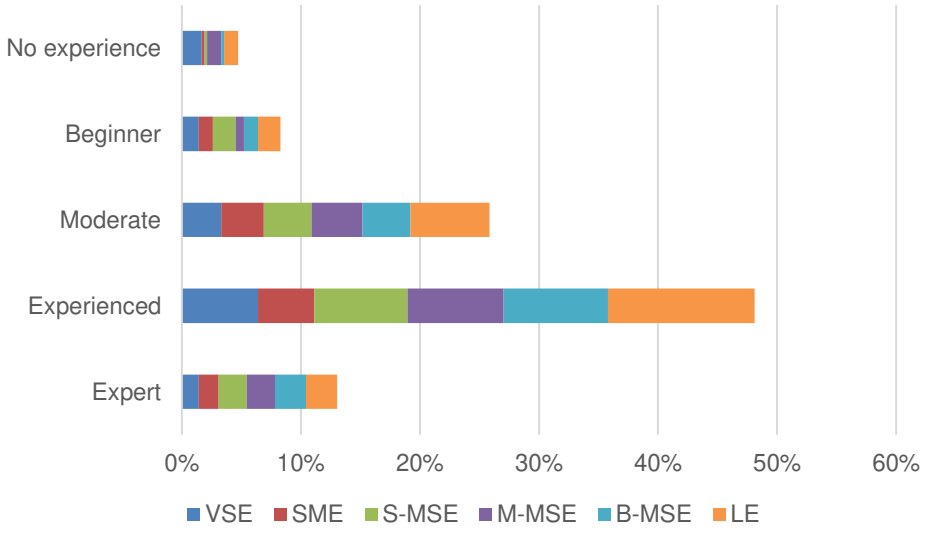
Small companies are understandably the most likely not to have invested in data management systems, with up to 47% of very small businesses reporting no investment. Conversely, 18% of LE respondents indicate that their company has not invested in such systems. Although large enterprises handle diverse types of data, some may lack investment in more advanced solutions, such as data lake management, data mesh technologies, or data and metadata governance systems.



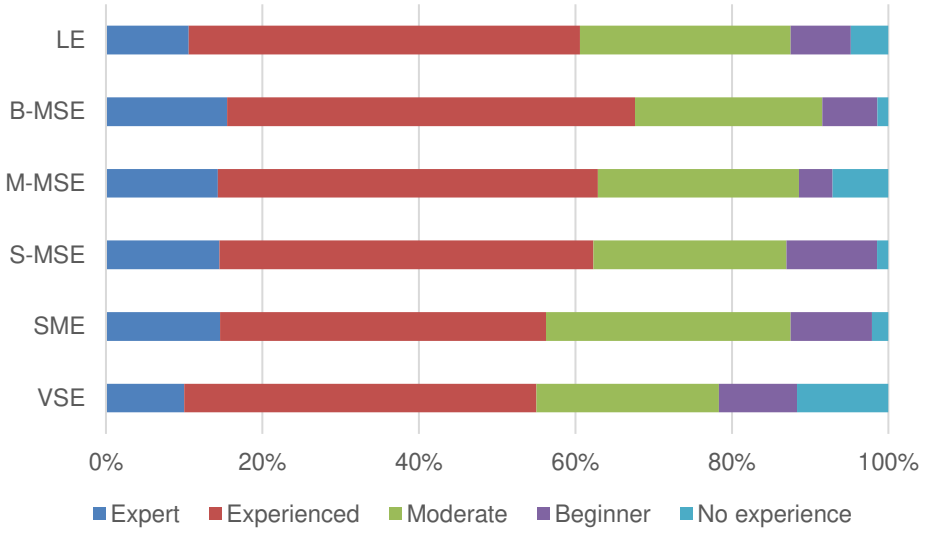
At the sector level, the financial sector unsurprisingly stands out as highly equipped in data management, although the fact that 10% of companies in this sector lack such investments indicates potential for further growth. The services sector is the least equipped, with 28% of companies not investing in data management systems—a figure partly explained by the presence of many small businesses within this sector

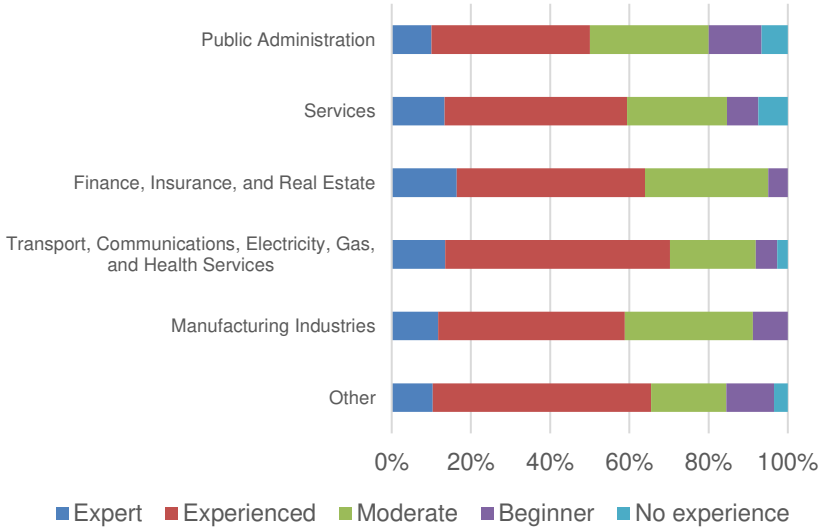
6.3.3.2 How would you rate your company's experience in data management?

60% of respondents consider their company to be expert or experienced in data management, while 40% consider it to have little or no experience at all:



The proportion of companies with experience or expertise ranges from 55% to 67%, depending on company size, indicating a certain homogeneity and therefore a weak relationship between this issue and company size:

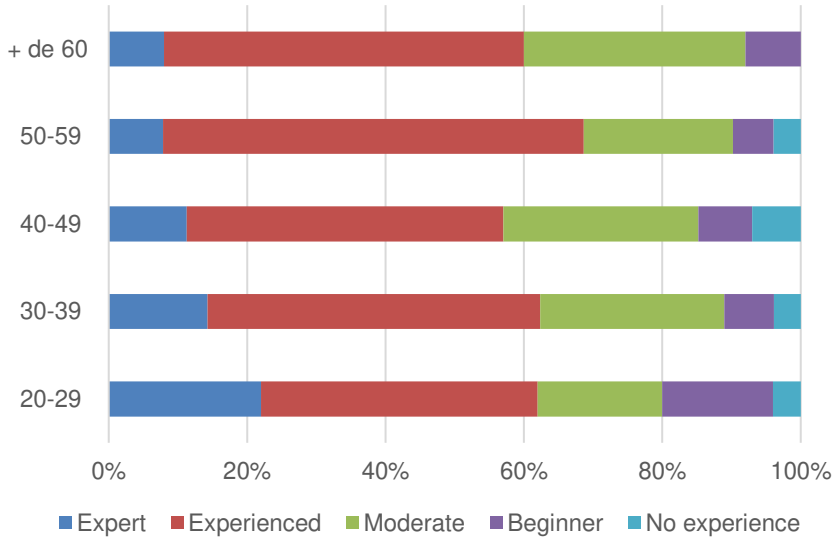


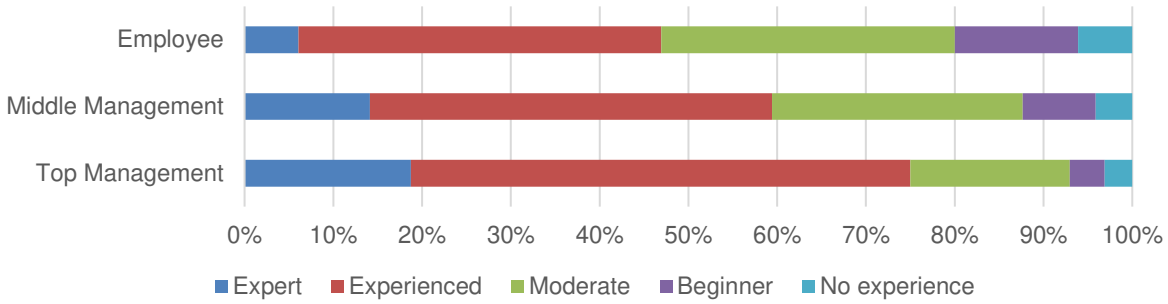


The financial sector has the highest proportion of expert companies (17%), but the utilities sector has the highest rate of experienced companies (70%).

Public administration has the lowest level of experience (50%).

It is interesting to note that the age of the respondent is correlated with the "data management expert" response rate:
More than 20% of 20–29-year-olds say they work for leading data management companies, compared with 7-8% of over-50s.



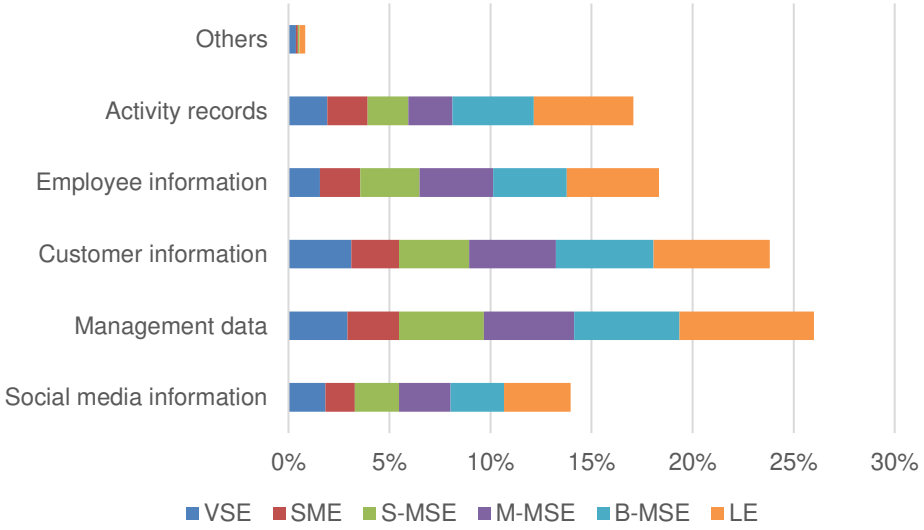


When it comes to position within the company, the perception of a company with experience in data management is highly differentiated.

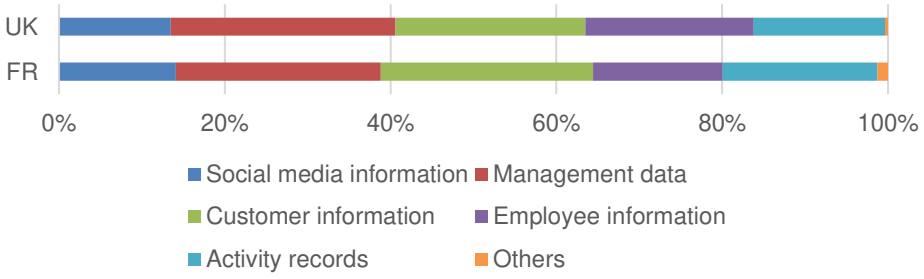
6.3.3.3 What kind of information does your company collect and use?

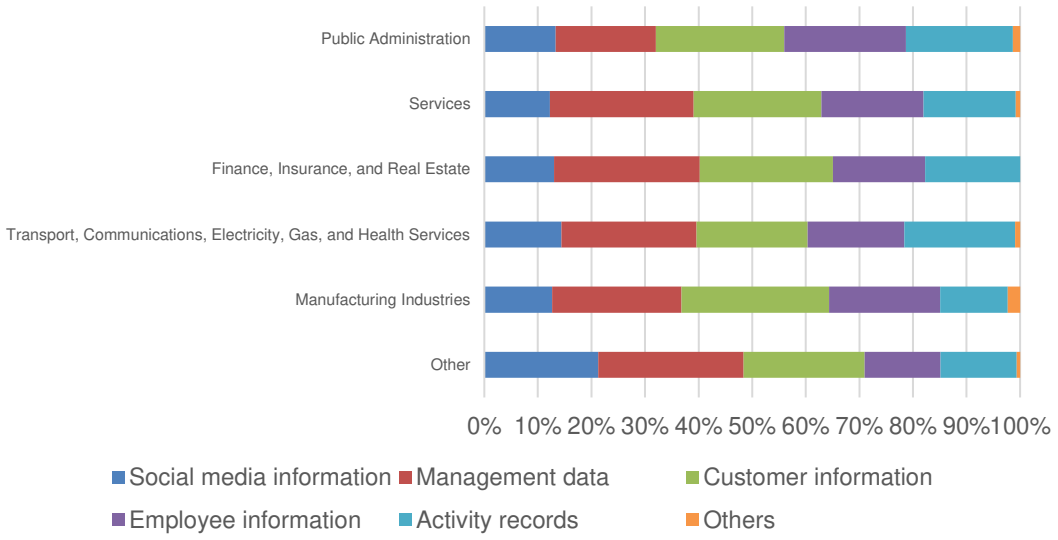
2.6 responses per respondent

Among the five sets of information proposed, two stand out: management data (26%) and customer information (24%):



British respondents are slightly less interested in customer data (customer information and social networks), but much more so in employee data:



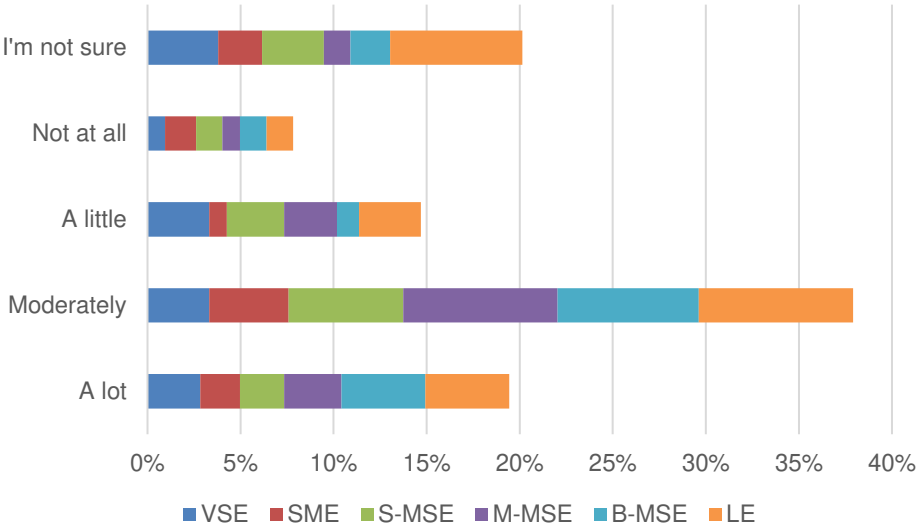


At the sector level, customer information is a key focus across all industries, with the industrial sector showing even greater interest than services and other B2C sectors. The utilities sector prioritizes metadata logs, likely due to the abundance of data from sources such as after-sales service, machine-to-machine interactions, and sensors.

Public administration shows limited collection and use of management data, although it maintains a relatively balanced approach to other types of information (excluding social networks). Finally, the retail sector, included in the 'other' category, strongly skews the overall interest of this group toward social networking data, which is expected given its relevance to retail operations.

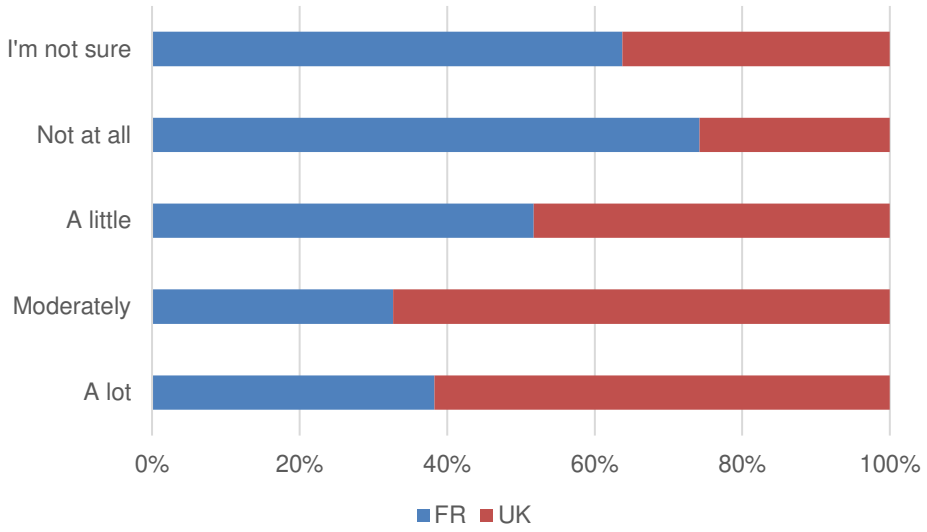
6.3.3.4 To what extent does data quality affect the contribution of AI to your company/industry?

Data quality is a sensitive issue for AI, which cannot reach its full potential if the data it receives is not consistent and reliable (beyond its quantity).

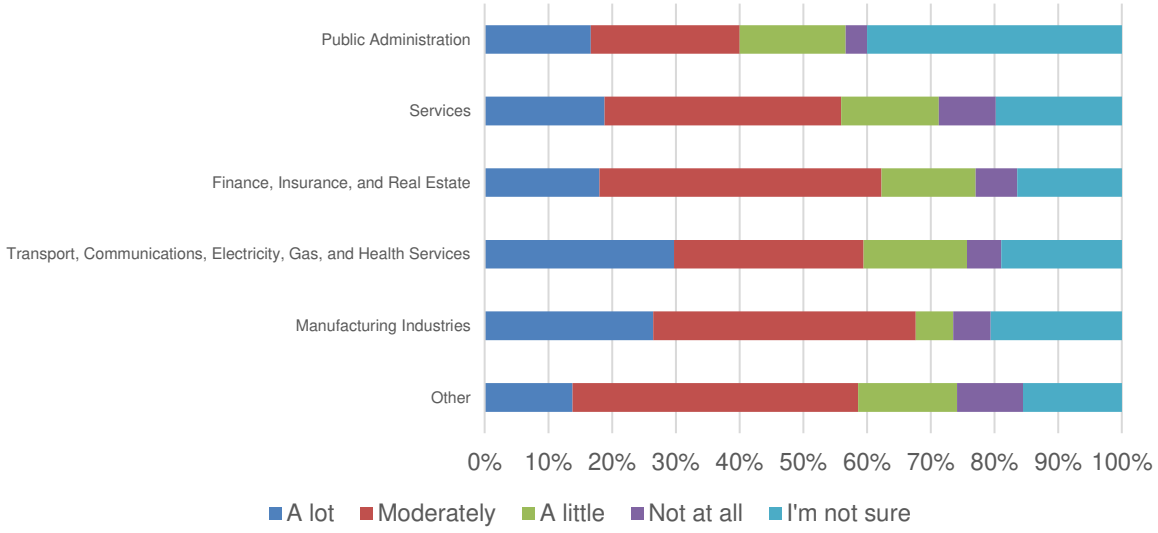


Although data quality is perceived as important, it is not considered crucial, with 38% of respondents considering the subject to have a moderate impact. Half as many consider the impact to be high.

17% of British respondents consider the impact of data quality to be low or non-existent (despite a high level of undecided respondents), compared with 29% of French respondents:

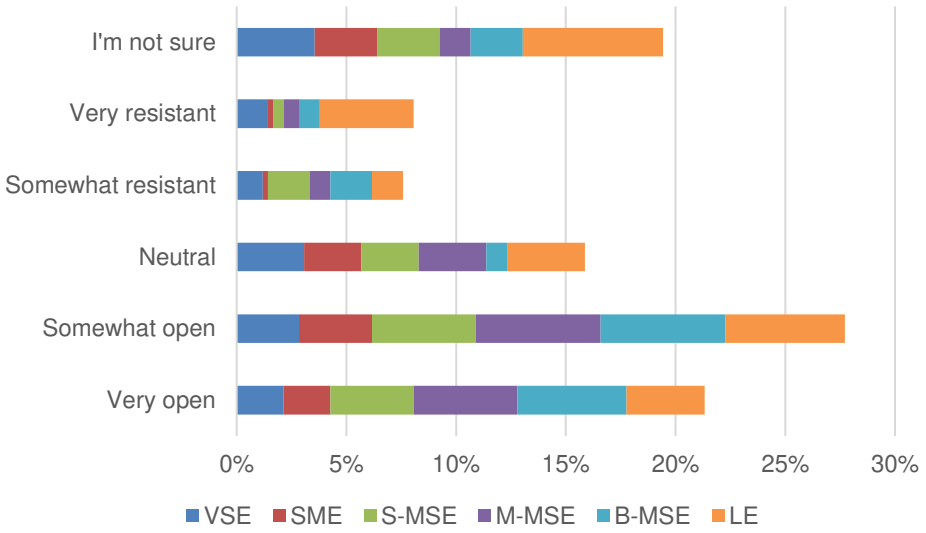


At sector level, only the industry sector stands out significantly below 20% (12%) of responses supporting a low or zero impact of data quality on the contribution of AI:

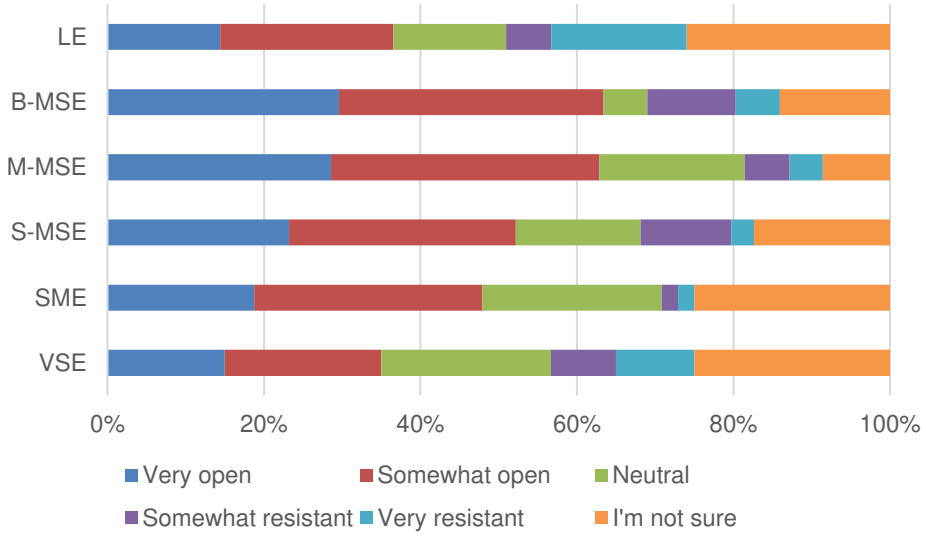


6.3.3.5 To what extent is your company open to the implementation of data-sharing practices, while preserving the confidentiality of personal data?

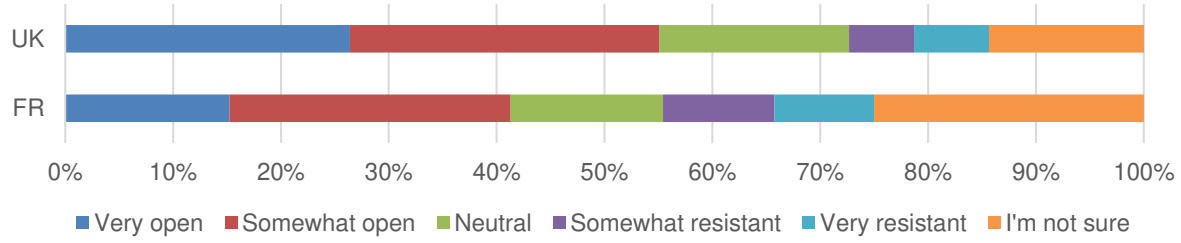
The responses indicate a highly favourable attitude towards data sharing, provided that the confidentiality of personal data is respected, with 48% expressing a positive view, 16% remaining neutral, and 15% expressing a negative view.



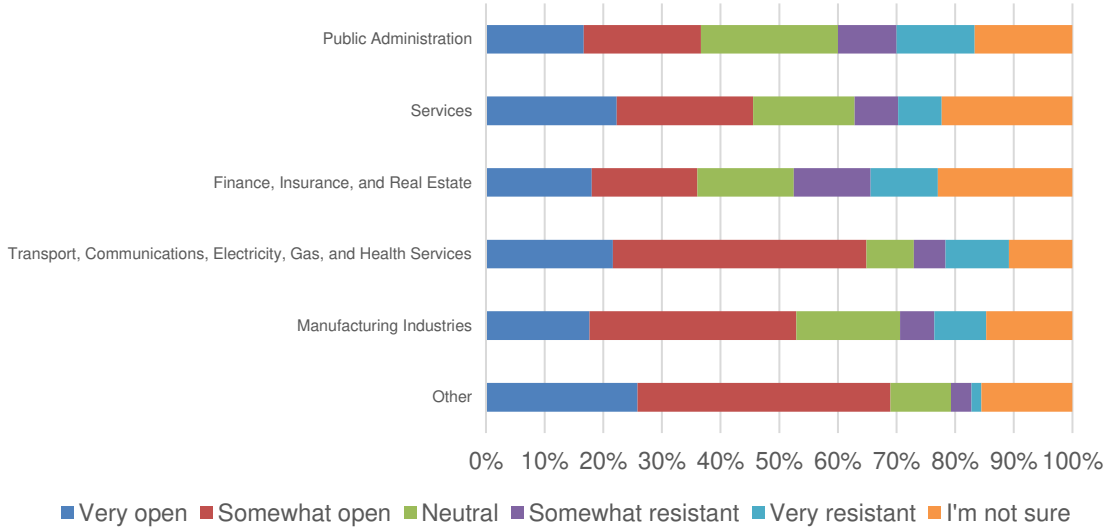
Data sharing, due to the 'club effect,' is particularly appealing for companies with limited data resources, a factor generally correlated with company size. Accordingly, negative attitudes toward data sharing increase with company size, ranging from 5%-10% for mid-sized enterprises to 22% for large enterprises. Notably, two exceptions to this trend are small-to-mid-sized enterprises and very small enterprises, where negative responses are 15% and 19%, respectively.



Openness to data sharing is more pronounced among British respondents, with only 12% expressing reluctance compared to 20% of French respondents.



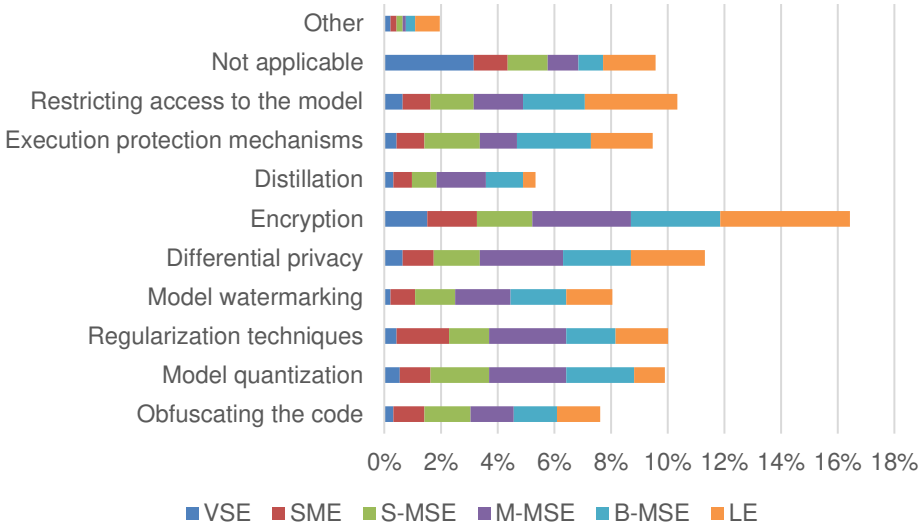
The sectors most reluctant to share data are finance (25%) and public administration (22%), likely due to factors such as confidentiality concerns, sector-specific regulations, a less fragmented pool of players compared to other sectors, and the competitive advantage that exclusive data access provides.



6.3.3.6 How does your company protect its artificial intelligence technologies against the copying or theft of sensitive data?

2.2 responses per respondent

Encryption is the most widely used technique, closely followed by five others:



Notably, only 9% of companies—one-third of which are very small businesses—consider themselves unaffected by this type of issue.

The most popular techniques, by country, are as follows:

	FR	GB
#1	Encryption	Encryption
#2	Protection Mechanisms	Privacy Differential
#3	No Sensitive Data	Model Quantification
#4	Restrict Access to Model	Regularization
#5	Privacy Differential	Model Watermark

Respondents generally use confidentiality techniques; however, French respondents place additional emphasis on access-control methods, while British respondents focus more on techniques related to the model and its data.

The sectors also show some differences in their preferences:

	Services	Finance, Insurance and	Transport, Communications	Manufacturing / Industries	Administration Public
#1	Encryption	Encryption	Encryption	Encryption	Encryption
#2	No Sensitive Data	Restrict Access to the Model	Restrict Access to the Model	Differential Privacy	Restrict Access to the Model
#3	Differential Privacy	Regularization Techniques	Differential Privacy	Model Quantification	Differential privacy
#4	Restrict access to the model	Differential Privacy	Model Quantification	Model Watermark	Execution Protection Mechanisms
#5	Regularization Techniques	Execution Protection Mechanisms	Execution Protection Mechanisms	Restrict Access to the Model	Regularization Techniques

6.4 AI and compliance

6.4.1 To remember

20% of companies have already encountered legal or regulatory challenges related to AI use, from which they have drawn valuable insights.

24% of companies plan to establish a dedicated team or role for AI compliance, joining the **36%** that are already equipped—indicating a recent but growing trend. Conversely, **20% of** companies have no plans to address AI compliance in this way.

14% of companies do not conduct any compliance reviews, while **43%** perform these reviews at least quarterly.

24% of companies rate their knowledge of European AI laws as low, while **29%** consider it high.

Among UK respondents, **45%** consider the laws sufficient, and **27%** find them insufficient —a pattern reversed for French respondents, as **29%** view current European AI laws as sufficient, while 43% find them lacking.

6.4.2 Overview table

20%	of companies have already faced legal or regulatory difficulties related to their use of AI.
20%	of companies do not have and do not plan to dedicate a team or role to ensuring compliance with laws and regulations, a rate which drops to 5% for companies that have experienced difficulties.
60%	of companies will soon have dedicated roles, 24% of which will be created in the near future, demonstrating the growing awareness and momentum in this area.
14%	of companies do not carry out any compliance reviews. Conversely, 43% do so at least quarterly.
34%	of AI projects take particular account of the RGPD.
42%	of measures taken to ensure transparency and clarifiability deal with transparency, and 32% with clarifiability.
58%	of companies are engaging or plan to engage with policymakers or regulators on AI topics, a rate that rises to 97% for companies that have experienced legal difficulties
24%	of respondents consider that their company has a low level of knowledge of European AI law, a rate dropping to 1% for companies that have experienced difficulties.
37% 34%	of respondents consider current AI laws satisfactory, 34% think the opposite. The cultural disparity is strong, with a 45%/27% ratio for British respondents, reversed at 29%/43% for French respondents.

"As early as April 2023, a working group was set up to coordinate the actions carried out within the EDF Group with regard to generative AI. To date, eight families of use cases have been identified and some fifteen experiments have been launched. Cybersecurity, legal issues, acculturation and training have also been taken into account. The challenge now is to accelerate the implementation of the first uses of generative AI with solutions that are secure and mastered by the digital industry."
- Manager at EDF

6.4.3 Answers

20% of companies have already faced legal or regulatory challenges related to AI use, indicating that despite the relatively recent development of AI-specific regulations, these difficulties are neither theoretical nor uncommon. However, 14% of companies still do not conduct compliance reviews, suggesting that awareness of these risks remains incomplete.

Yet, awareness is growing, as seen in the increasing trend of appointing a dedicated compliance officer for AI. 24% of companies plan to create this role, adding to the 36% that already have one in place. Still, 20% of companies do not intend to assign a dedicated compliance role, including 14% that are not very small businesses, where limited resources might make dedicated roles impractical. This decision does not appear to reflect a high confidence in alternative control measures, as over half of these companies report a low level of knowledge regarding European AI laws.

mpanies report a low level of knowledge regarding European AI laws.

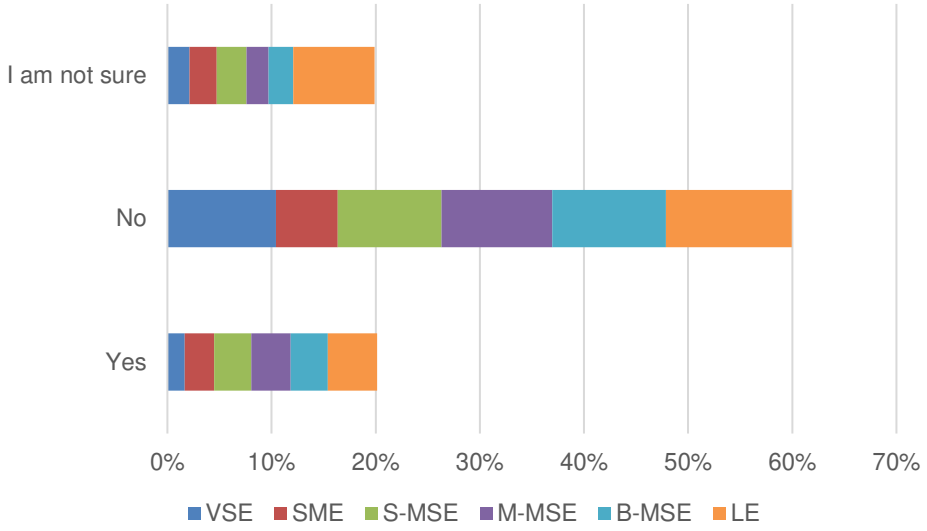
29% of companies consider their understanding of European laws to be high, while 47% rate it as moderate. Knowledge levels are generally higher among larger companies. Notably, 58% of companies are engaging or plan to engage with policymakers and regulators on AI issues, although many have only a moderate grasp of European regulations.

Respondents are divided on the adequacy of existing AI-related laws, with 37% considering them sufficient and 34% finding them insufficient. Limited familiarity with European laws tends to correlate with more sceptical views of their sufficiency. This question also highlights a cultural divide: 45% of British respondents find the laws sufficient, with only 27% finding them inadequate. In contrast, 29% of French respondents see current laws as sufficient, while 43% view them as lacking.

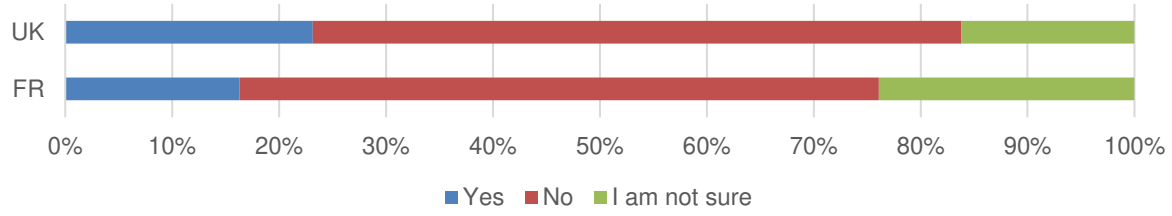
Companies that have previously encountered legal or regulatory difficulties have taken steps to mitigate future issues: 92% conduct periodic compliance reviews, 95% have implemented or plan to implement a dedicated compliance team for AI use, 97% wish to engage with policymakers and regulators, and 55% consider their knowledge of European laws to be high, with only 1% indicating a low level of knowledge.

6.4.3.1 Has your company ever faced legal or regulatory difficulties regarding its use of AI?

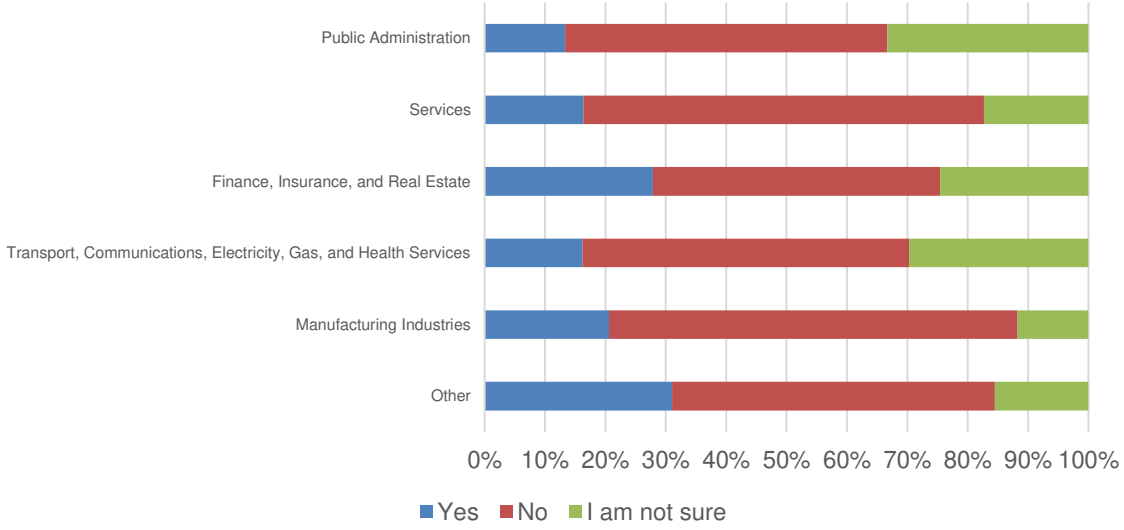
20% of companies have already encountered legal or regulatory difficulties, demonstrating that such problems are neither theoretical nor rare:



This rate is higher for British respondents, at 23%, than for 17% of French respondents:

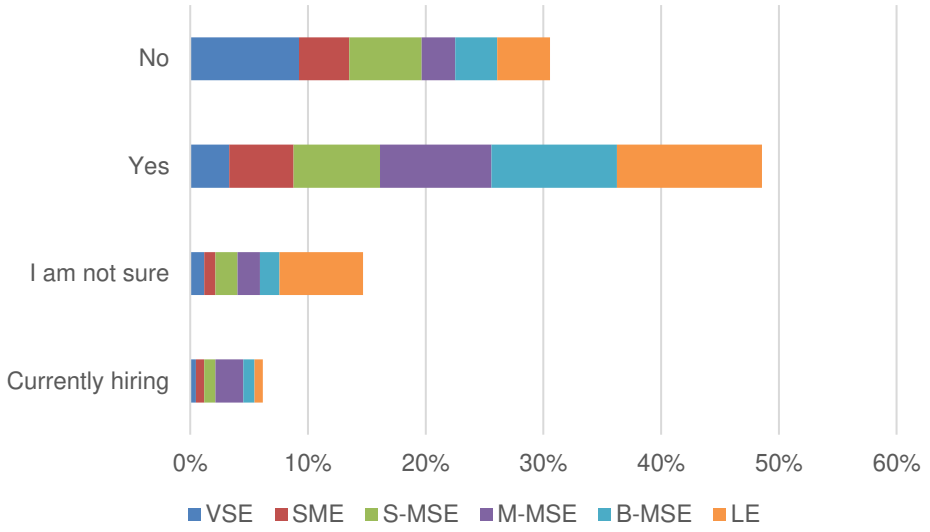


The financial sector (28%) and industry (20%) are more notably affected (within the "other" segment, construction and agricultural activities also seem to be concerned), although no sector is spared, including public administration:



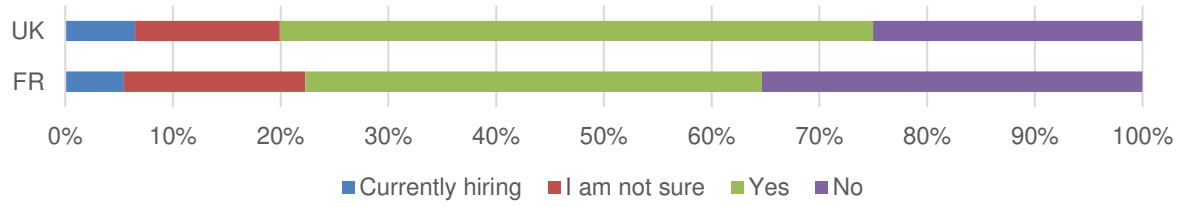
6.4.3.2 Does your company have a dedicated team or role to ensure compliance with laws and regulations regarding the use of AI?

36% of companies have a dedicated AI use compliance role, 60% counting companies intending to do so. Conversely, 20% of companies are not considering the creation of such a role:



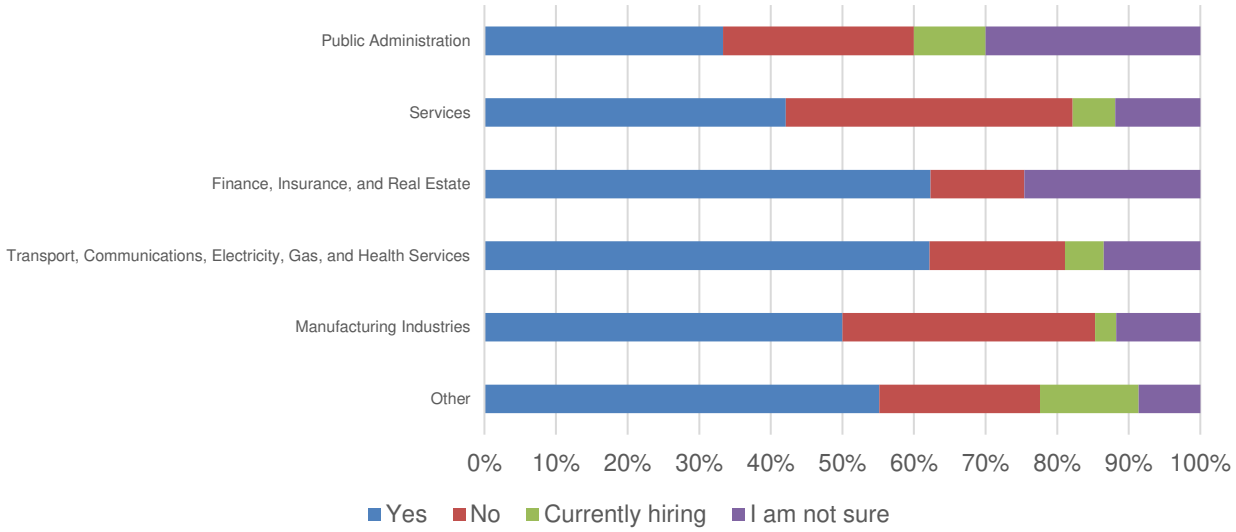
National and regional (European) regulations are steadily being implemented and solidified. Many companies recognize that these regulations require specialized roles, driving a recent surge in companies with dedicated compliance staff, increasing from 36% to 60%.

However, 20% of companies still do not plan to establish such roles, two-thirds of which are medium to large businesses, where it is understandably challenging for smaller firms to dedicate full-time resources to compliance roles. French companies are notably lagging in this area, with 22% not planning to implement dedicated compliance roles, compared to 15% of UK companies.



At the sector level, utilities are leading the way in establishing dedicated compliance roles. Public administration, meanwhile, is showing significant awareness and a strong forward momentum to increase its compliance support from the current lowest rate (27%) to a projected high of 73%.

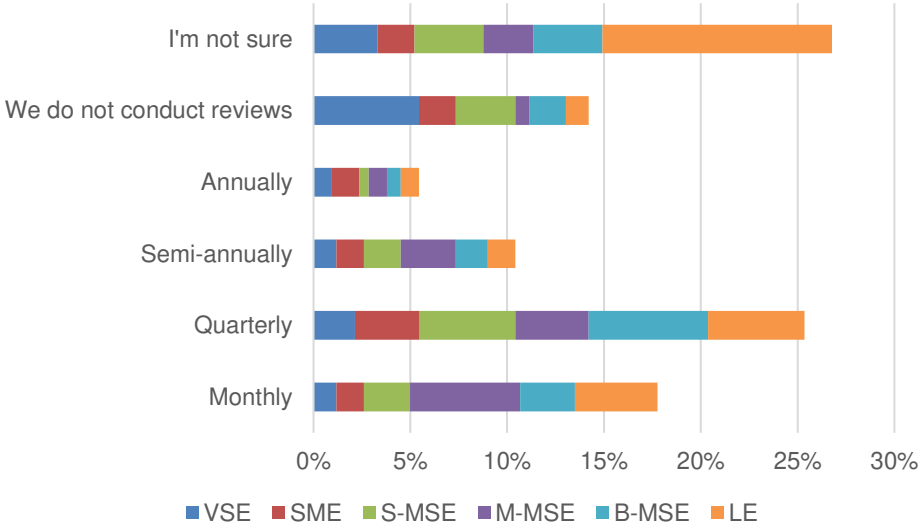
In contrast, the services sector, while currently better positioned than the financial sector in terms of compliance roles, is demonstrating a slower pace of progress, which is likely to place it last in the future—a position currently held by the financial sector. The financial sector's existing, extensive compliance departments may explain this trend; rather than lacking AI compliance, they may be slower to establish a distinct role for it within their compliance teams.



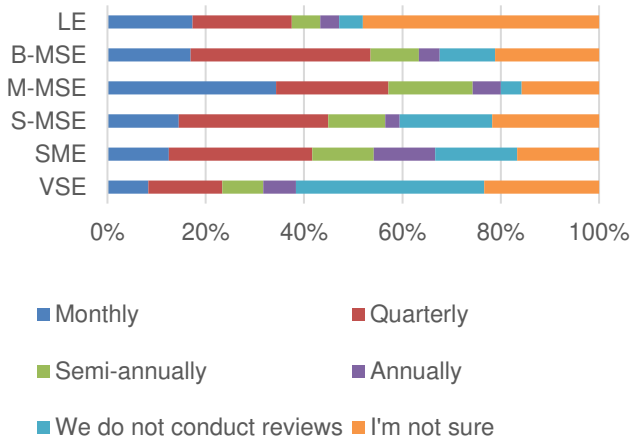
6.4.3.3 How often does your company review its AI practices for compliance with current laws and regulations?

The preferred frequency for AI-related compliance reviews is quarterly (26%), with a further 18% of companies exercising an even more frequent review.

Conversely, 14% of companies say they do not carry out compliance reviews:

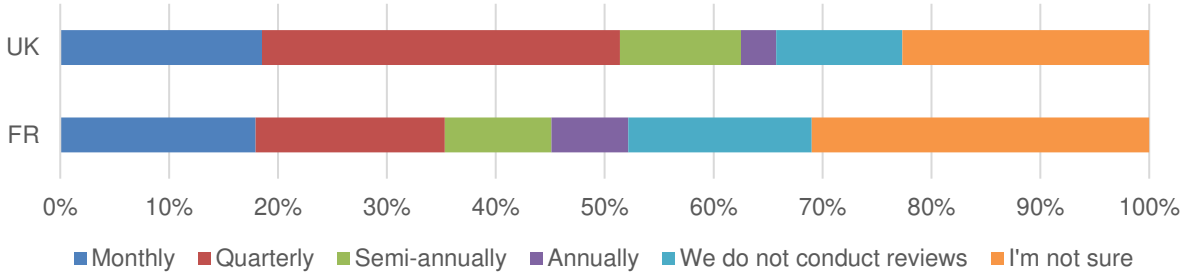


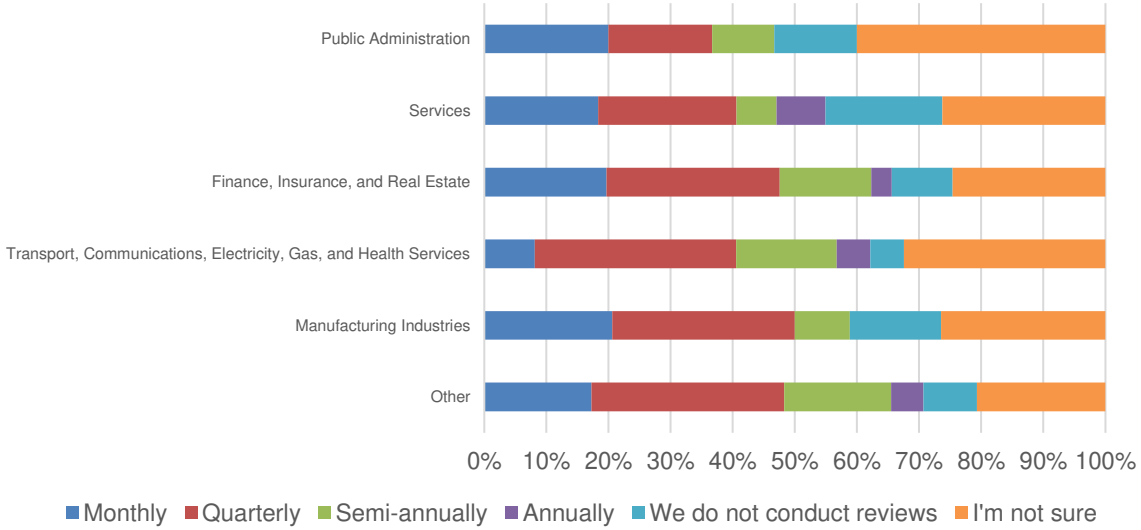
It is interesting to note that among companies that have already experienced legal or regulatory difficulties, 79% of them adopt a monthly or quarterly review rhythm, ... and none of them exempts themselves from a review.



It should be noted that, outside the VSE sector, between 5% and 20% of companies carry out no compliance review at all.

For French respondents, the rate is 17% (including VSEs):



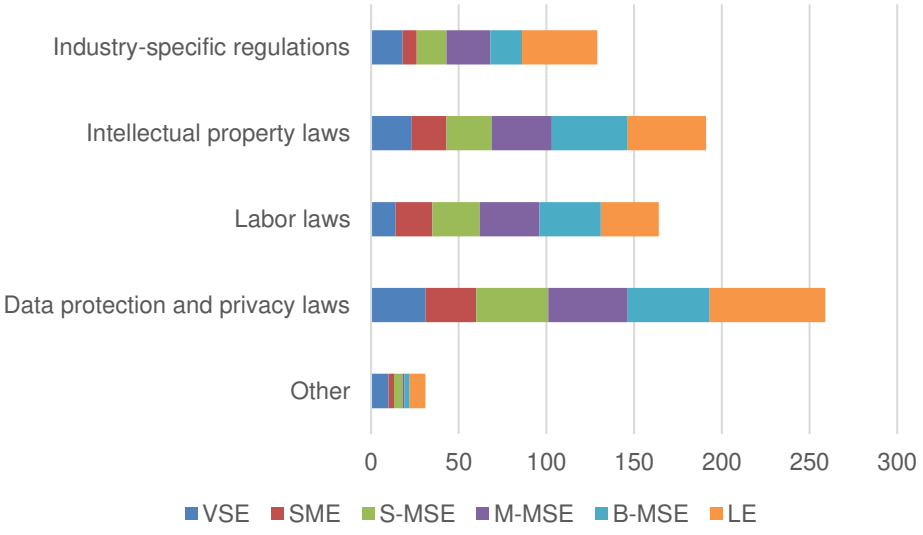


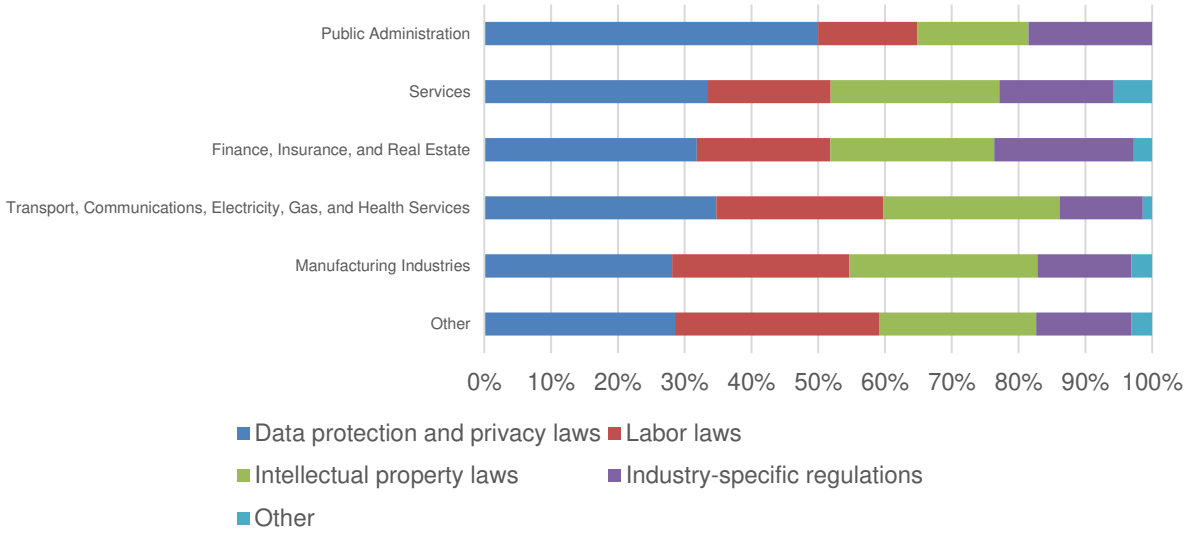
Most sectors prefer quarterly compliance reviews, except for public administration, where a high rate of undecided responses limits the depth of analysis. Notably, the services sector has a significant absence of compliance reviews, with 18% of companies not conducting them. However, every sector includes companies that operate without a compliance review, even in traditionally regulated fields like finance, where 10% of companies lack such oversight.

6.4.3.4 Which of the following regulatory areas does your company take into account in its AI projects?

(1.8 responses per respondent)

There remains significant room for improvement in regulatory compliance, especially regarding personal data protection, which was cited by only 59% of respondents (representing 33% of all responses, with an average of 1.8 responses per respondent).

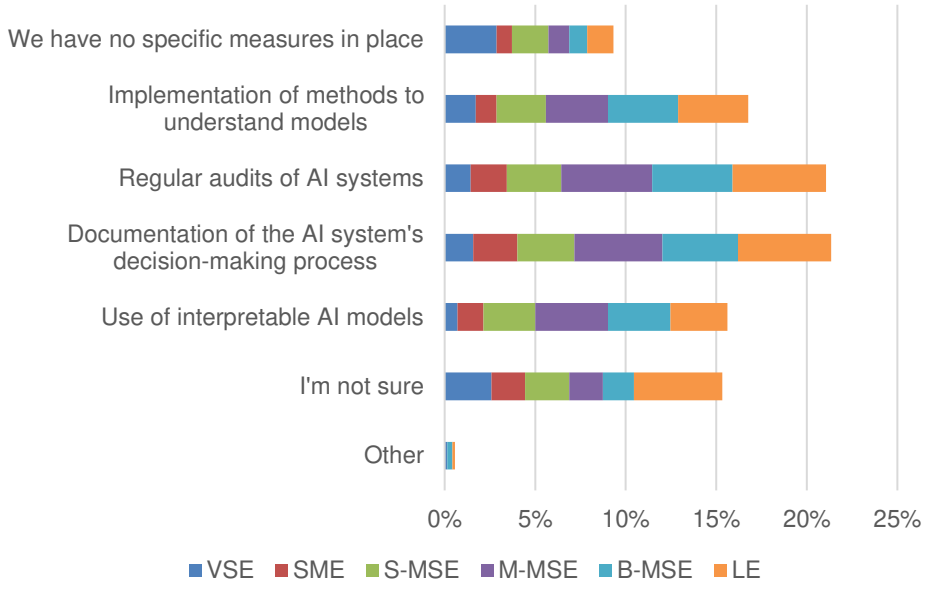




At the sector level, public administration places a strong emphasis on data protection and privacy. However, sector-specific regulations remain relatively uncommon, which is understandable in certain cases. For example, in the services sector, health-related activities are subject to regulation but represent only a small portion of the sector's overall activities. By contrast, the financial and utilities sectors are more heavily regulated, although sector-specific laws do not play a dominant role in guiding compliance efforts.

6.4.3.5 How does your company guarantee the transparency and explicability of its AI systems in line with legal/regulatory requirements?

(1.6 responses per respondent)

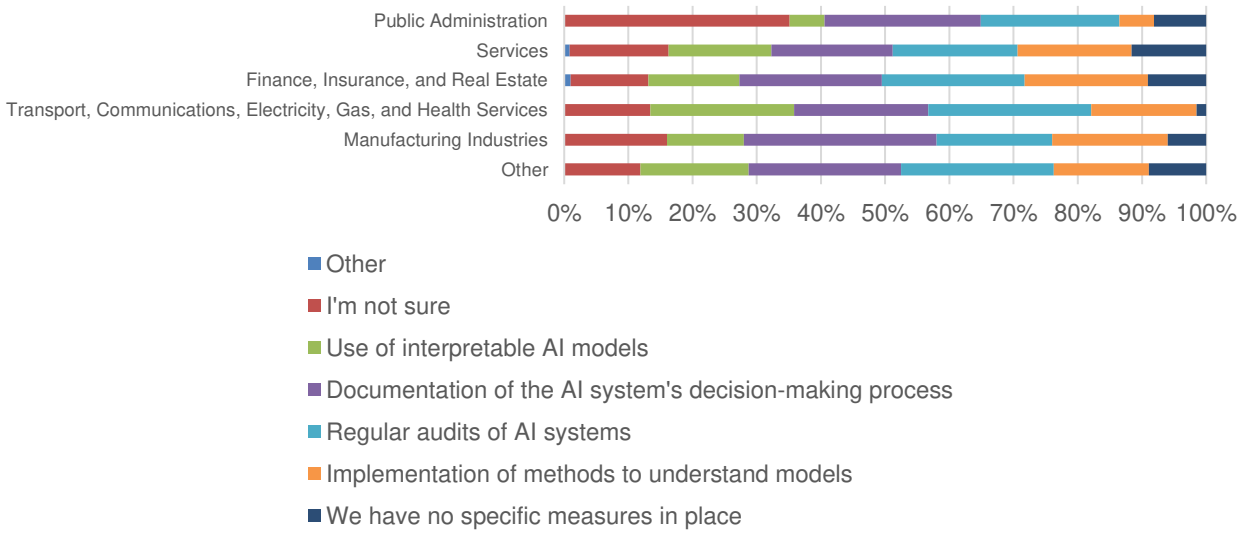


The most frequently cited methods focus on transparency (42% of responses) and involve close human oversight of AI systems. This includes both clear human accountability over the system's outcomes and decisions (the decision-making process) and rigorous control of the system across its lifecycle, such as through regular audits.

The next most common methods, cited in 32% of responses, pertain to the explicability of AI. These include implementing techniques to make AI results understandable, or directly using more interpretable models, such as regression over neural networks.

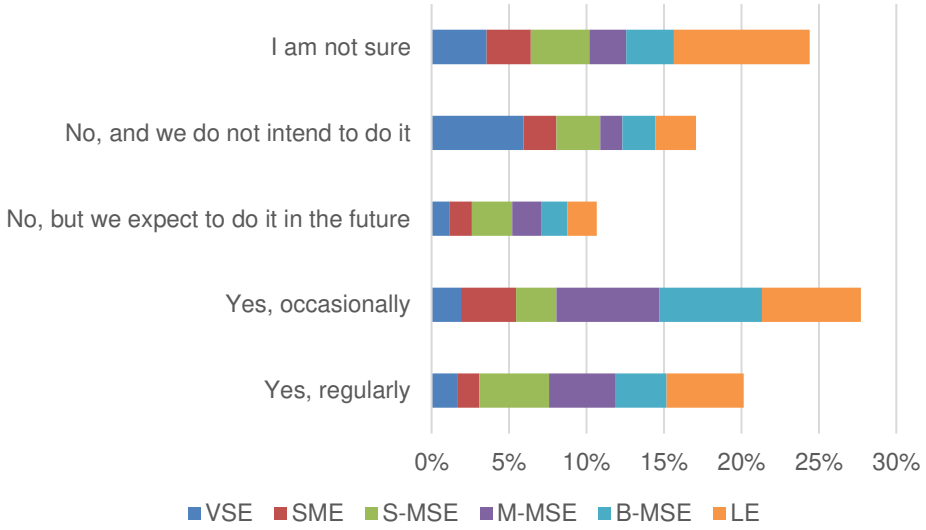
g more interpretable models, such as regression over neural networks.

Sector-specific approaches vary: utilities rely more heavily on audits and interpretable models, while the industrial sector prioritizes thorough documentation of decision-making processes. Public administration, however, appears to place less emphasis on model comprehension and interpretability measures.



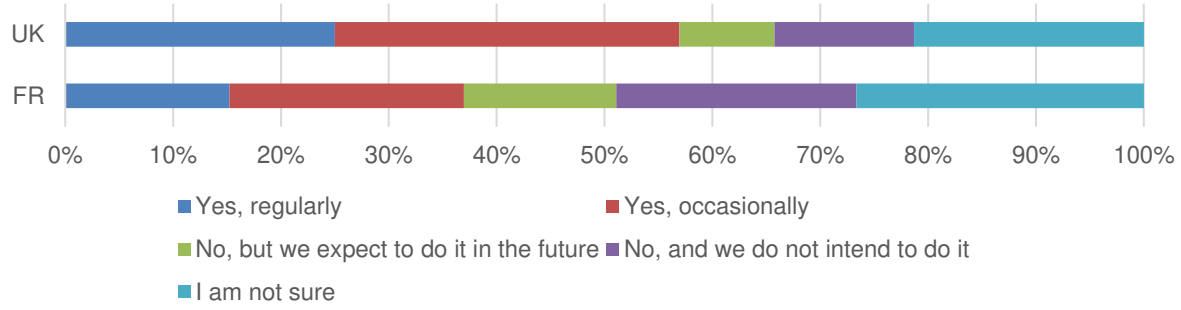
6.4.3.6 Does your company engage with policymakers or regulators on issues related to AI and its governance?

A majority of 58% of companies say they interact or intend to interact with policymakers or regulators, of which 47% already do, even though 24% of respondents refrained from answering for lack of information.

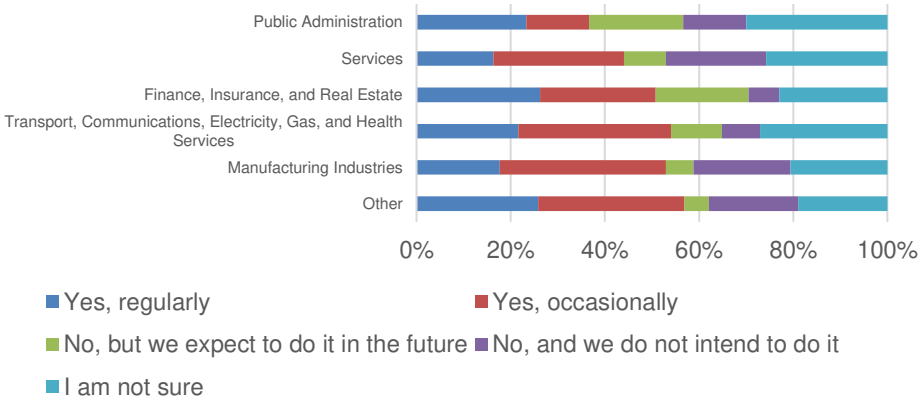


For MSE companies with the highest number of respondents (13% abstention rate), this rate of companies interacting or wishing to interact even rises to 77%.

Information differs significantly between British (66%) and French (51%) respondents, with an inverted hierarchy for companies not intending to interact (12% for British respondents, 22% for French ones).

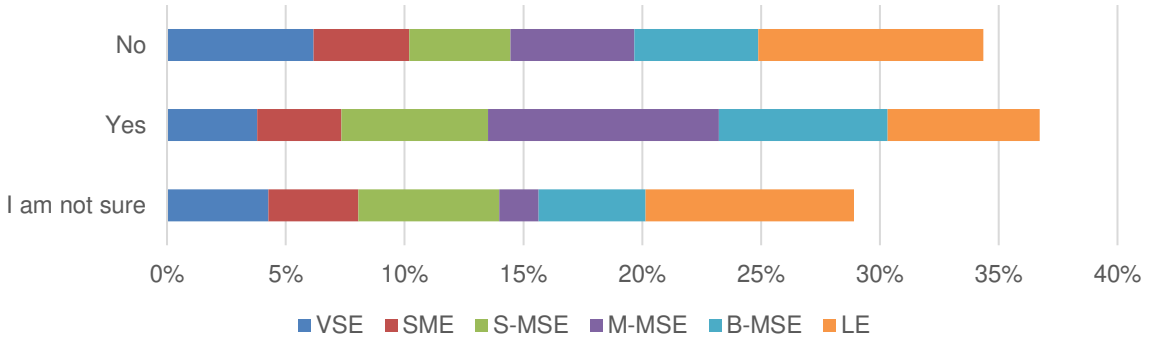


The financial and utilities sectors appear more prone to interaction, which can probably be put down to the fact that these sectors are largely regulated at sector level and are used to interaction with public authorities and regulators.

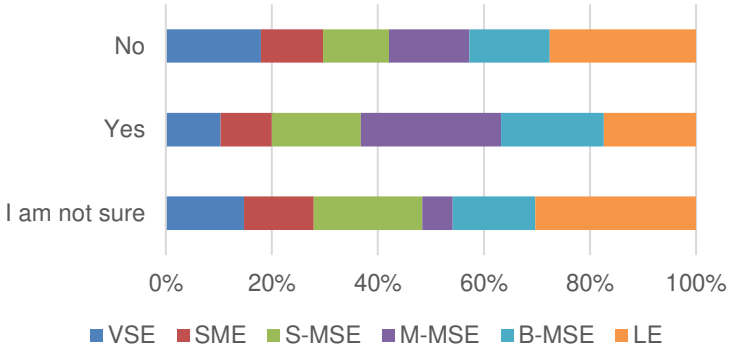


6.4.3.7 Do you think current laws and regulations sufficiently address the challenges and implications of AI?

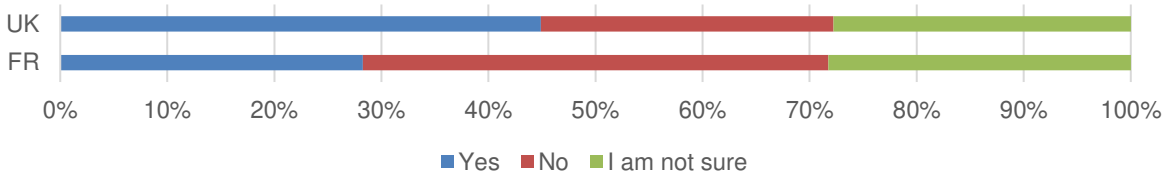
Opinions on the adequacy of current regulations are divided, with the affirmative (37%) slightly more favourable than the negative (34%):



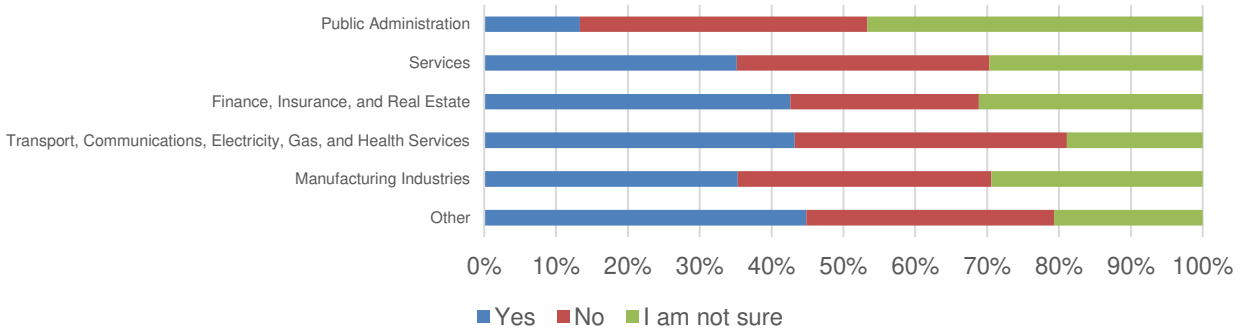
In detail, the majority of MSEs consider that current regulations are sufficient, while other companies (VSEs, SMEs, LEs) tend to think the opposite:



Opinions are also reversed between British and French respondents, with positive responses from 44% and 29% of respondents respectively:

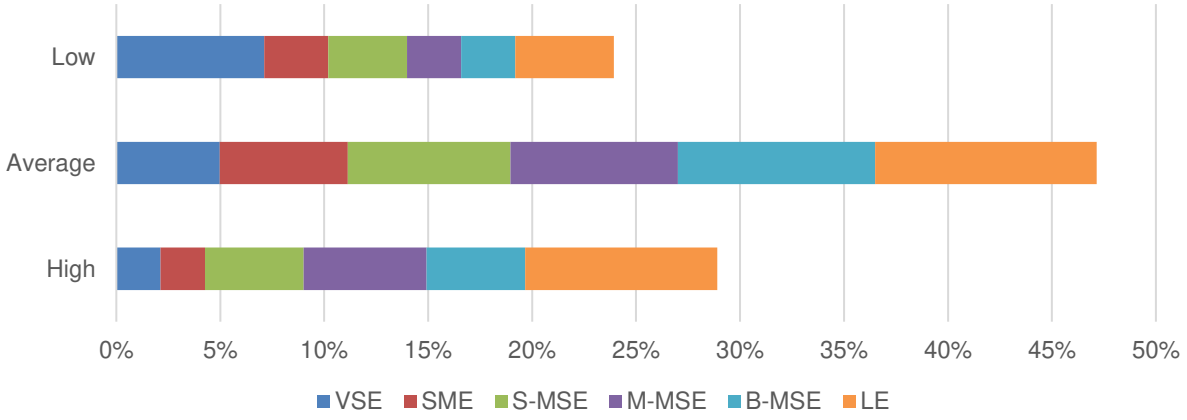


Public administration stands out clearly on this question, with only 12% of positive responses:



6.4.3.8 What level of knowledge of European AI law do you think your company has?

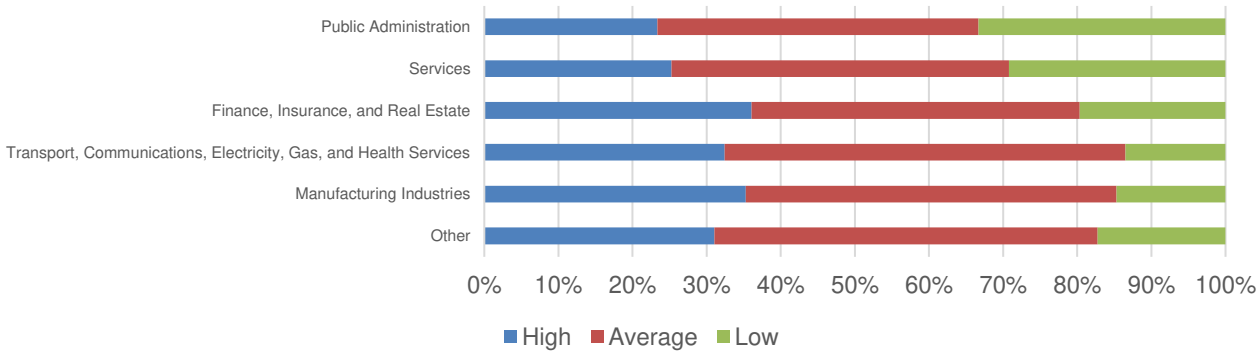
The majority of companies (47%) consider their knowledge of European AI laws to be average, while the 'high' and 'low' levels are relatively balanced, turning to the advantage of high knowledge (29% vs. 24%) thanks to larger companies:



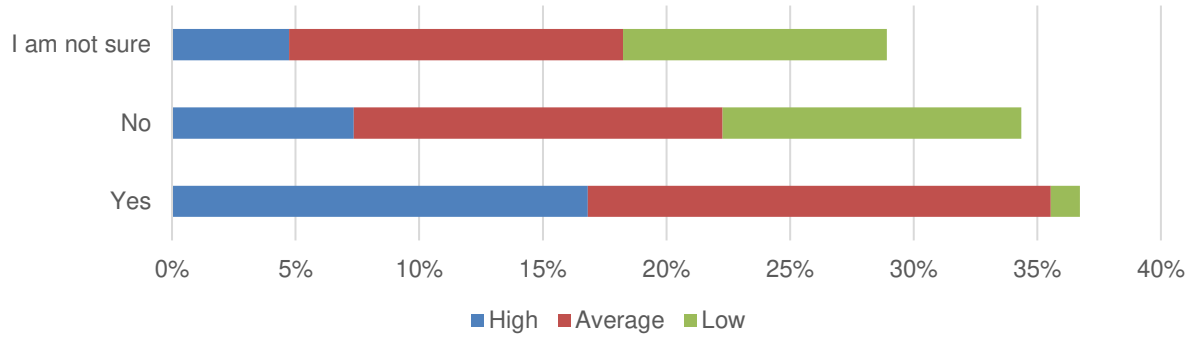
Among companies that have encountered legal or regulatory difficulties, 56% report a high level of knowledge regarding European AI law, compared to 25% among companies without such experiences. These challenges have served as learning opportunities, helping companies build maturity in compliance.

Since the question referred specifically to European AI law, it was interesting to examine whether responses differed between British and French respondents, given the UK's exit from the European Union. However, no significant difference was observed—either because British respondents interpret 'European law' as encompassing all European countries' laws, whether EU members or not, or because they are interested in EU regulations (such as the EU AI Act and the DSA) given the likelihood of commissioning AI models within the EU.

At the sector level, responses are relatively uniform, although the service sector (which includes many very small businesses) and public administration lag behind, with only 22% of respondents reporting a high level of knowledge and 32% indicating a low level.



Finally, it is interesting to note that respondents who consider themselves to have a good knowledge of European laws are also more likely to consider that these laws are sufficient:



This knowledge is *de facto* associated with an understanding of the reality and scope of the obligations imposed on the various players in the AIS value chain.

6.5 AI and sustainability: opportunities

6.5.1 To remember

55% of respondents believe that AI has a positive impact on sustainable development in their company.

6% of respondents say that sustainability is not a priority for their company, and two-thirds of these are very small businesses.

7 SDGs account for **46%** of responses, in order of importance: education, gender equality, infrastructure, health, food security, energy, employment.

41% of companies favour cross-departmental collaboration for decision-making on AI topics.

6.5.2 Overview table

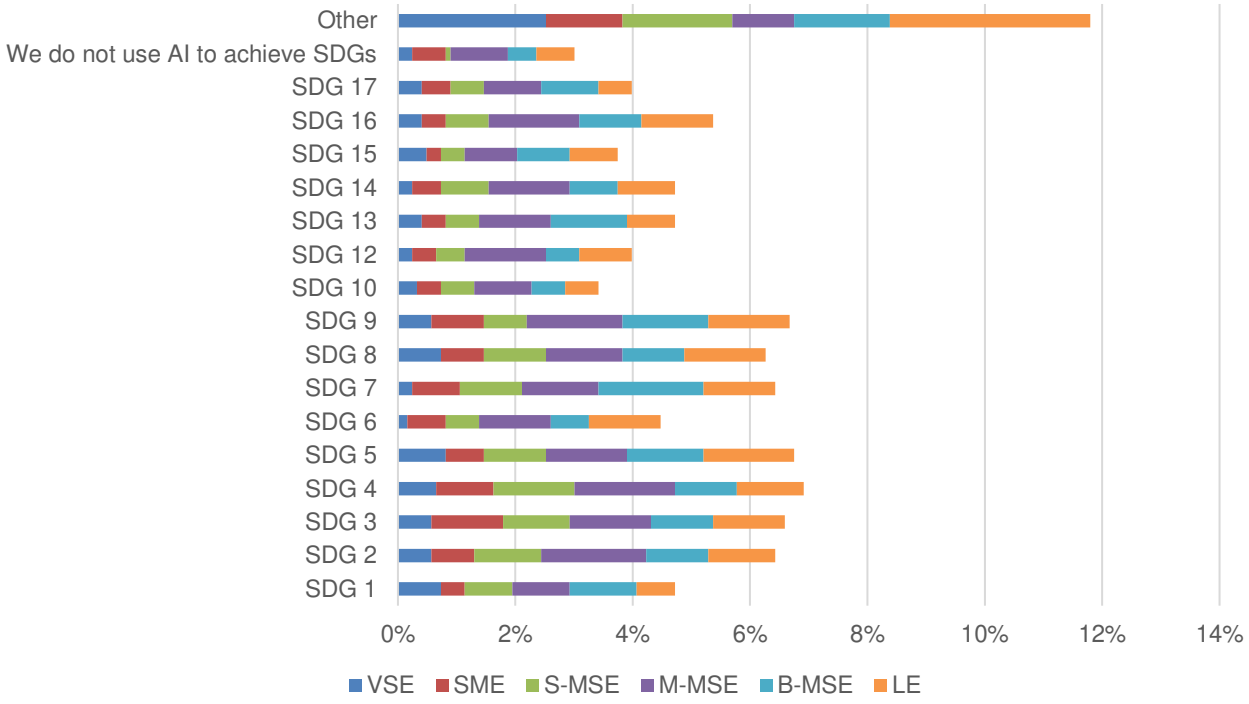
55%	of respondents believe that AI has a positive impact on sustainability in their company, and only 4% believe the opposite.
Procurement Waste GHG	61% of the sustainable development issues to which AI contributes concern procurement, waste and greenhouse gases.
6	uses linked to AI's sustainable development garnered 49% of citations (45% for the other 8). These are: energy, ethics in the sustainability, waste, environmentally friendly products/services, carbon neutrality
6%	of respondents indicate that sustainability is not a priority for their company, and therefore do not plan to use AI in this context.
7	SDGs garnered 46% of citations for goals whose attainment depends in particular on AI (39% for the other 10). These are: education, gender equality, infrastructure, health, food security, energy, employment
41%	of companies favour cross-departmental collaboration for decision-making on AI projects related to sustainable development
15%	of respondents declare that no specific organization is planned for these AI projects linked to sustainable development.

"We still have too little data on the environmental impact of generative AI. This data would enable us to make the best decisions while raising employee awareness at the same time." - EDF manager

6.5.3 Answers

6.5.3.1 Which of the Sustainable Development Goals (SDGs) does your company primarily aim to achieve through AI?

(2.9 responses per respondent)

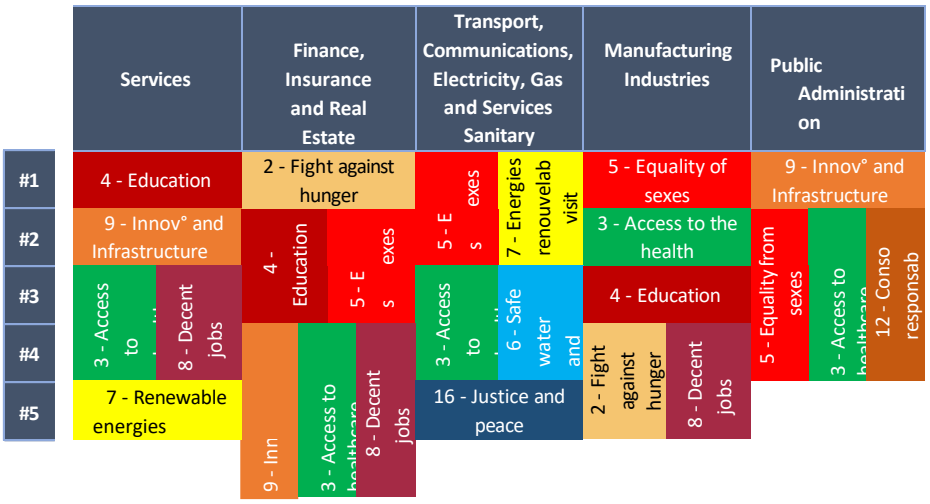


The contribution of AI to the SDGs appears to be (i) present (only 15% of respondents did not select an answer designating an SDG), (ii) very evenly distributed between the SDGs. Larger companies (G-ETI, GE) seem to be able to allocate more resources to environmental issues (Objective 13). Smaller companies (VSEs and SMEs) are more focused on the MDG related to promoting economic growth (Goal 8). Goals 7 (affordable energy) and 6 (water management) receive little attention from small businesses.

SDG priorities vary from country to country:

They also differ according to the sector under consideration, which is understandable given that each of them does not have the same societal or environmental impact. For example, the Public Administration sector shows a strong commitment to education, innovation and infrastructure.

The following is a list of the Top 5 SDGs to which AI contributes:



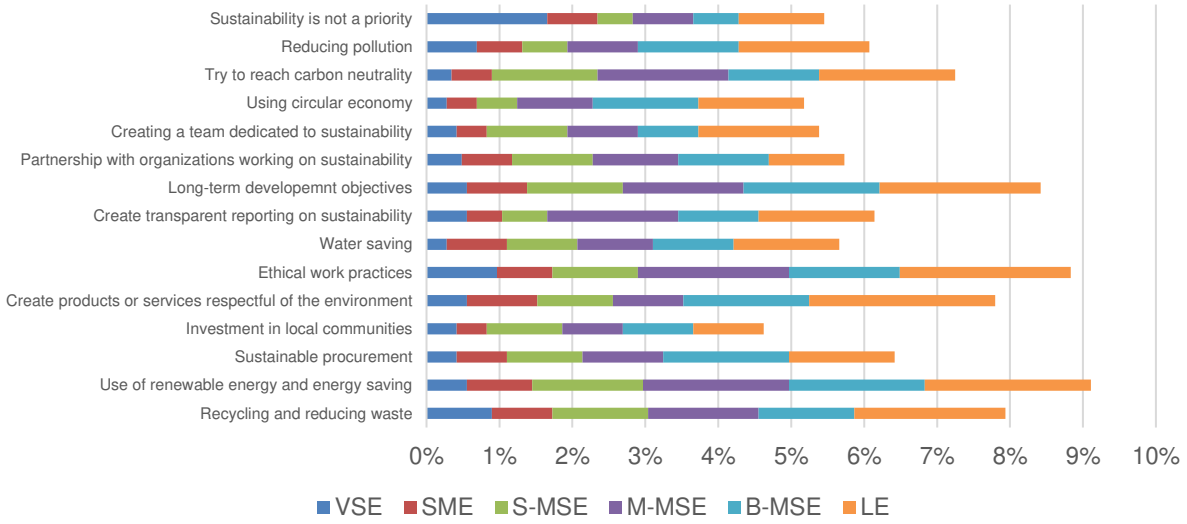
An analysis of Sustainable Development Goal (SDG) priorities by professional role within companies reveals notable differences in the focus of sustainable development efforts. Top managers tend to prioritize long-term objectives, such as education, gender equality, and renewable energy. Middle managers, tasked with implementing strategies, focus on goals like innovation, infrastructure, and renewable energy, reflecting an emphasis on operational efficiency. Employees, meanwhile, prioritize goals related to quality of life, such as access to healthcare, education, and the fight against hunger.

quality of life, such as access to healthcare, education, and the fight against hunger.

Renewable energy stands out as the only SDG priority shared across all respondent categories.

6.5.3.2 What are the sustainable development-related uses of AI in your company?

(3.4 responses per respondent)



Few respondents indicate that sustainability is not a priority, and around a third of them are located in VSEs. Medium-sized companies show strong adoption of practices that can give them a distinct competitive advantage, such as offering environmentally friendly products. Smaller companies, though limited by resources, still show a notable commitment to key practices, underlining a growing commitment to sustainability across the entrepreneurial spectrum.

The Top 5 responses cover a wide range of objectives, with significant divergences in this hierarchy depending on the respondents' country:

	Total	France	UK
#1	Renewable Energy	Environmentally Friendly Product/Service	Ethical Working Practices
#2	Ethical Working Practices	Renewable Energy	Renewable Energy
#3	Long-term sustainability	Carbon Neutrality	Long-term sustainability
#4	Recycling and Waste Reduction	Reducing Pollution	Recycling and waste reduction
#5	Environmentally Friendly Product/Service	Recycling and Waste Reduction	Sustainable Sourcing Policies

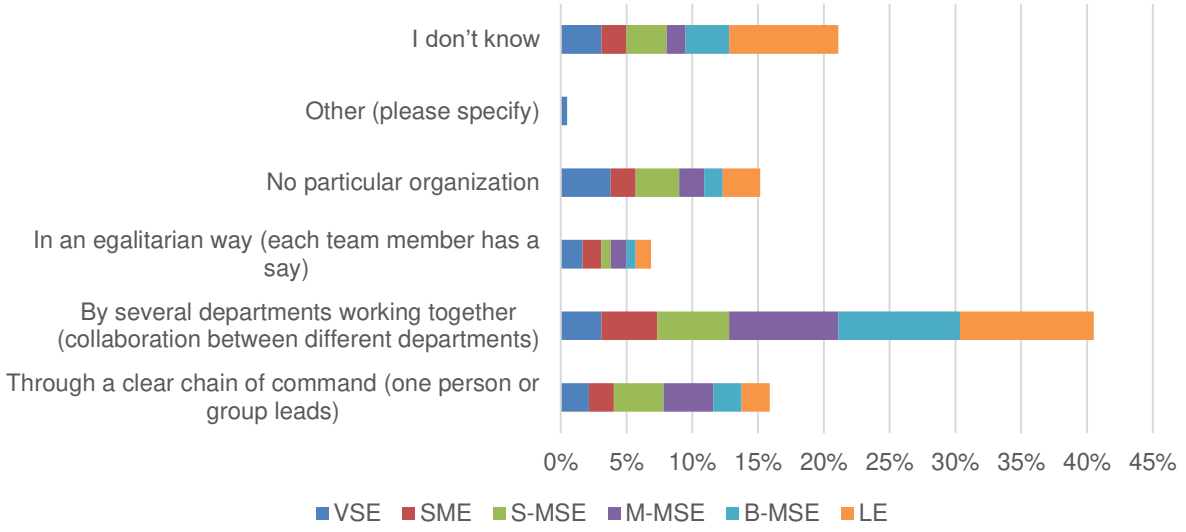
French respondents clearly prioritize environmental issues, while British respondents emphasize ethics and sustainability.

Naturally, business sector plays an important role in usage:

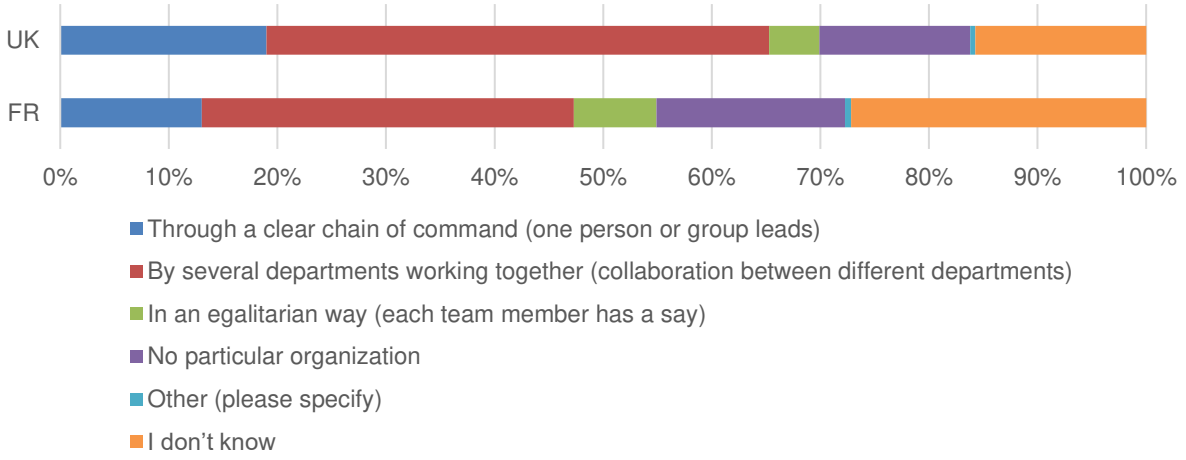
	Services	Other	Finance & Insurance	Transport, Communications	Manufacturing	Administration Public
#1	Ethical Working Practices	Ethical Working Practices	Ethical Working Practices	Environmentally Friendly Product/Service	Long-term sustainability	Carbon Neutrality
#2	Renewable Energy	Renewable Energy	Renewable Energy	Renewable Energy	Renewable Energy	Renewable Energy
#3	Long-term sustainability	Recycling and reducing waste	Long-term sustainability	Circular Economy	Environmentally Friendly Product/Service	Recycling and reducing waste
#4	Recycling and reducing waste	Long-term sustainability	Environmentally Friendly Product/Service	Recycling and reducing waste	Sustainable Sourcing policies	Not a priority
#5	Not a priority	Environmentally Friendly Product/Service	Reducing Pollution	Carbon Neutrality	Ethical Working Practices	Sustainable Sourcing Policies

The top priority shared across all sectors is the use of AI to promote renewable energy adoption and generate energy savings. Ethics are particularly central in the service and finance sectors, where ethical working practices rank as a high priority. Meanwhile, public administration and the transport and telecom sectors place environmental issues as their top priority.

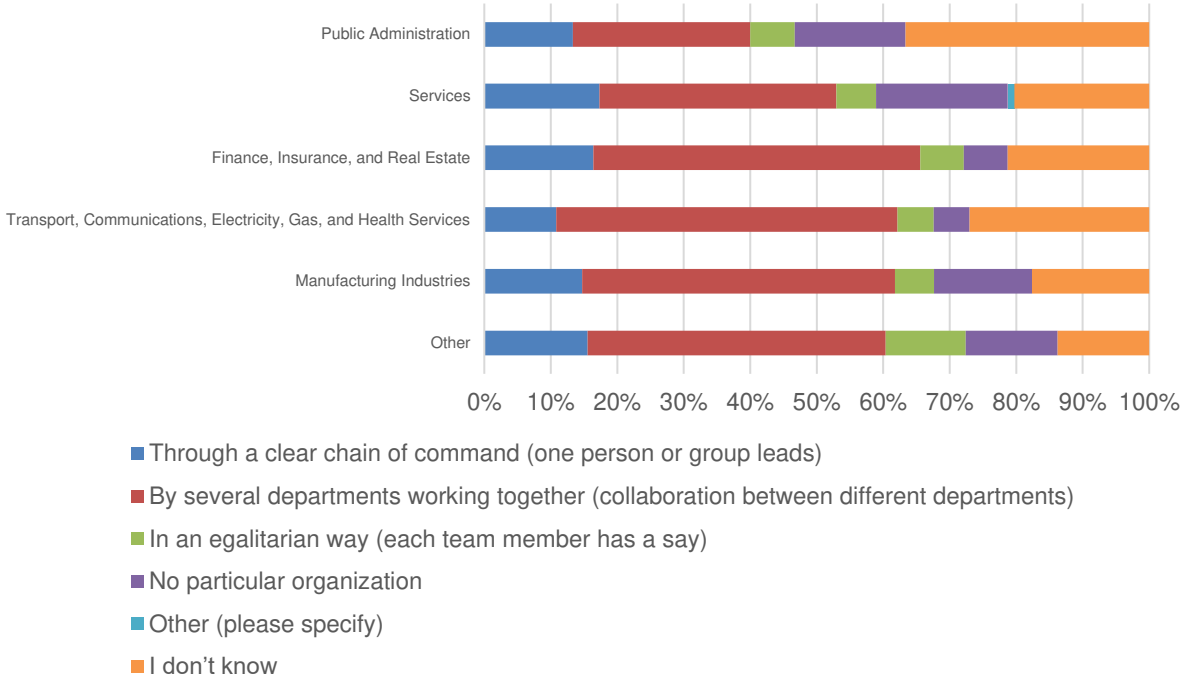
6.5.3.3 How does your company organize decision-making for artificial intelligence projects linked to sustainable development?



Collaboration across multiple departments is the preferred approach for AI projects focused on sustainable development, with 40% of respondents indicating this as their chosen method. Notably, a significant portion of respondents reported being uninformed on this topic. This collaborative approach is primarily adopted by larger companies, whereas many very small businesses lack a specific organizational structure for these initiatives.



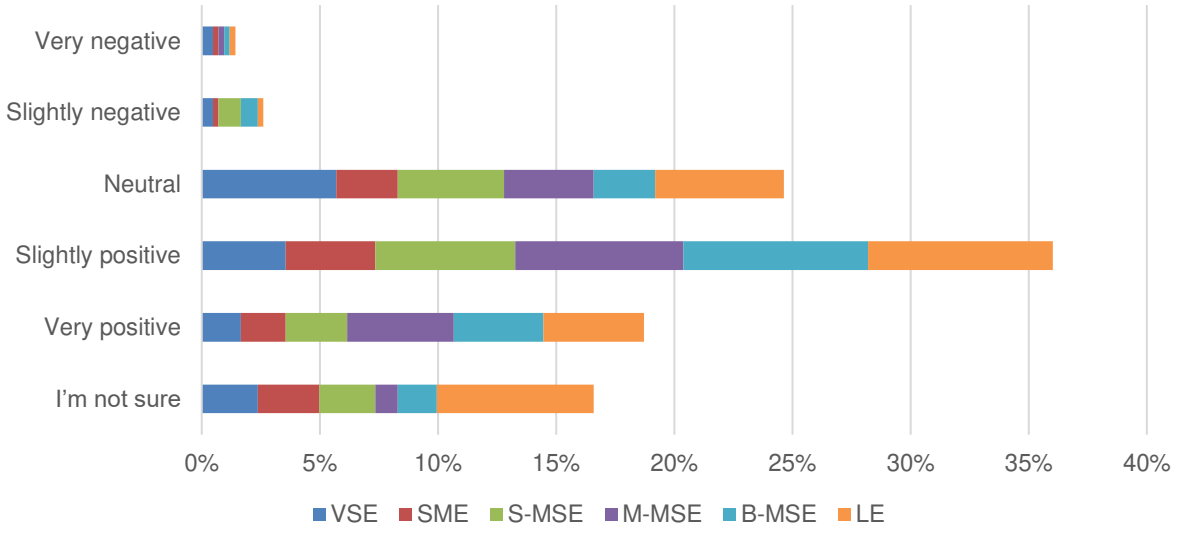
The organization appears less clear to French respondents, with only 55% declaring one of the three proposed modus operandi, compared to 70% for British respondents.



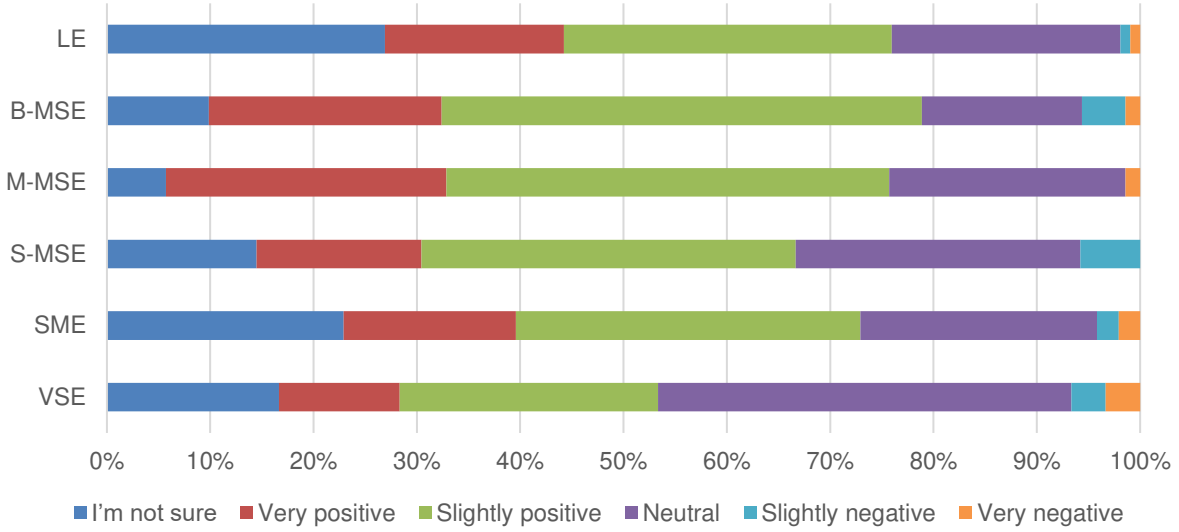
Interdepartmental collaboration is especially prominent in certain sectors, such as finance and utilities, indicating that decision-making in these areas often requires coordination across multiple departments.

In contrast, public administration has a notably higher proportion of respondents who are unaware of how AI projects are organized. The service sector also exhibits a degree of interdepartmental collaboration, suggesting that decision-making here is not solely hierarchical but also collaborative to effectively address the diverse aspects of its operations.

6.5.3.4 From your point of view, how would you assess the impact of AI on sustainable development in your company?

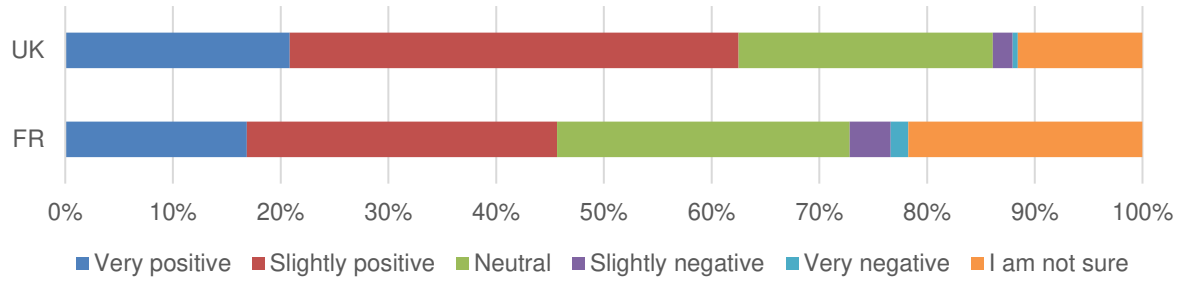


The impact of AI on sustainable development is judged very favourably, with 54% of responses positive and 4% negative. This result contradicts early findings on the subject in scientific research[3]. This result illustrates a gap between practitioners and researchers on the subject.

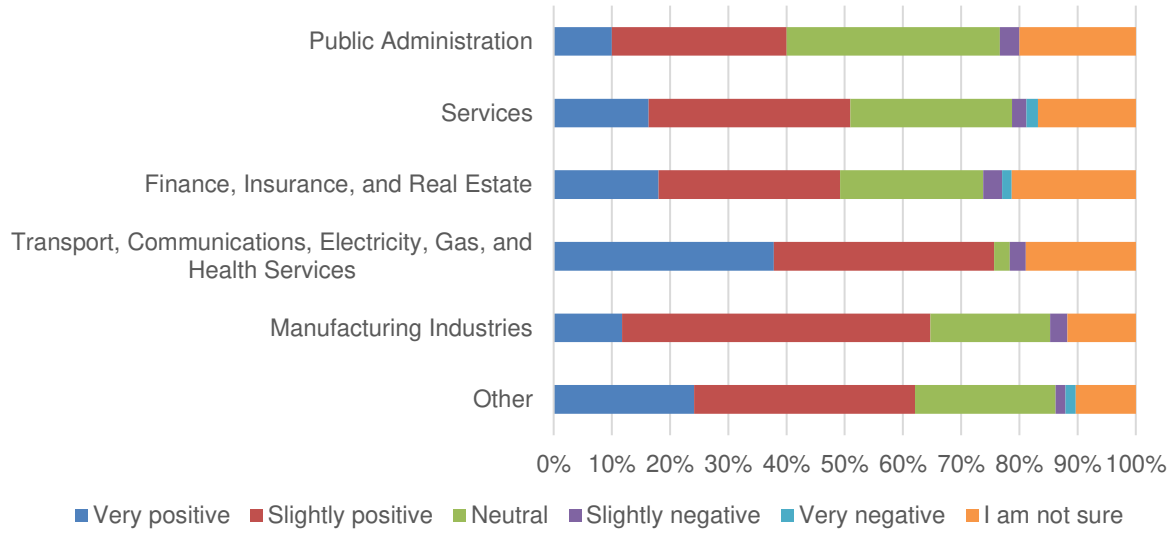


M-MSEs and G-MSEs are the most categorical, with almost 70% positive responses. The proportion of respondents who don't know is high among LEs. The smallest have high proportions of "neutral", "negative" and "I'm not sure" answers.

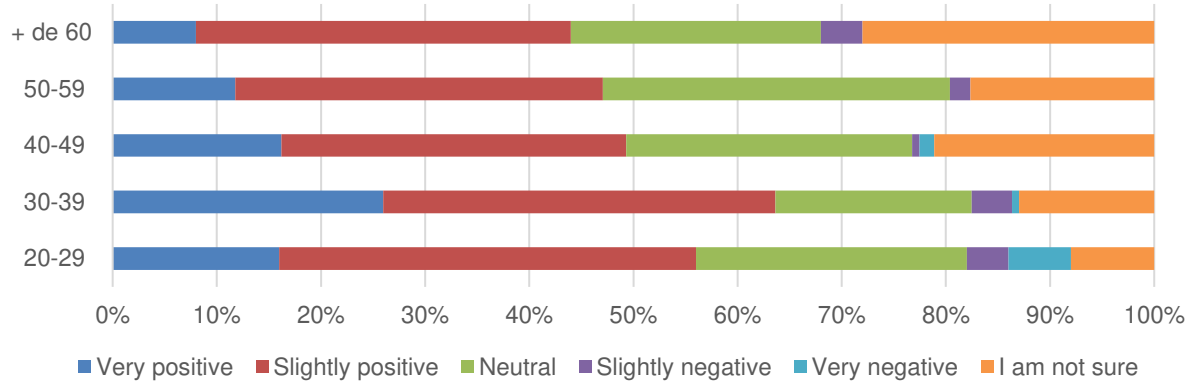
[3] Emma Strubell, Ananya Ganesh, and Andrew McCallum. 2019. Energy and Policy Considerations for Deep Learning in NLP. *In Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics*, pages 3645-3650, Florence, Italy. Association for Computational Linguistics.



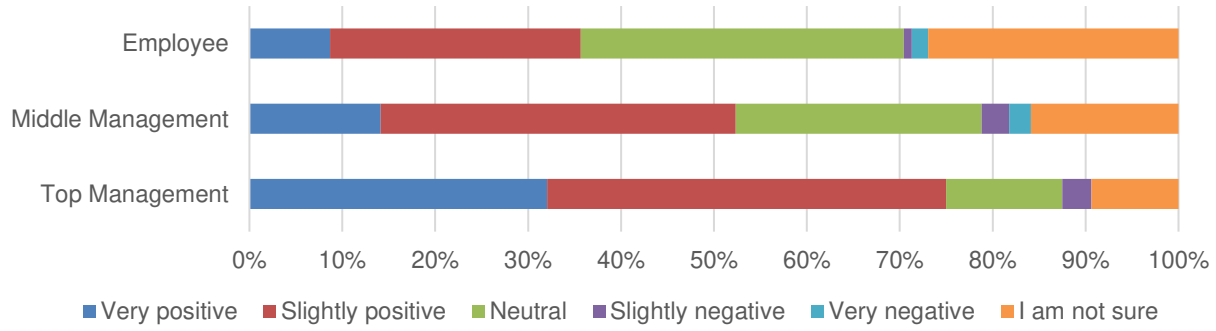
French respondents are more nuanced, with 45% in favour (62% among UK respondents) and over 20% unable to offer an opinion.



The utilities and industrial sectors hold the most positive views on AI's impact on sustainable development, which is particularly significant given their substantial influence on environmental issues. Public administration, however, is more reserved, with only 40% of respondents expressing a positive outlook—compared to at least 50% in other sectors.



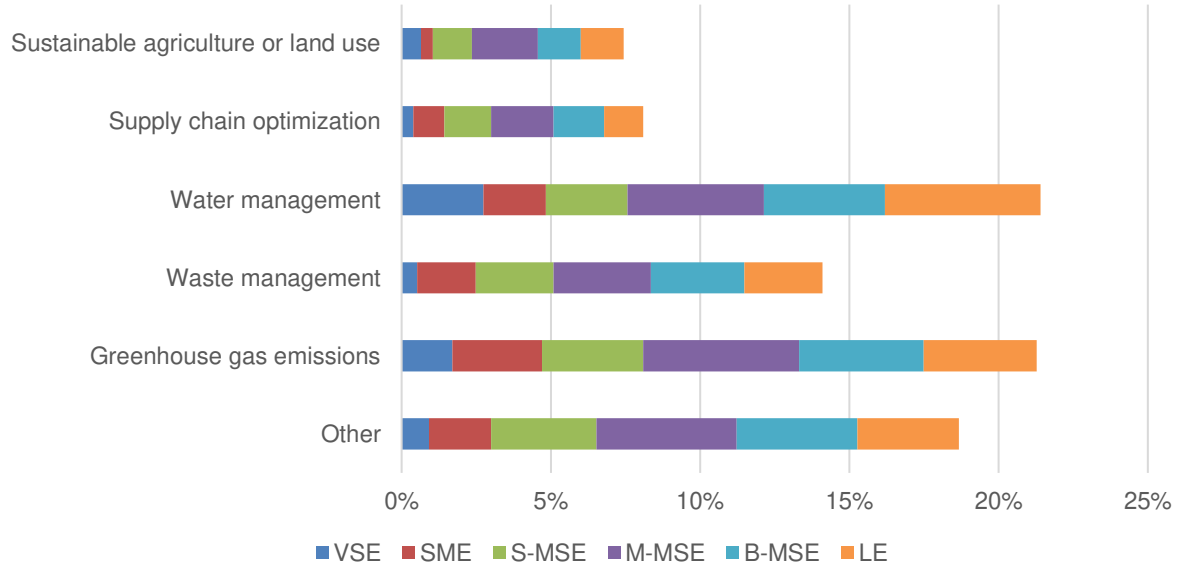
The younger generations (under 40) are the most positive, with the 30-39 age group showing the highest proportion of very positive respondents.



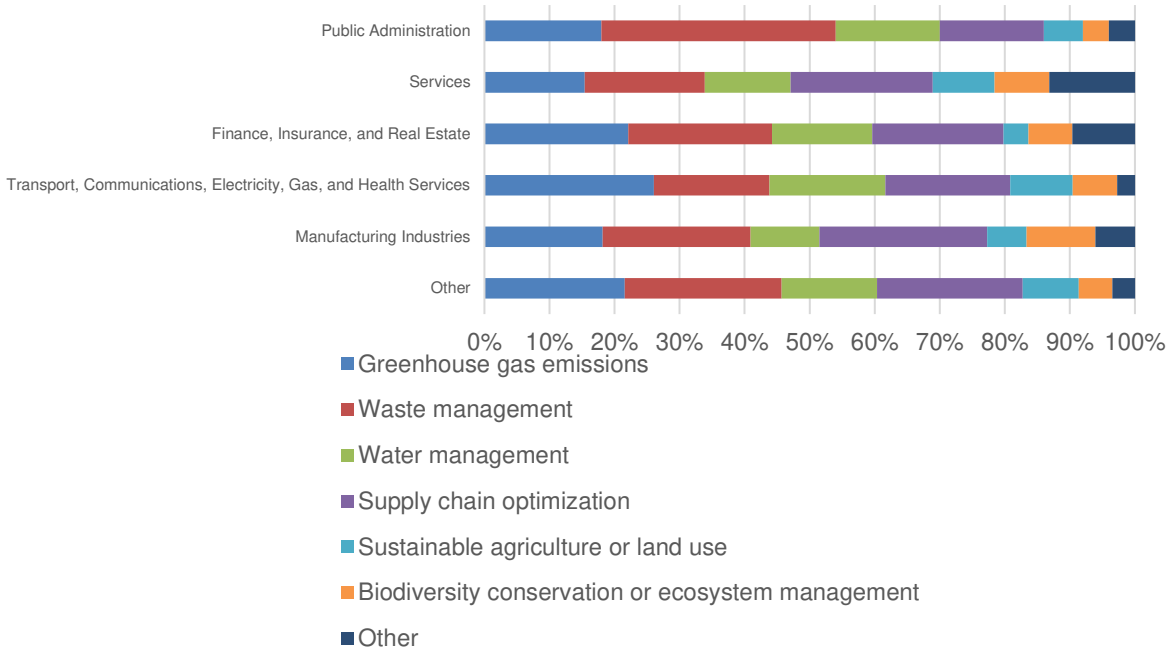
Respondents' position in the company is structuring on their opinion, with decision-makers overwhelmingly considering that AI will have a positive impact on sustainable development in their companies.

6.5.3.5 To which areas related to environmental sustainability is your company applying AI technologies?

(1.8 responses per respondent)



Among the fields in which AI is applied, some stand out as lagging behind (biodiversity conservation, sustainable agriculture and water management), but the overall ranking needs to be put into perspective, as some business sectors have little leverage over some of them.



The utilities sector places a strong emphasis on reducing greenhouse gas emissions and managing water resources, aligning with the nature of its environment-related activities. The manufacturing industry, by contrast, focuses primarily on supply chain optimization, highlighting the sector's approach to linking environmental concerns with operational efficiency. Meanwhile, public administration prioritizes waste management, likely due to the responsibility of local authorities in this area.

6.6 AI and sustainability: risks

6.6.1 To remember

29% of respondents put confidentiality at the top of the list of negative impacts of AI. Job losses come second (**25%**).

36% of companies track AI energy consumption, the **same number do not**.

43% of companies do not measure net greenhouse gas emissions caused by AI.

40% of companies have no measures in place to prevent the unnecessary use of AI models.

72% of companies that have already experienced ethical problems on an AI project have implemented measures to combat equity bias.

6.6.2 Overview table

Privacy Policy Employment Energy	29% of respondents put confidentiality at the top of the list of negative externalities of AI already encountered or anticipated by their company. Job losses come second (25%), followed closely by increased energy consumption (22%).
Confidentiality Carbon Resources	31% of respondents put confidentiality at the top of the list of new risks created by AI. However, resource consumption and carbon footprint together account for 42%.
36% **36%**	36% of companies track AI energy consumption, the same proportion do not.
29% **43%**	29% of companies measure net greenhouse gas emissions caused by AI, 43% do not.
32% **40%**	32% of companies have measures in place to prevent the unnecessary use of AI models, 40% do not.
Various sources Information audit	57% of measures to combat equity bias are equally concentrated between the use of differentiated sources and verification information on a regular basis, a rate that rises to 72% for companies that have already experienced ethical problems on an AI project.

"We are particularly vigilant in 2 areas:

- *Over-consumption of energy through the use of unsuitable AI models (the balance between Large Language Model and Small Language Model depending on use cases).*
- *The sustainability of these digital investments in products whose lifespan can exceed 40 years. The rapid obsolescence of technologies is considered in relation to the potential gain over a limited period (5 to 10 years)." - Guillaume Rabier, VP Markets & Synergies, Alstom*

6.6.3 Answers

Tracking AI energy consumption poses a challenge, as it varies based on the model and infrastructure used (external, cloud, on-premises, etc.). Most large companies (M-ETIs and larger) can monitor this consumption, whereas public administration lags behind, with the majority of respondents indicating they do not track it. The financial sector also falls short in this area. Conversely, the utilities and industrial sectors have more widely adopted energy monitoring practices, suggesting a heightened awareness of AI's energy impact.

Measuring AI-related greenhouse gas emissions is similarly challenging, with most respondents indicating they do not track these emissions and a high proportion expressing uncertainty. Larger companies, such as M-ETIs and G-ETIs, are more often able to measure these emissions, whereas VSEs and SMEs lag considerably. Only 23% of French respondents monitor these emissions, compared to 35% of UK respondents.

Proactivity in preventing the excessive or unnecessary use of AI models remains low across sectors. MSEs stand out, with nearly 50% of respondents reporting measures to limit excessive AI use. In contrast, around 40% UK companies have already implemented such measures, compared to only 25% of French ones. The service, financial, construction, and agricultural sectors show greater attention to this issue than the utilities and industrial sectors, while public administration provides limited information on this topic.

Among the four proposed negative externalities, respondents ranked them as follows:

1. Confidentiality (most frequently cited)
2. Risk of job cuts
3. Impact on energy consumption
4. AI biases (rarely cited)

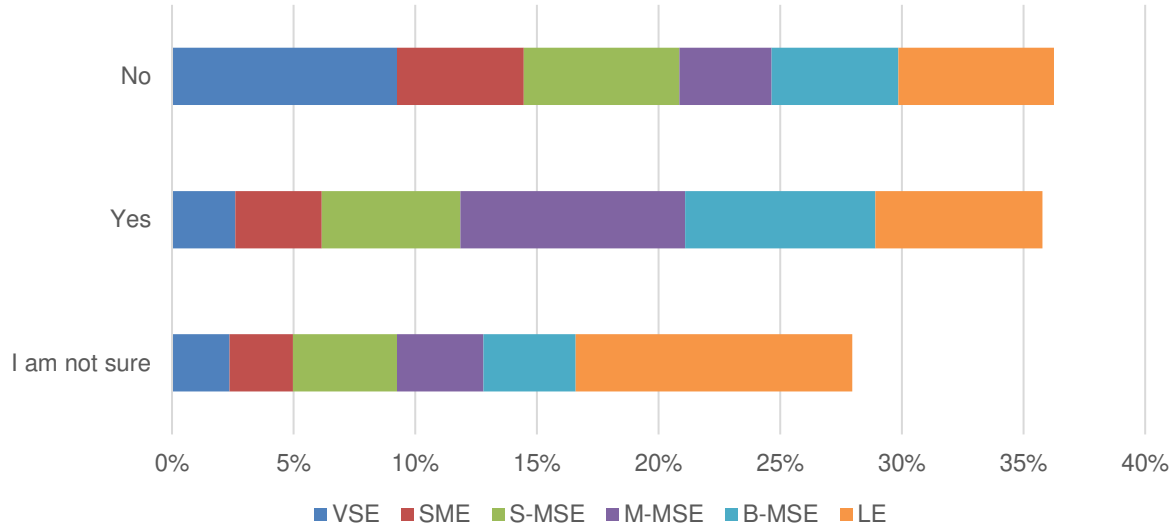
For British respondents, job cuts rank highest, whereas French respondents place confidentiality first, followed by energy consumption and job cuts. In the utilities and public administration sectors, energy consumption is a top concern, ahead of job cuts. Decision-makers tend to prioritize energy consumption, while employees and middle managers focus more on biases and job cuts.

Confidentiality is seen as the primary risk to AI sustainability. Environmental risks, including resource consumption and carbon footprint, account for 41% of responses. Ethical concerns are particularly prominent among large companies, whereas MSEs show greater concern for environmental risks. The financial sector emphasizes data confidentiality and security, while the industrial sector is more focused on carbon footprint. Decision-makers prioritize resource consumption, while other respondents are more concerned with ethical issues. Women, in particular, emphasize privacy and ethics, potentially due to concerns about gender bias in AI.

ncerned with ethical issues. Women, in particular, emphasize privacy and ethics, potentially due to concerns about gender bias in AI.

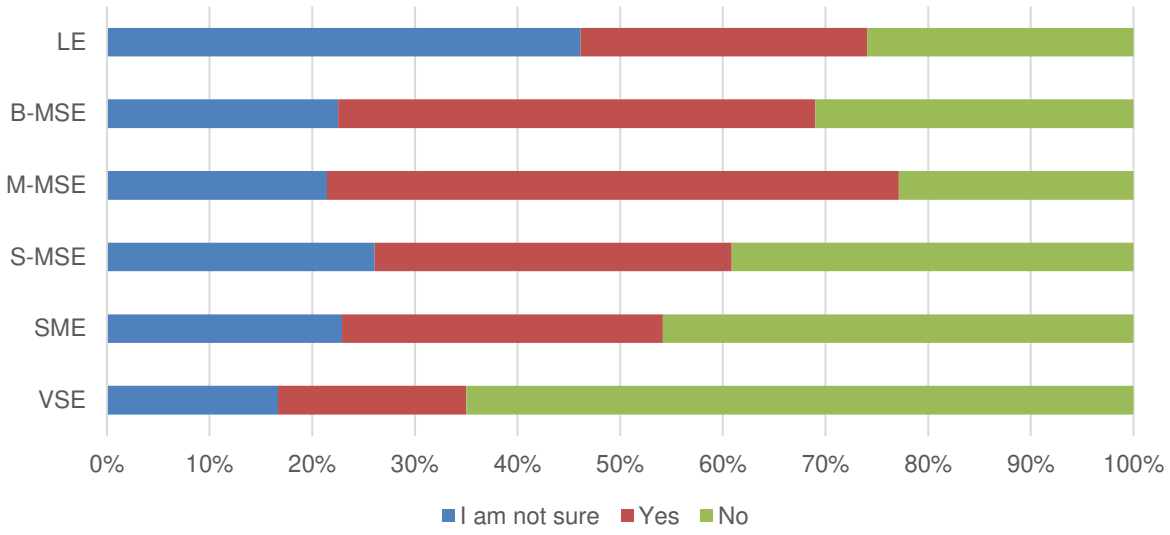
In conclusion, this analysis highlights considerable variation in the ethical and sustainable management of AI across different company sizes and sectors. Large companies, along with the utilities and industrial sectors, lead in tracking energy consumption and measuring greenhouse gas emissions. However, very small businesses and sectors such as public administration are significantly lagging behind.

6.6.3.1 Does your company monitor AI power consumption?

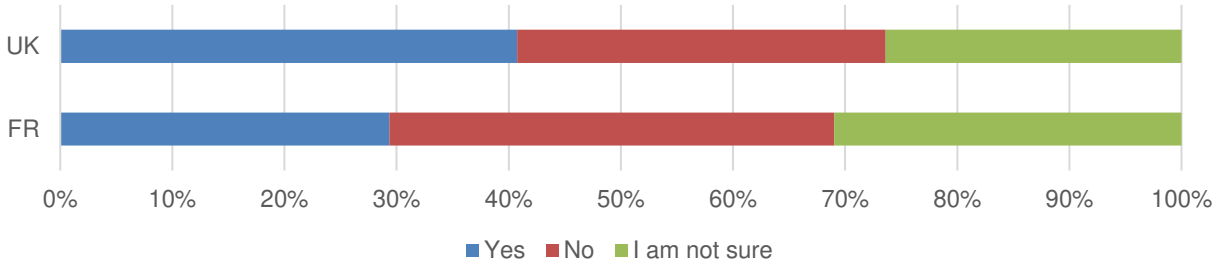


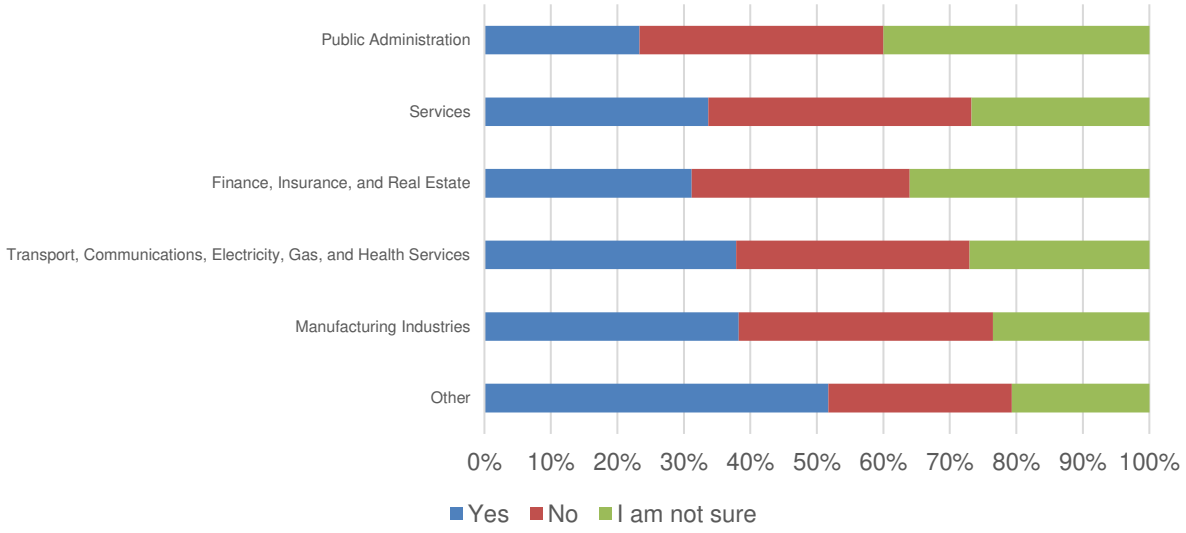
Keeping track of an AI's energy consumption is no easy task; the model and infrastructure in place don't always make it easy (external model or not, cloud or on-premises infrastructure, etc.), leading to very mixed responses.

Most large companies indicate that they track energy consumption (excluding those who do not have the information):



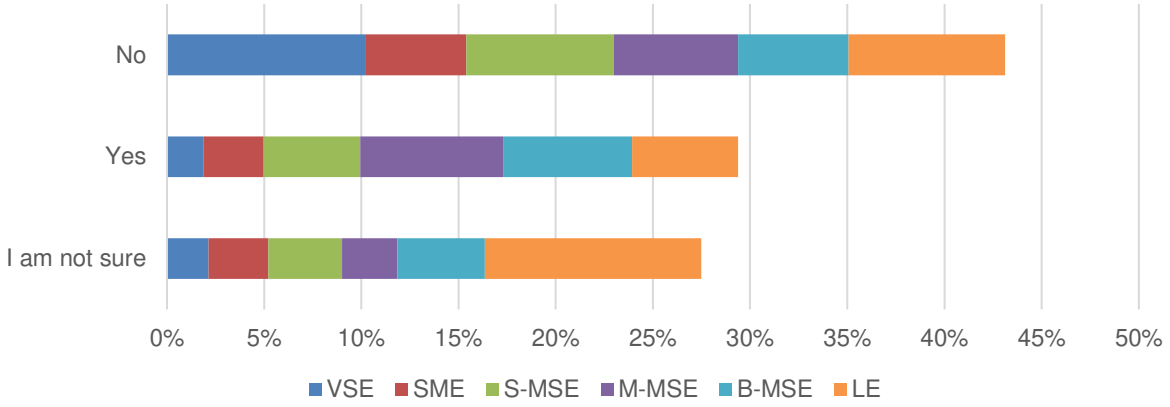
British respondents show a significantly less moderate consumption pattern than French respondents:



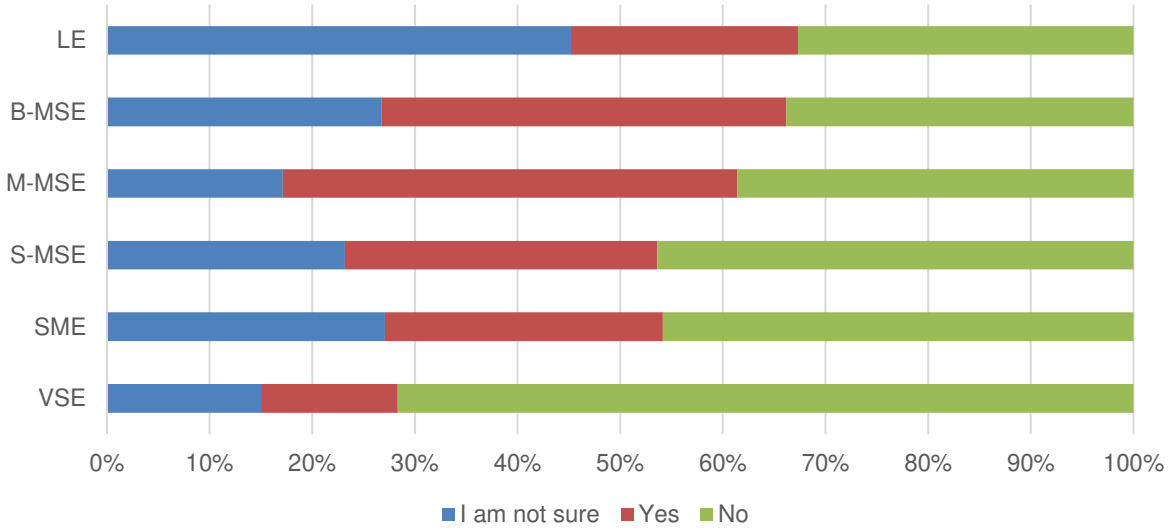


Public administration appears to be lagging in monitoring AI-related energy consumption, with a significant majority of respondents indicating they do not track it. The financial sector also falls behind in this area. In contrast, sectors such as utilities and industry demonstrate better adoption of AI energy monitoring practices, suggesting a heightened awareness of energy impact where monitoring is more seamlessly integrated into operational routines.

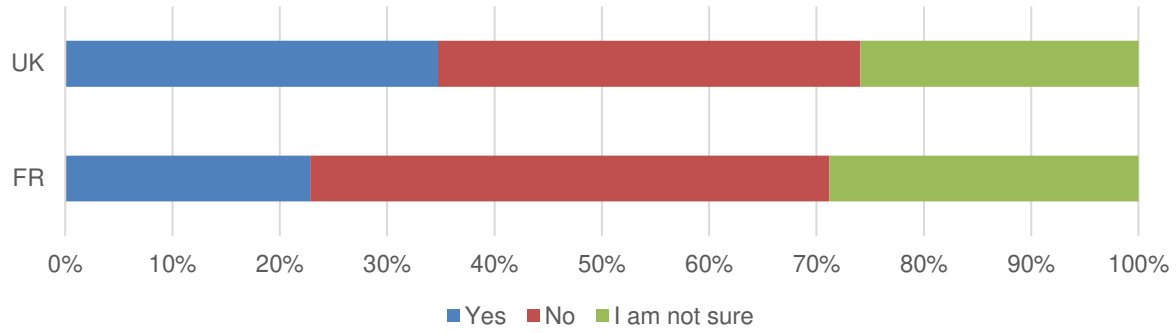
6.6.3.2 Do you measure AI's net greenhouse gas emissions? (Net greenhouse gas emissions refer to the total emissions produced by AI operations minus any emissions offset or reduced by AI implementations).



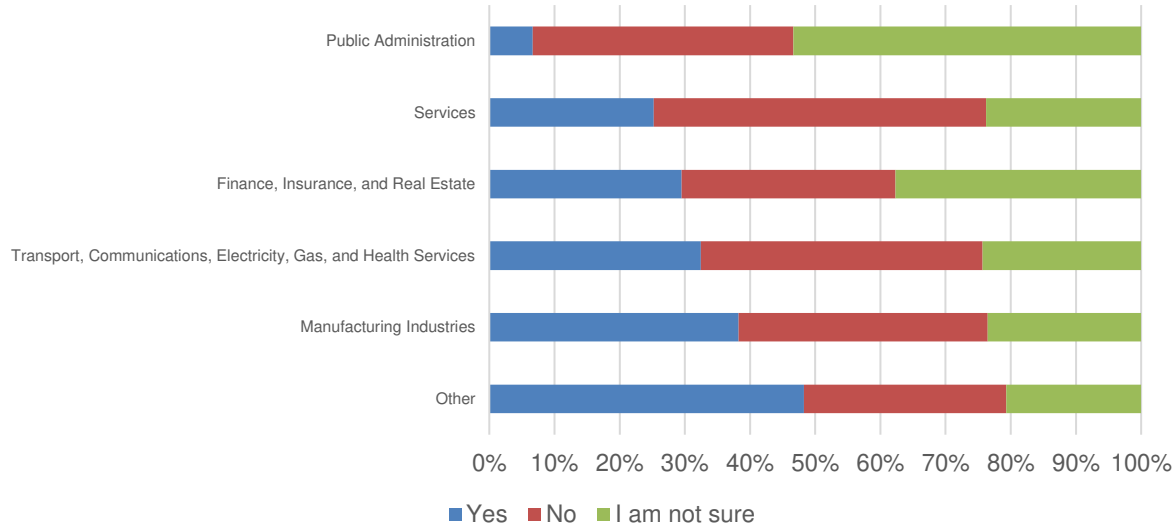
AI-based measurements of net greenhouse gas emissions are not easy to implement, and indeed the responses show a predominantly negative response. There is also a high proportion of respondents who are unsure, as these are still emerging practices.



M-MSEs and B-MSEs are the only companies that report being more frequently able to measure net emissions than not. However, a high rate of uninformed respondents in some size segments may affect the reliability of this analysis. In particular, very small businesses lag considerably behind other segments in their ability to track emissions.

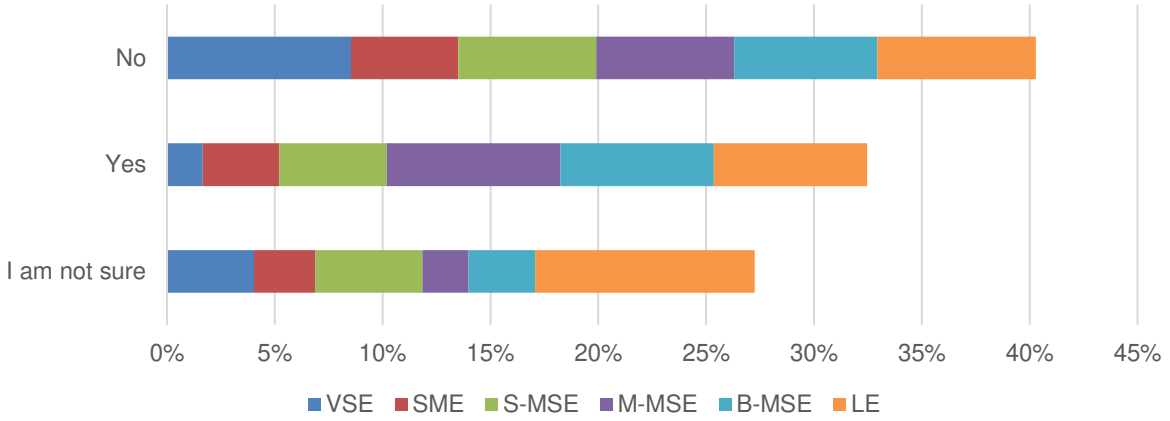


35% of British respondents say they track net emissions, compared with 23% of French respondents.

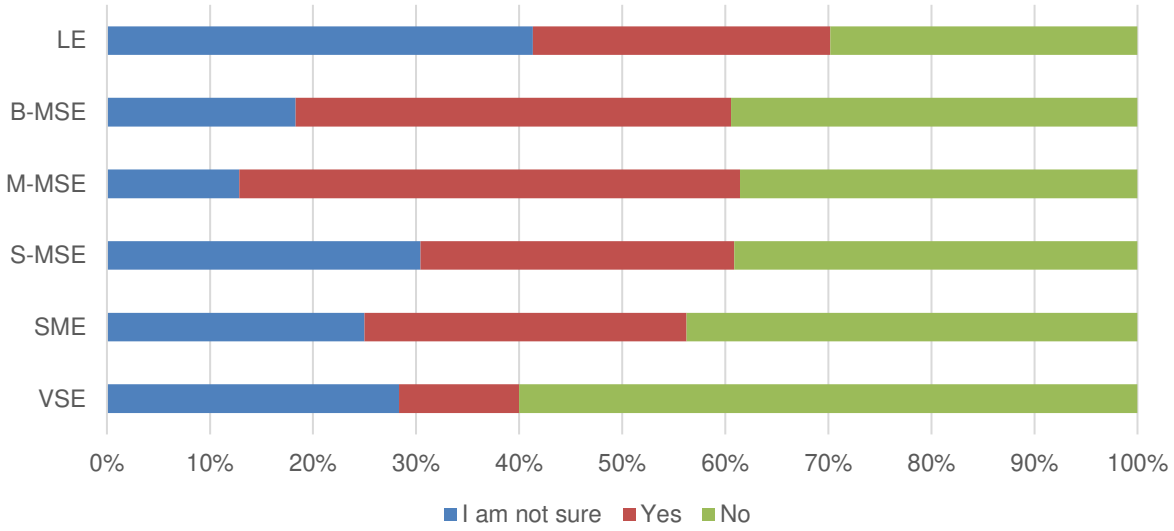


Public administration shares little information in this area, with over 50% of respondents reporting they had no knowledge on the subject. The tertiary sectors also face challenges here, with a particularly high rate of negative responses in the services sector, exceeding 50%. In contrast, industry, along with construction and agriculture (classified within the 'other' segment), are among the sectors most attentive to tracking this measure.

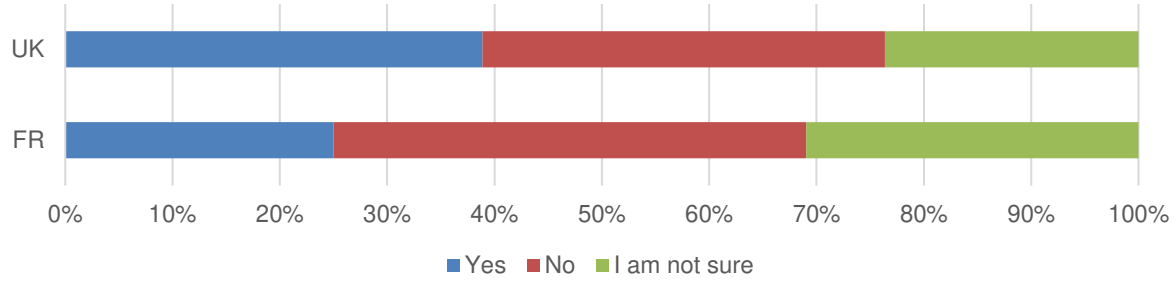
6.6.3.3 Does your company have measures in place to avoid unnecessary use of AI models on limited datasets or excessive engineering?



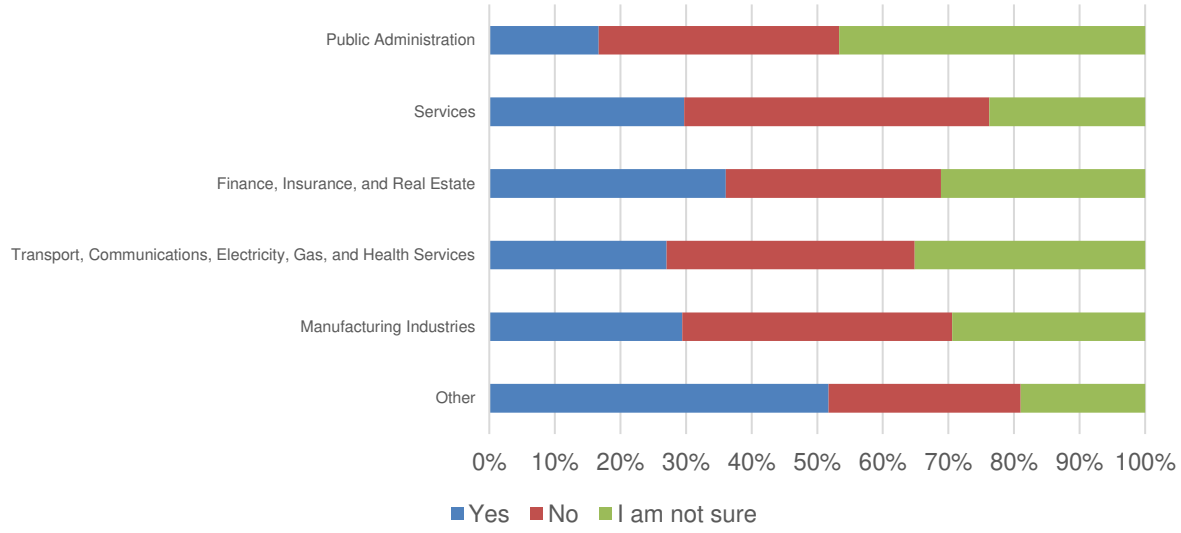
Companies are generally not proactive in identifying avoidable AI uses—situations where more efficient, less resource-intensive methods could suffice. As companies experiment with AI to discover valuable applications while also trying to understand and adapt to the technology, this practical measure may currently seem counterproductive to their learning and adoption goals. However, it is likely that this approach will soon gain traction, as excessive or avoidable use of AI can lead to significant energy consumption and potential environmental harm.



MSEs are the best performers, with almost 50% of respondents declaring that such measures are in place.



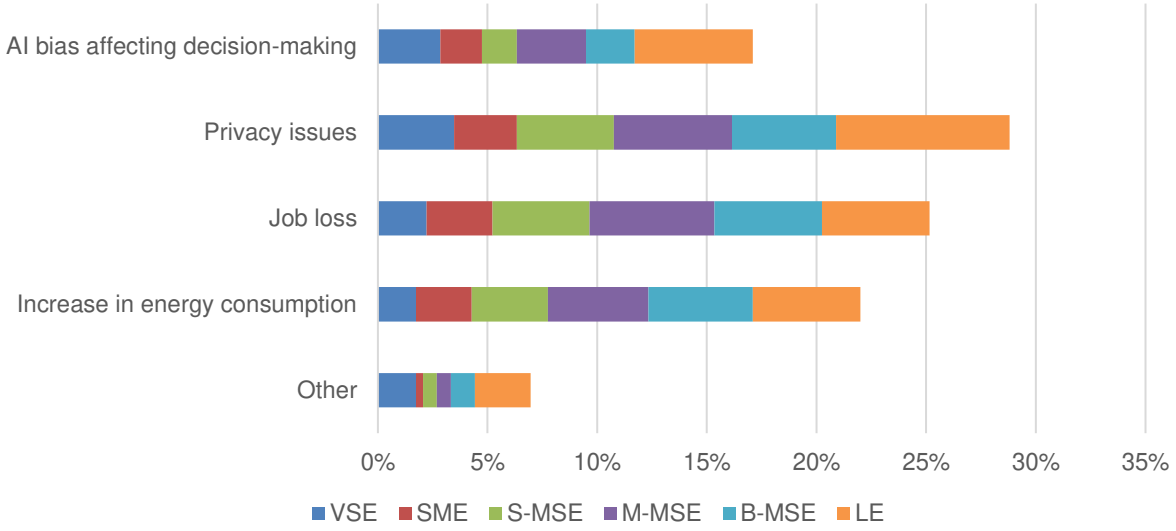
French respondents show a real lag on the subject, with only 25% positive responses compared with around 40% of British respondents.



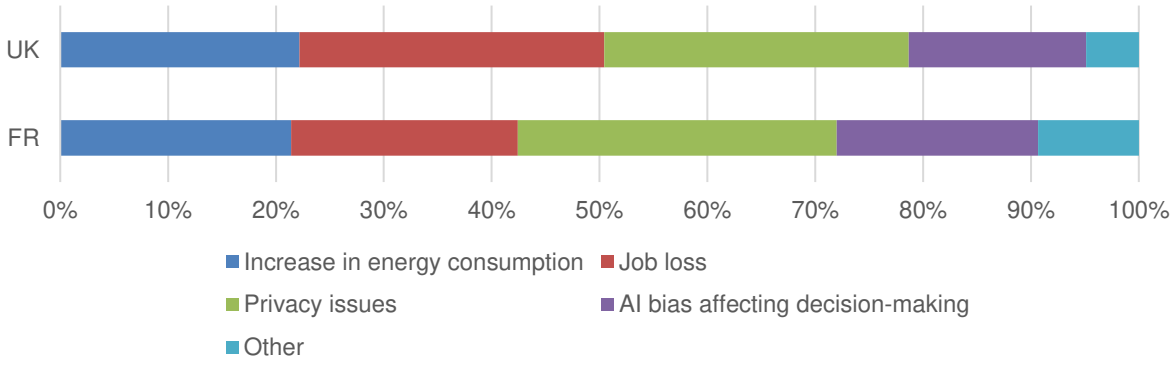
The service and financial sectors are slightly more attentive to this issue (construction and agriculture, in the "other" segment, also seem to be) than utilities and industry. In the public administration sector, information is not widely available.

6.6.3.4 Which of the following potential negative externalities of AI have you encountered or anticipated in your company?

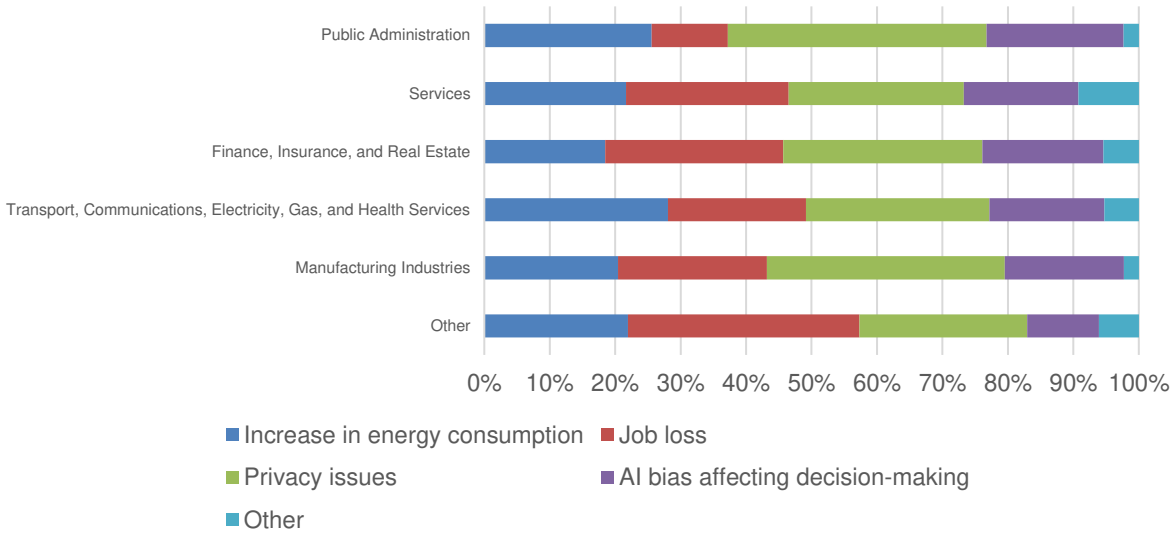
(1.5 responses per respondent)



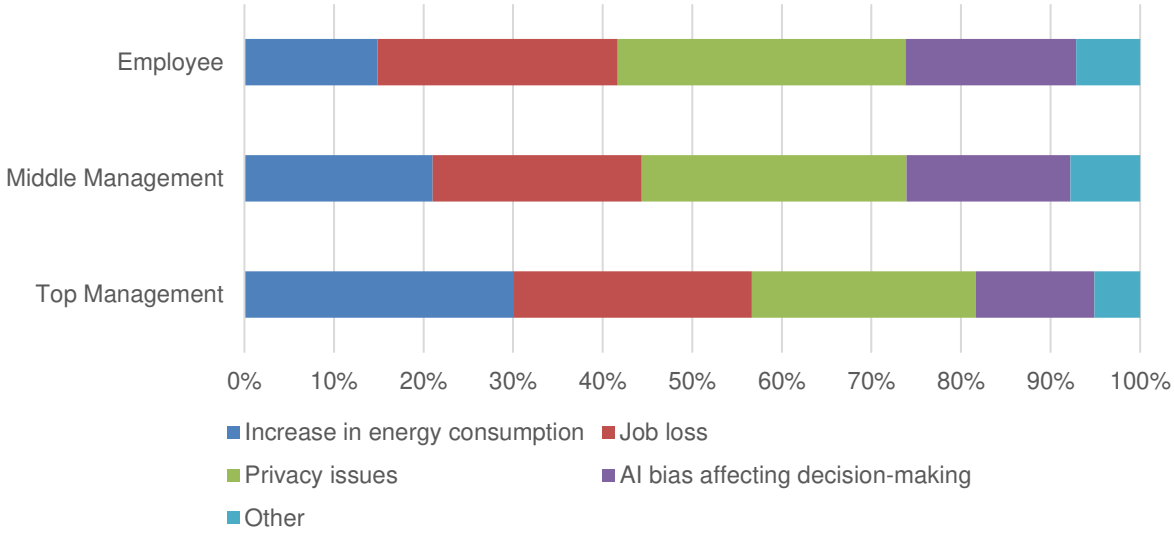
The four negative externalities proposed are highly hierarchical, with confidentiality being the most frequently encountered issue, followed by the risk of job cuts and the impact on energy consumption. The question of AI bias and its risks for decision-making appears less important.



For French respondents, confidentiality is by far the most significant negative externality, while the next three concerns—energy consumption, job cuts, and AI biases—are more evenly balanced, with energy issues slightly ahead of job cuts. In contrast, British respondents prioritize job losses over confidentiality concerns.



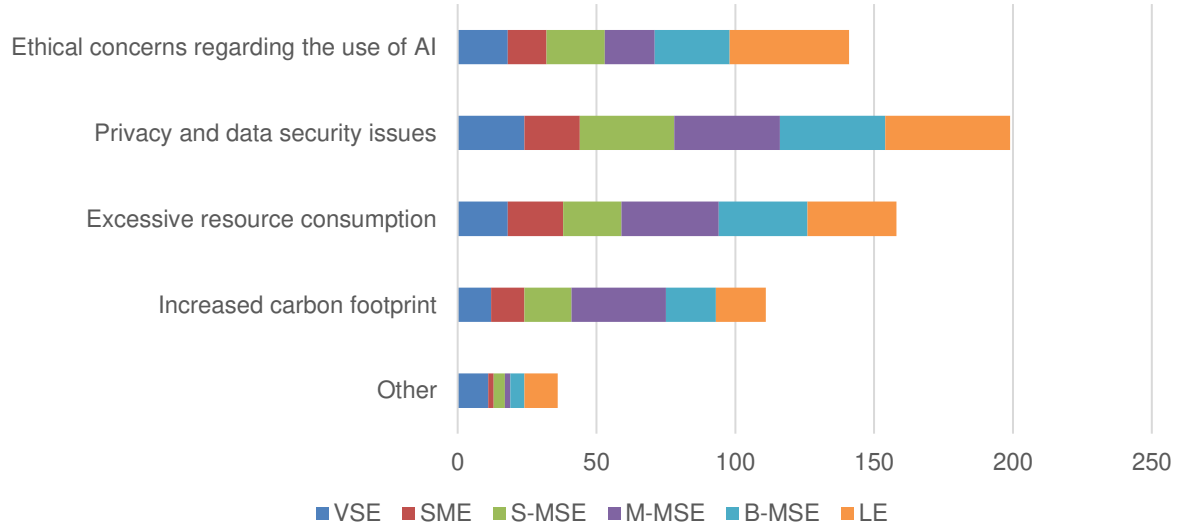
It is worth noting that it is in utilities and public administration that energy consumption outstrips job cuts.



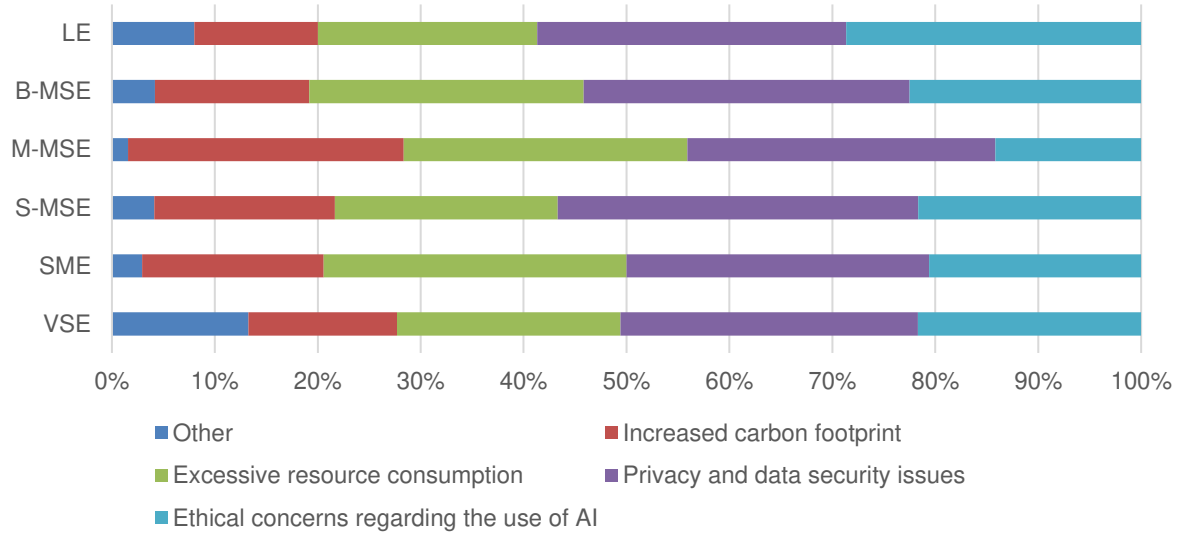
It is also noteworthy that job losses are a greater concern for employees than for decision-makers. Bias in AI is similarly more concerning for employees and middle managers, while decision-makers prioritize energy consumption as a significant externality, more so than other respondent categories.

6.6.3.5 Which of the following new sustainability risks does AI create in your company/industry?

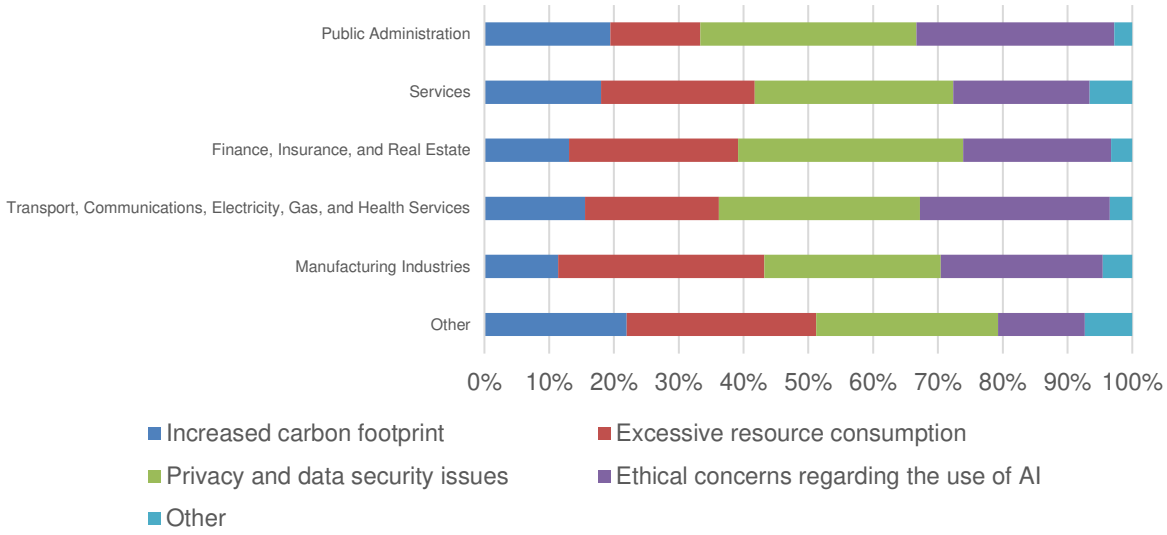
(1.5 responses per respondent)



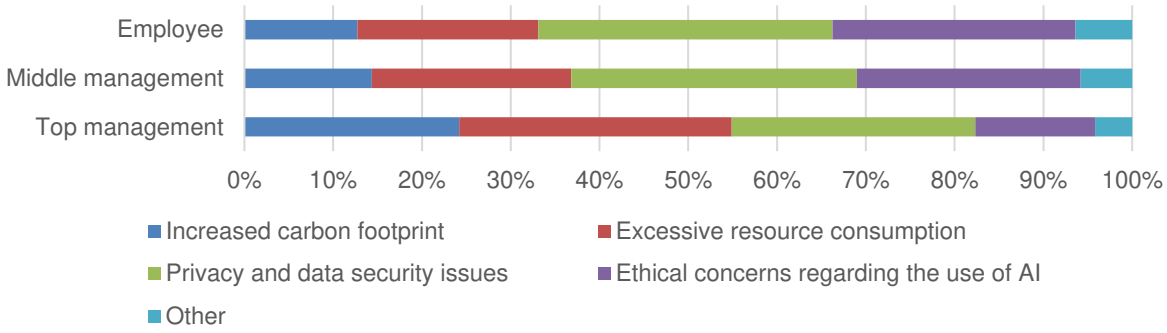
While confidentiality appears to be the main risk to sustainability, environmental risks (resource consumption and carbon footprint), when grouped together, account for 41% of responses.



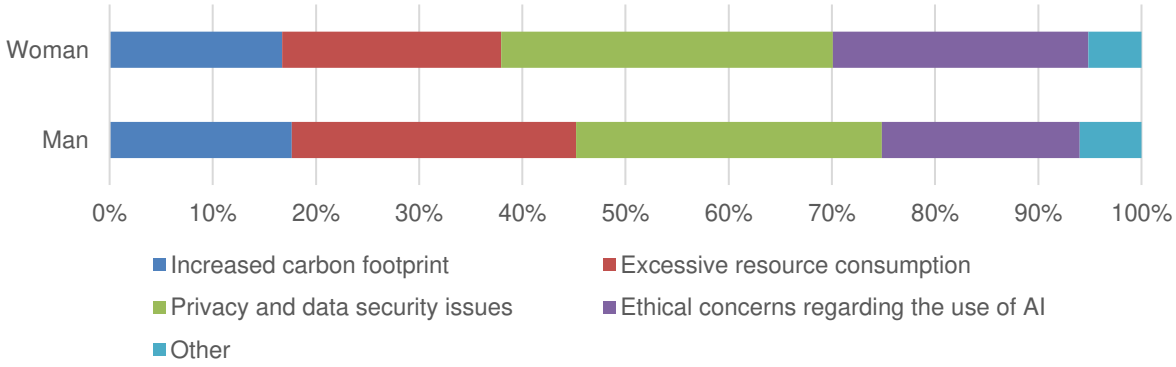
Ethical concerns are most prevalent among GEs, while environmental risk is perceived more strongly among MSEs.



The financial sector is more focused on the issue of data confidentiality and security, consistent with the critical importance of information protection in this sector. The industry places more importance on the increased carbon footprint, consistent with the responses in the previous categories.



Top managers place more emphasis on resource consumption and less on ethical issues, unlike other categories of respondents who are more focused on these topics.

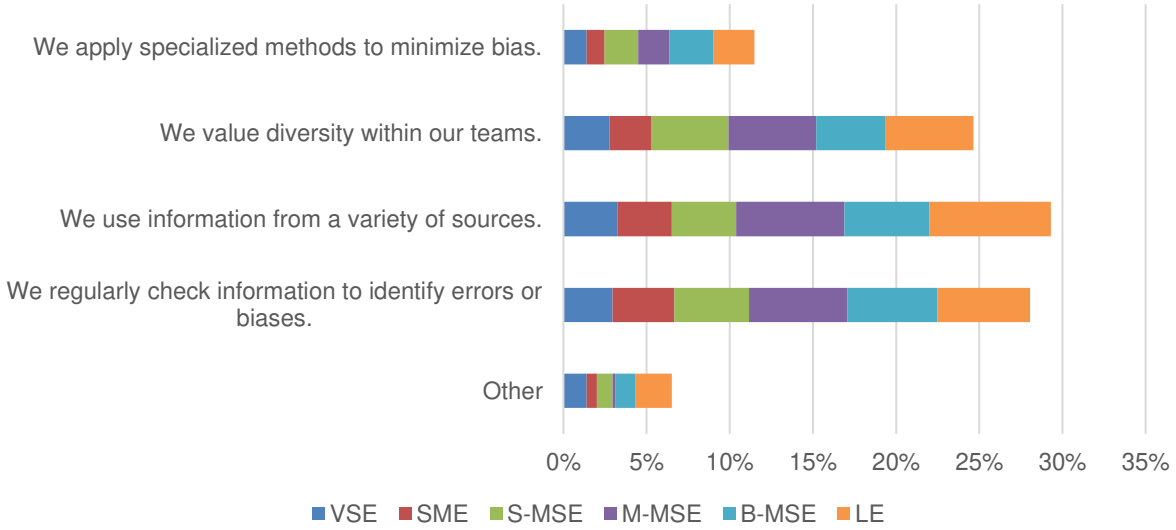


Women place slightly more emphasis on confidentiality and ethics. This heightened focus on ethics may stem from the fact that one of the commonly discussed biases in AI relates to gender[4].

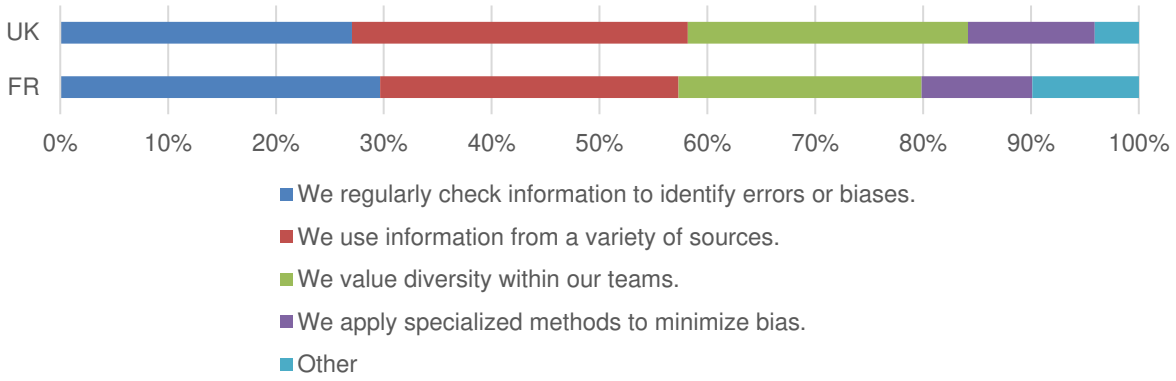
[4] Source: UNESCO, Generative AI: UNESCO study reveals alarming evidence of regressive gender stereotypes,

6.6.3.6 How does your company ensure that the information used for artificial intelligence is fair and non-discriminatory?

(1.5 responses per respondent)



Unsurprisingly, data management methods come out on top, although the quest for diversity within teams is a close second.



French respondents, for their part, prioritize detection analysis as the most used method. Interestingly, women assign equal importance to the top three methods, with a notable difference compared to men's responses, particularly when it comes to valuing diversity within teams.

https://www.unesco.org/en/articles/generative-ai-unesco-study-reveals- alarming-evidence-regressive-gender-stereotypes

6.7 AI and sustainability: ethics

6.7.1 To remember

18% of respondents say their company has already had to stop or adjust an AI project due to ethical issues.

61% of respondents believe that ethics are important in their company's AI strategy.

48% of the ethical considerations taken into account by companies relate in roughly equal measure to confidentiality and transparency.

14% of companies have no mechanism in place to resolve the ethical dilemmas associated with the use of AI.

33% of companies plan to set up training in AI ethics issues.

6.7.2 Overview table

18%	of respondents say their company has already had to stop or adjust an AI project due to ethical issues
61% **13%**	61% of respondents believe that ethics are important in their company's AI strategy, while 13% believe the opposite
28% **19%**	28% of companies have tools to detect or resolve ethical issues in AI. 19% have no such plans.
32%	of companies do not have and do not plan to dedicate a team or role to manage ethical considerations in AI, a rate that drops to 8% for companies that have experienced ethical issues
Confidentiality Transparency	48% of ethical considerations taken into account by companies relate in roughly equal measure to Confidentiality and Transparency
54% **26%**	35% of companies already have ethical guidelines for the use of AI, a figure that rises to 54% if current initiatives are taken into account. 26% have no such guidelines in this area.
67% **17%**	For those companies that already have them, the guidelines are widely publicized (for 67% of them).
14%	of companies have not implemented any measures to resolve ethical dilemmas related to the use of AI... a rate reduced to 7% for companies that have already experienced such a problem.
63% **20%**	30% of companies offer their employees training on the ethical use of AI, soon to be 63%. 20% do not plan to do so, a rate reduced to 1% for those that have already experienced an issue in this area.

6.7.3 Answers

Organizations are increasingly recognizing the critical importance of ethical considerations in their AI initiatives, with 63% of surveyed companies rating ethics as very to extremely important in their AI strategy. However, implementation challenges and varying levels of maturity across different business segments reveal a complex landscape.

Nearly one in five companies (18%) have already encountered ethical challenges significant enough to require project adjustments or cessation. These incidents show notable variations across company sizes and regions: mid-sized companies report the highest frequency of ethical challenges; British organizations report a significantly higher incident rate (27%) compared to their French counterparts (9%); and the utilities sector and public administration demonstrate better ethical risk management, reporting fewer incidents.

wer incidents.

Half of all surveyed companies either have or plan to establish dedicated AI ethics teams, slightly lower than the 55% that maintain general AI management teams. British companies show stronger institutional commitment, with only 28% lacking dedicated teams, while French organizations lag behind with 38% reporting no dedicated ethics resources. Current hiring trends suggest this capability gap may persist.

Organizations are focusing their ethical considerations on five key areas: data confidentiality (27%), decision-making transparency (21%), social impact (17%), AI bias (12%), and climate impact (12%). Large enterprises emphasize climate impact considerations, public administration prioritizes data confidentiality, and industrial sectors focus more heavily on social impact. French organizations emphasize data protection, while British companies prioritize transparency and social impact.

decision-making transparency (21%), social impact (17%), AI bias (12%), and climate impact (12%). Large enterprises emphasize climate impact considerations, public administration prioritizes data confidentiality, and industrial sectors focus more heavily on social impact. French organizations emphasize data protection, while British companies prioritize transparency and social impact.

The formalization of AI ethics through guidelines shows varying levels of maturity, with 35% having established ethical guidelines, 19% currently developing guidelines, and 25% having no immediate plans to develop guidelines. Multinational corporations lead in guideline implementation, while smaller businesses struggle with resource constraints. British companies demonstrate more advanced guideline development compared to French organizations. Among organizations with established guidelines, 68% make them publicly available, with 38% updating quarterly and 25% updating monthly. Smaller organizations show a preference for monthly updates, while French companies tend toward quarterly revisions. British organizations maintain an even split between monthly and quarterly updates.

y updates, while French companies tend toward quarterly revisions. British organizations maintain an even split between monthly and quarterly updates.

The commitment to AI ethics training reveals significant regional differences, with 30% currently providing AI ethics training, 33% planning to implement training programs, and 20% having no training plans. British organizations lead in training implementation (40%) compared to French companies (20%), and larger organizations show stronger commitment, with only 10-15% lacking training programs. Training programs primarily address data confidentiality (27%) and decision-making transparency (21%). The industrial sector includes

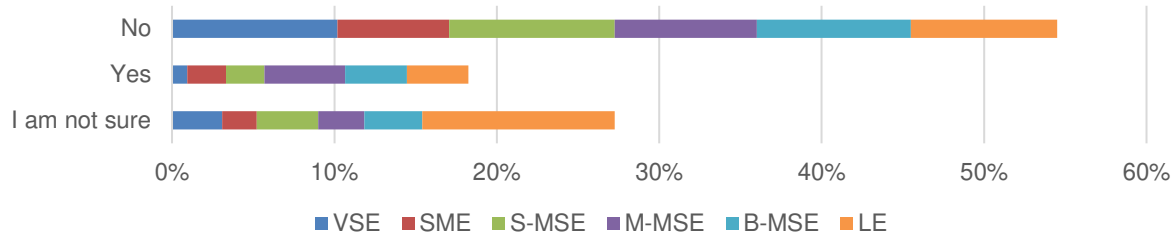
significant focus on workforce impact, public administration emphasizes data confidentiality, and the utilities sector prioritizes AI bias training.

ial sector includes significant focus on workforce impact, public administration emphasizes data confidentiality, and the utilities sector prioritizes AI bias training.

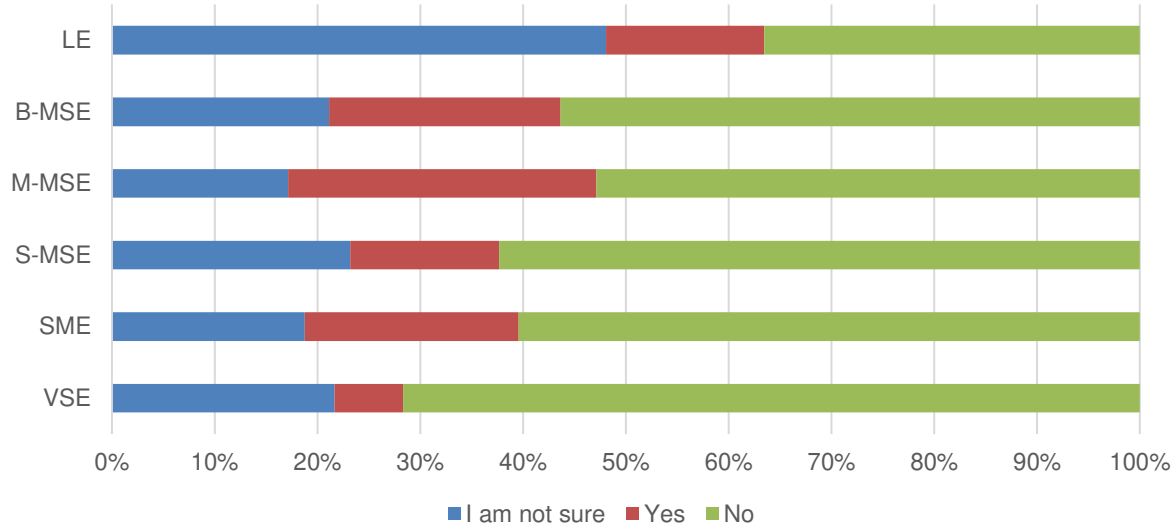
Companies employ various methods to address ethical dilemmas, with 24-25% each utilizing committees, external consultants, or stakeholder involvement, while 14% lack any formal approach. Currently, 28% use AI tools for ethical problem-solving, with 56% planning to implement such tools in the future.

While organizations increasingly recognize the importance of AI ethics, implementation maturity varies significantly across company sizes, sectors, and regions. British companies generally demonstrate more advanced ethical frameworks compared to French ones.

6.7.3.1 Has your company ever had to stop or adjust an AI project because of ethical issues?

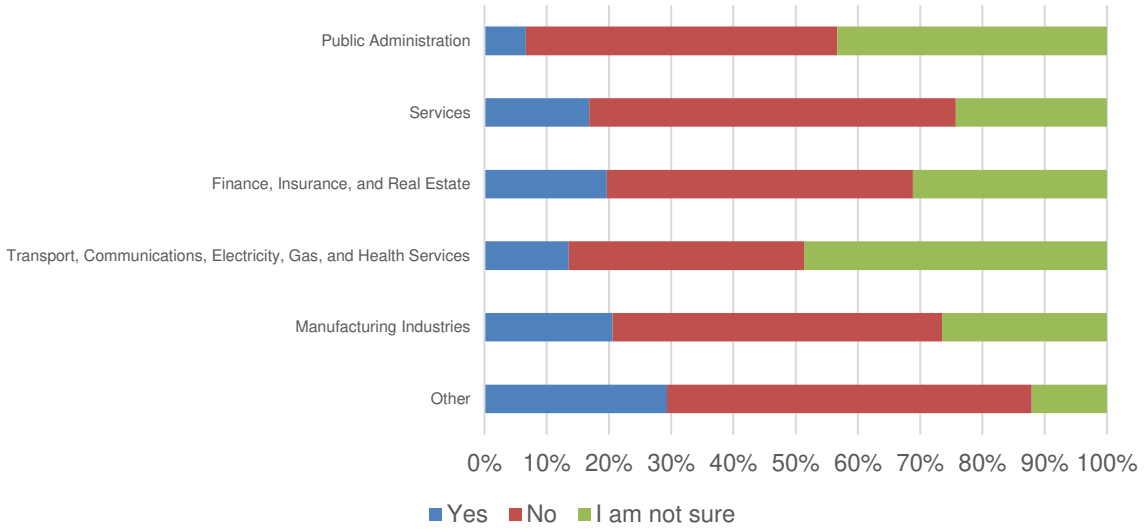


18% of respondents say that ethical issues have arisen and led the company to adjust or even halt an AI project.



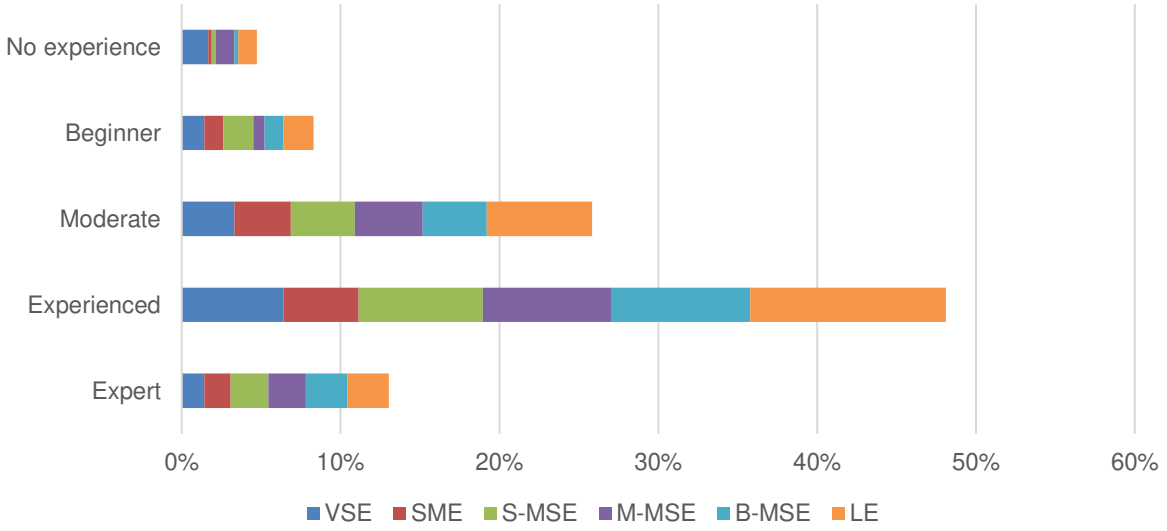
Ethics seems to be less of an issue for VSEs than for LEs. Mid-sized companies seem to have had the most difficulty with ethical issues.

British respondents were far more likely to report such an incident (27%) than French respondents (9%). These results can be explained in two ways: either the British adopt an action-oriented approach, testing and learning in the field, while the French favour upstream thinking; or the British have effective systems for detecting and dealing with problems, while the French are less well equipped and therefore fail to detect such issues.

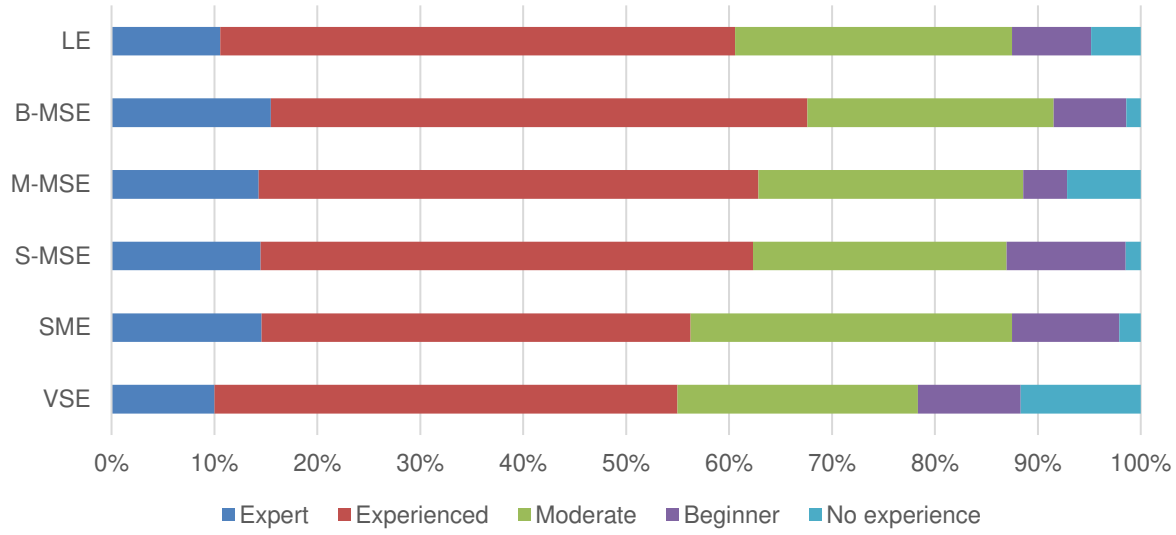


The utilities sector and even more so public administration report fewer incidents than other sectors.

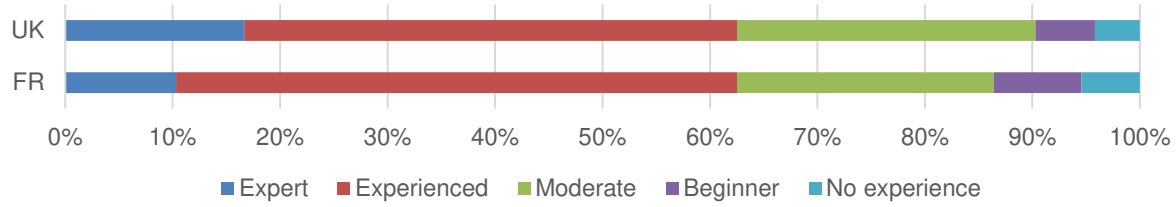
6.7.3.2 How would you rate the importance of ethics in your company's AI strategy?



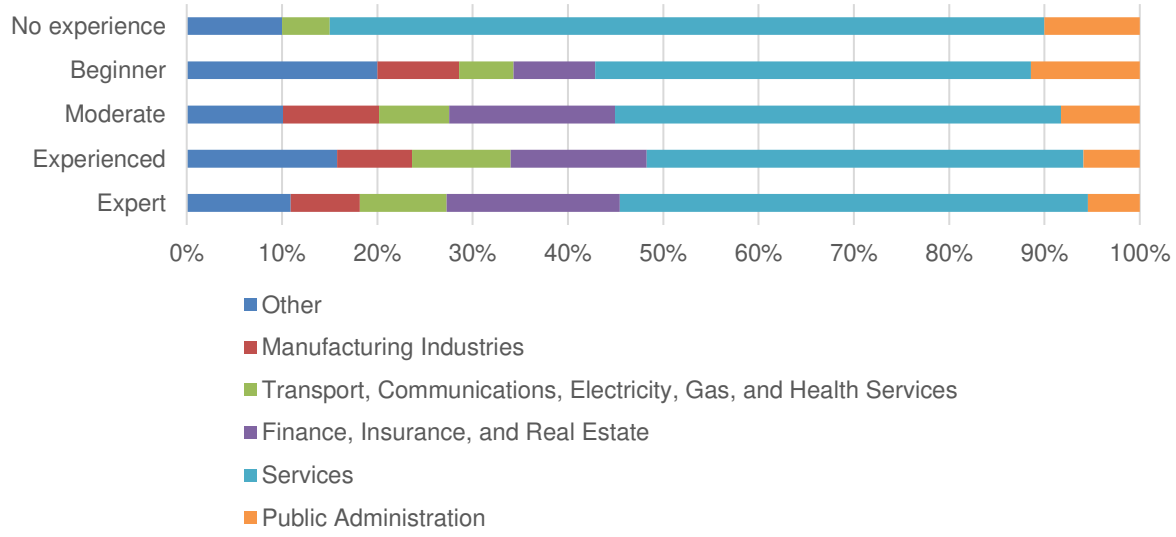
63% of respondents consider ethics to be important (very to extremely so) in their company's AI strategy, while 14% consider it to be of little or no importance.



It is mainly the smallest companies (VSEs and SMEs) that are concerned by the weakness or absence of consideration for ethics in AI strategy, even if the G-ETIs account for 10% of cases.

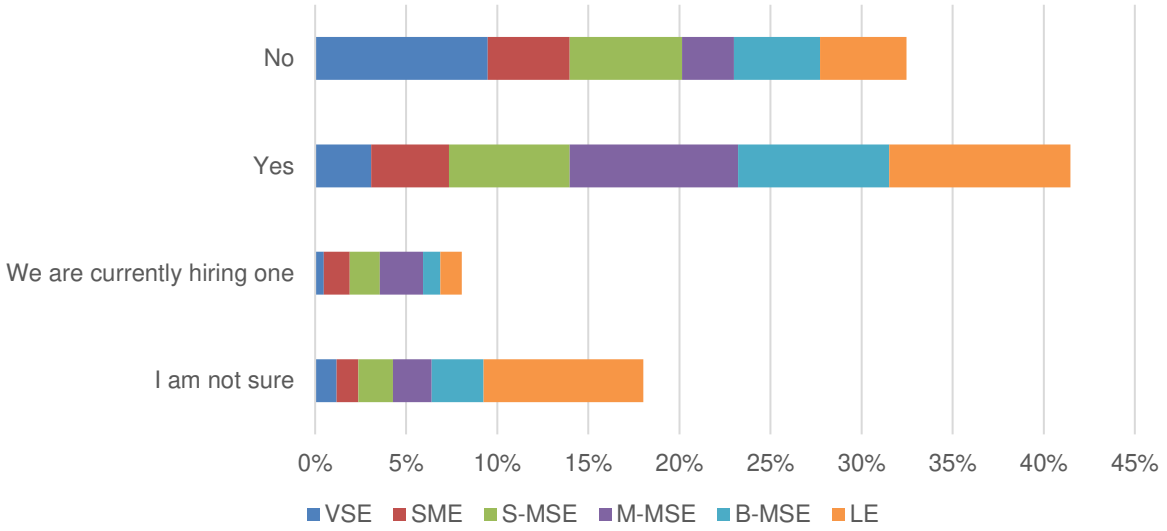


French respondents reported that 17% of them thought it was not at all important, compared to 8% of British respondents.

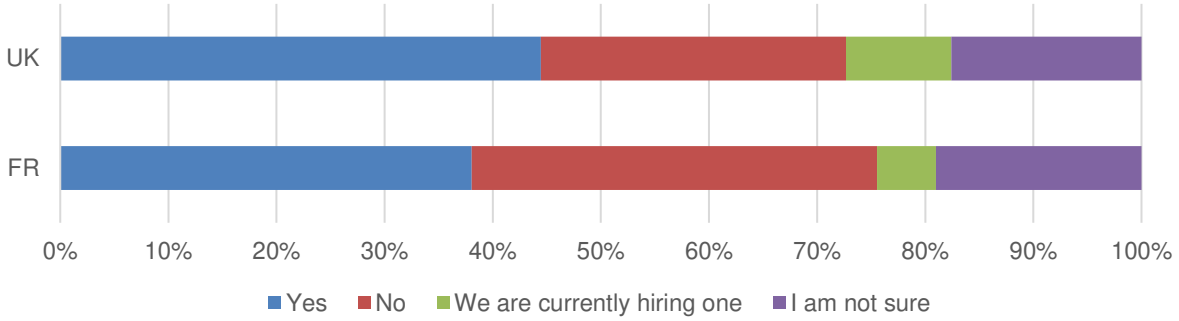


The services sector is the furthest behind on this issue, with 18% of companies for whom ethics plays a minor role in their AI strategy, although it's regrettable that in most other sectors the figure remains around 10%, except for public administration (which nevertheless has 20% of respondents who do not have the information).

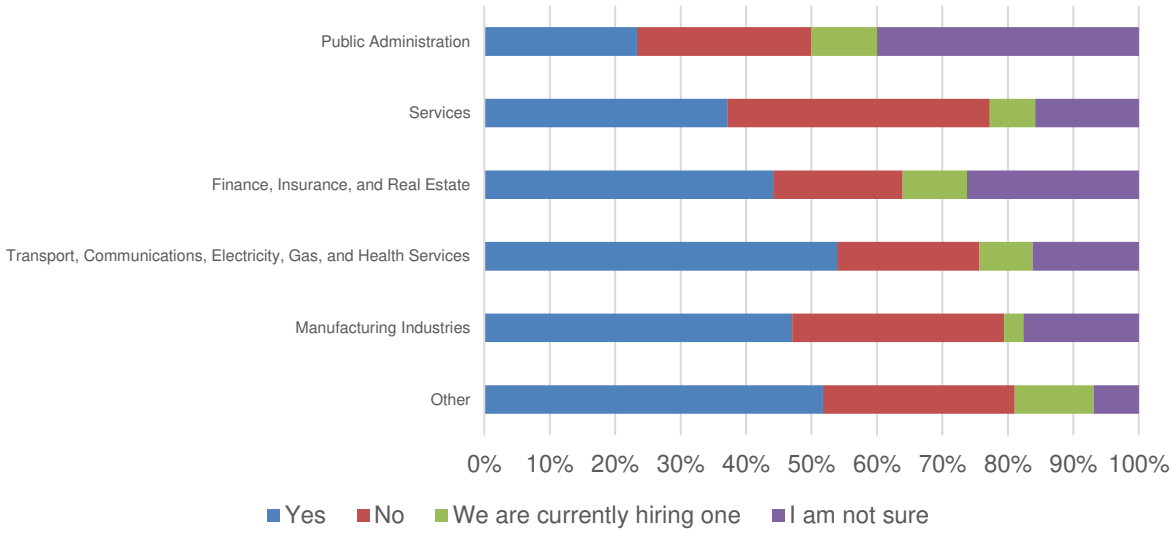
6.7.3.3 Does your company have dedicated staff or a team responsible for implementing and managing ethical considerations in the use of AI within the company?



Most responses were positive (50% including hiring), slightly down on the question of the existence of a team dedicated to implementing and managing AI (55%).



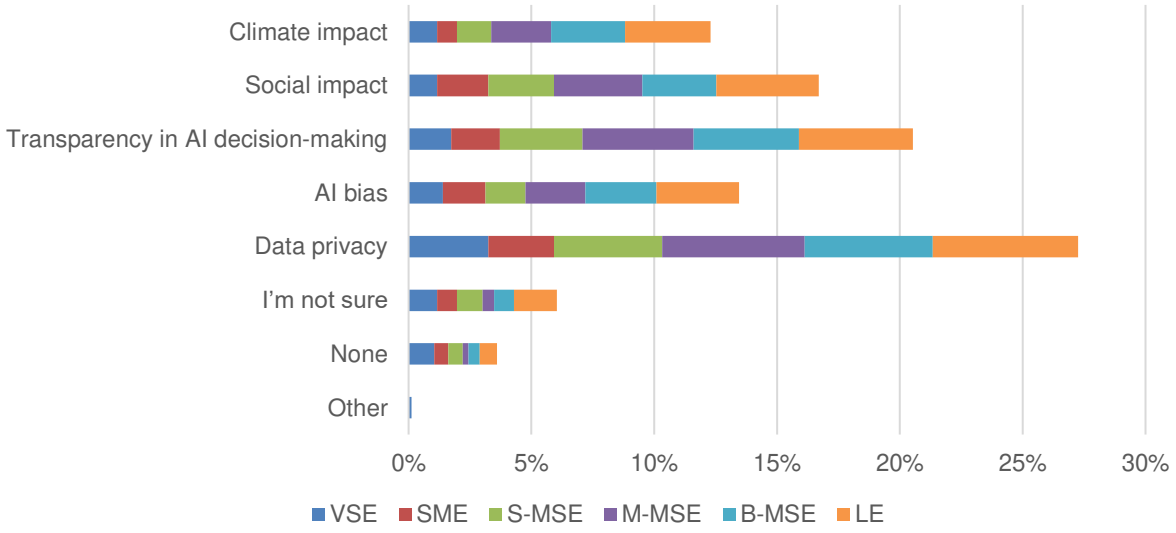
The rate of negative responses is 38% for French respondents and 28% for British respondents, with hiring dynamics not allowing for a reduction in the gap in positive responses, at least for now.



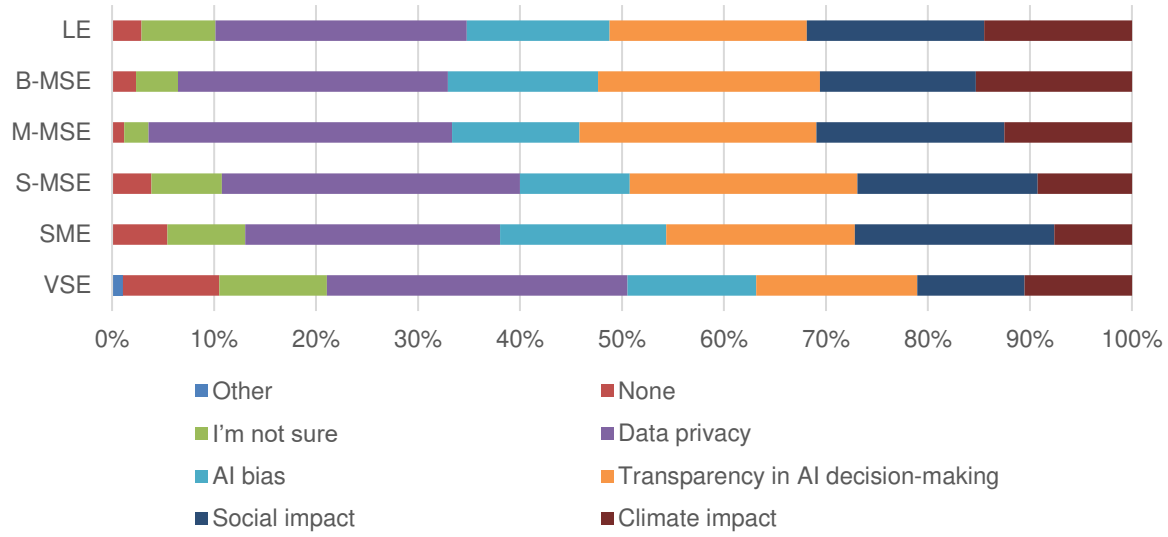
The rate of negative responses, even in the most virtuous sectors but also those most likely to be subject to high-risk AI, is improvable.

6.7.3.4 What ethical considerations does your company consider when implementing AI?

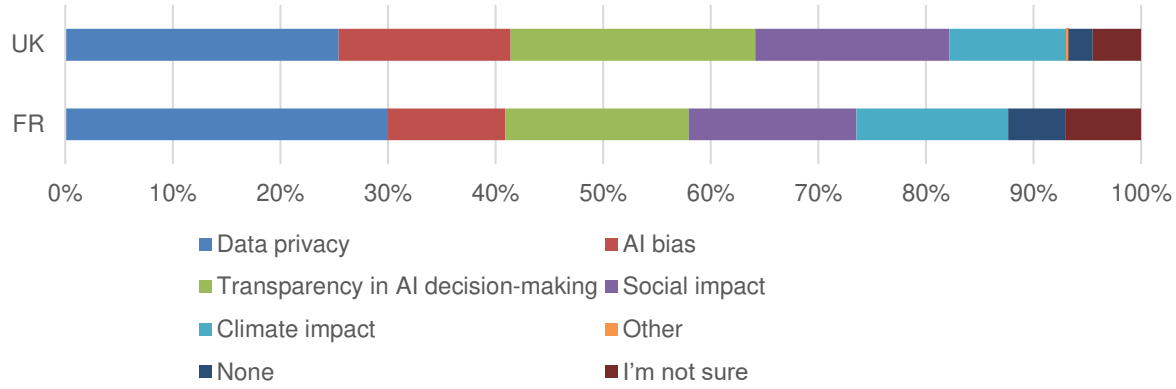
(2.0 responses per respondent)



Of the 5 ethical considerations proposed, the following top three emerge: confidentiality (27%), transparency of decision-making (21%) and social impact (17%). AI bias and climate impact, for their part, plateau at 12-13%.

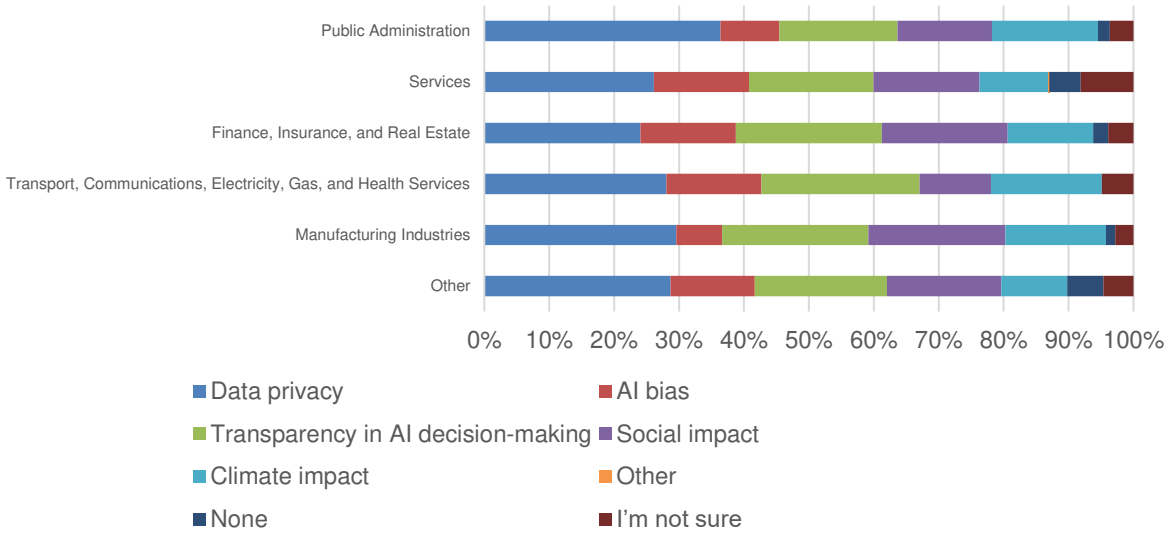


It's worth noting that climate impact is one of the top three ethical issues for large companies, both B-MSEs and LEs.



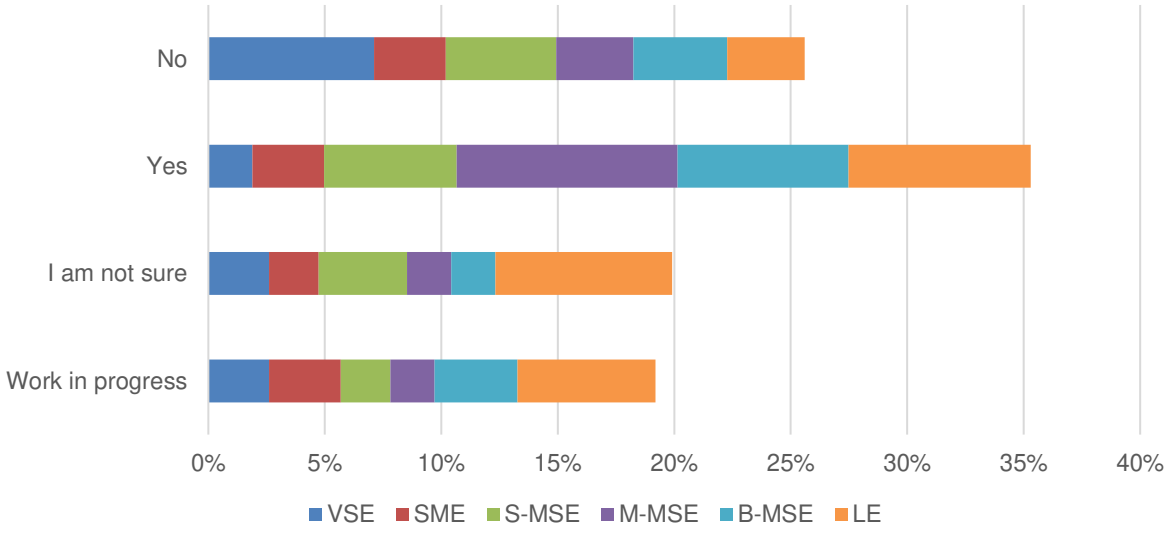
While both British and French organizations prioritize the same three key ethical concerns, there are notable differences in emphasis. French companies place significantly higher importance on data confidentiality, while British firms focus more heavily on decision-making transparency.

This divergence is reflected in their respective approaches to AI implementation. British organizations emphasize operational aspects, with 56% focusing on decision-making clarity, algorithmic fairness, and workforce impact—compared to 43% of their French counterparts. French companies, by contrast, concentrate more on foundational issues, with 44% prioritizing data protection and environmental sustainability, versus 35% of British firms.

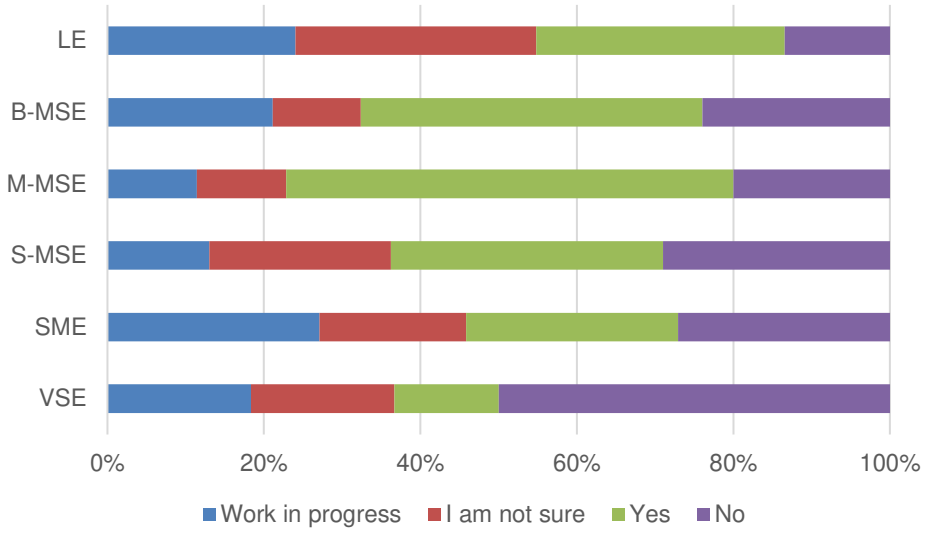


Public administration pays very close attention to confidentiality issues. AI biases are rarely taken into account by industry and public administration in their priority ethical considerations. Social impact is an important focus for industry. Climate impacts are important for utilities as well as industry and public administration.

6.7.3.5 Does your company have a set established ethical guidelines for the use of AI?



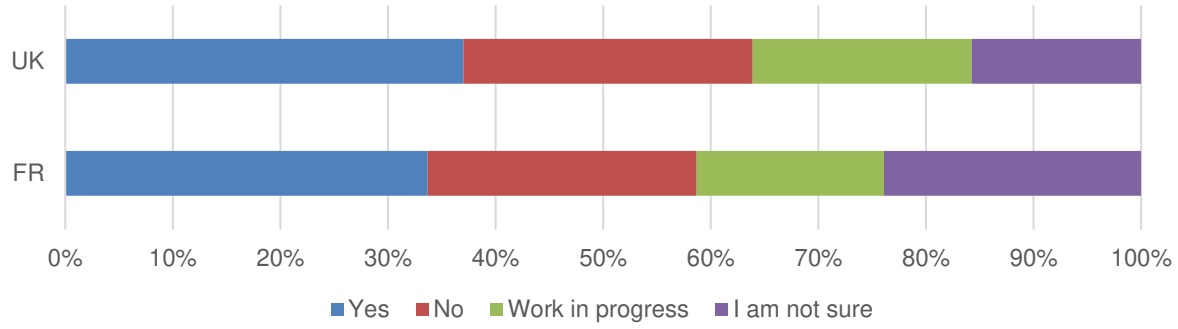
35% of companies already have ethical guidelines for the use of AI, and the momentum is strong as 19% of companies are in the process of developing such guidelines, leaving, however, 25% of companies with no plans on this issue.



Mid-sized enterprises demonstrate the highest maturity in establishing AI guidelines, although this finding requires some qualification due to a significant knowledge gap among LE employees about their own companies' guidelines.

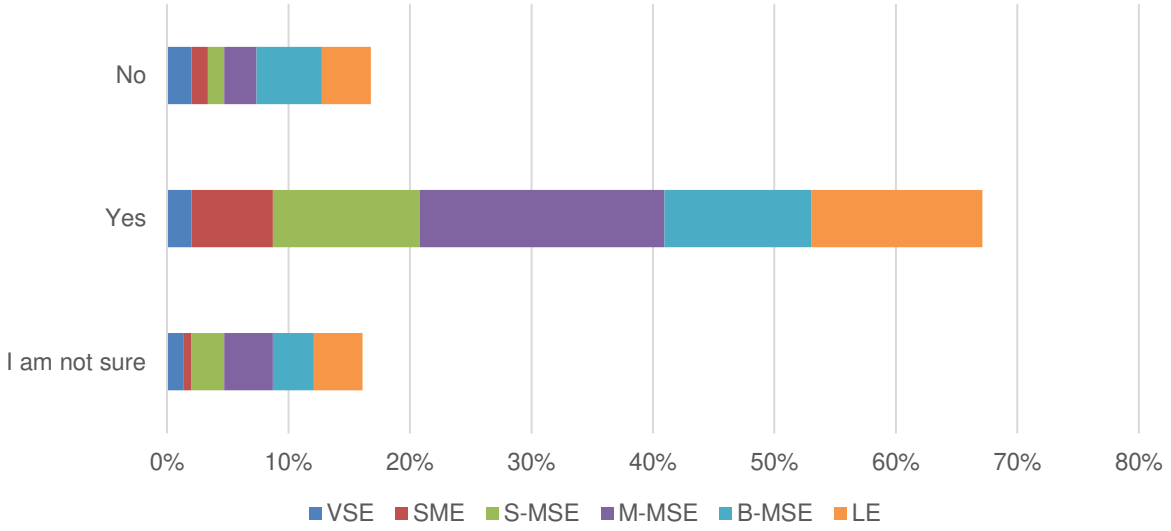
The effectiveness of AI guidelines is significantly undermined by insufficient communication and dissemination within organizations. This awareness gap threatens to render even well-crafted guidelines ineffective if they don't reach their intended users.

VSEs are struggling in this domain. The development of comprehensive AI guidelines requires substantial time investment and carries unavoidable baseline costs, creating a barrier to entry that often deters these smaller organizations from initiating such projects.

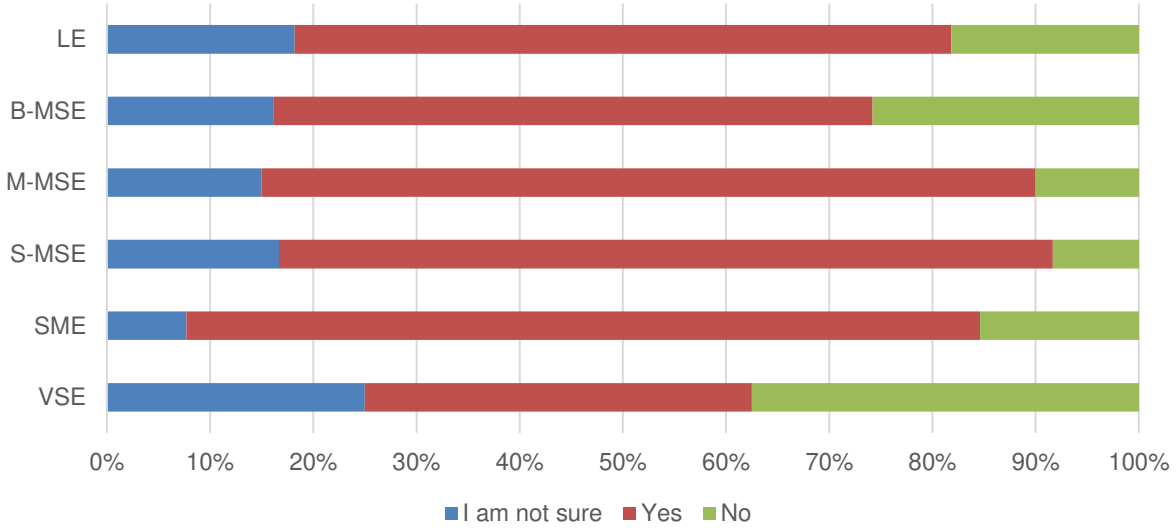


British companies are more likely to have ethical guidelines in place, and more likely to wish to do so, than French companies. Fewer British companies have no information on this subject.

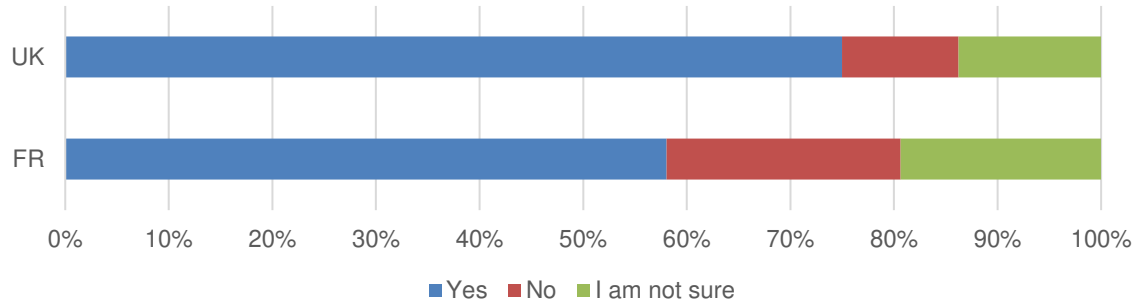
6.7.3.6 Are ethical guidelines for the use of AI made public? (35% of respondents)



Of the 35% of companies that already have ethical guidelines for the use of AI, almost two-thirds (68%) say "yes".

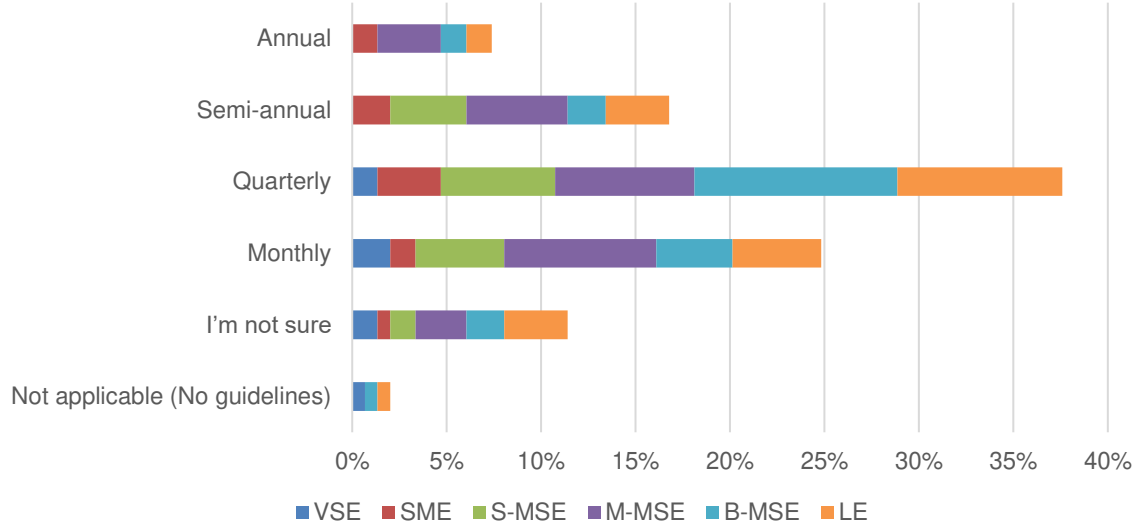


This rate is a little lower for B-MSEs and LEs (around 60%) and substantially lower for VSEs (38%).

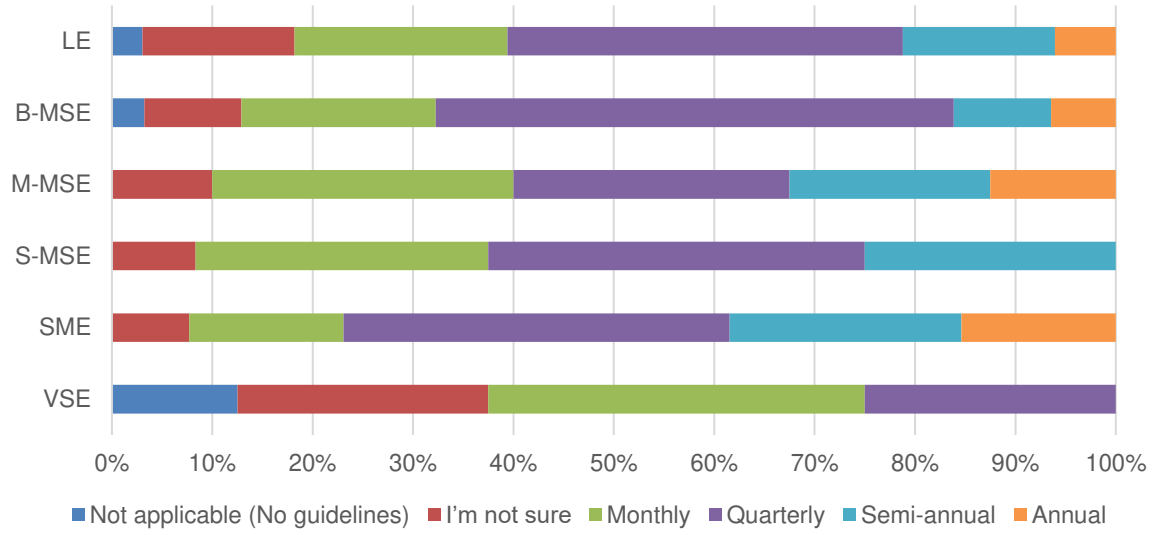


French respondents have a publication rate of under 60%, compared with over 70% for UK companies.

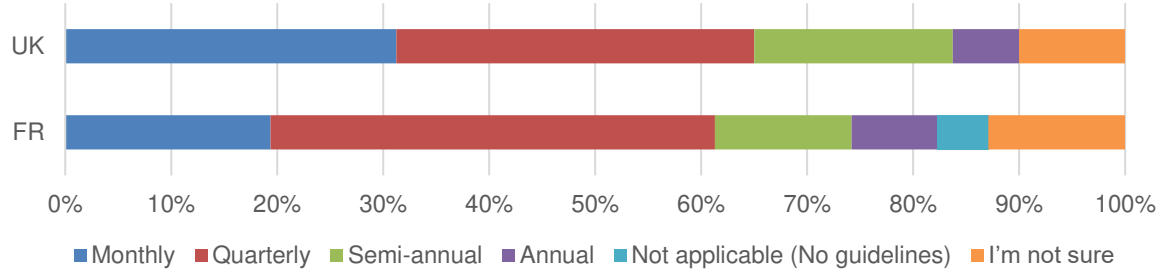
6.7.3.7 How often does your company review and update its AI ethical guidelines? (35% of respondents)



Quarterly updates are preferred by 38% of companies, and 25% even update on a monthly basis.



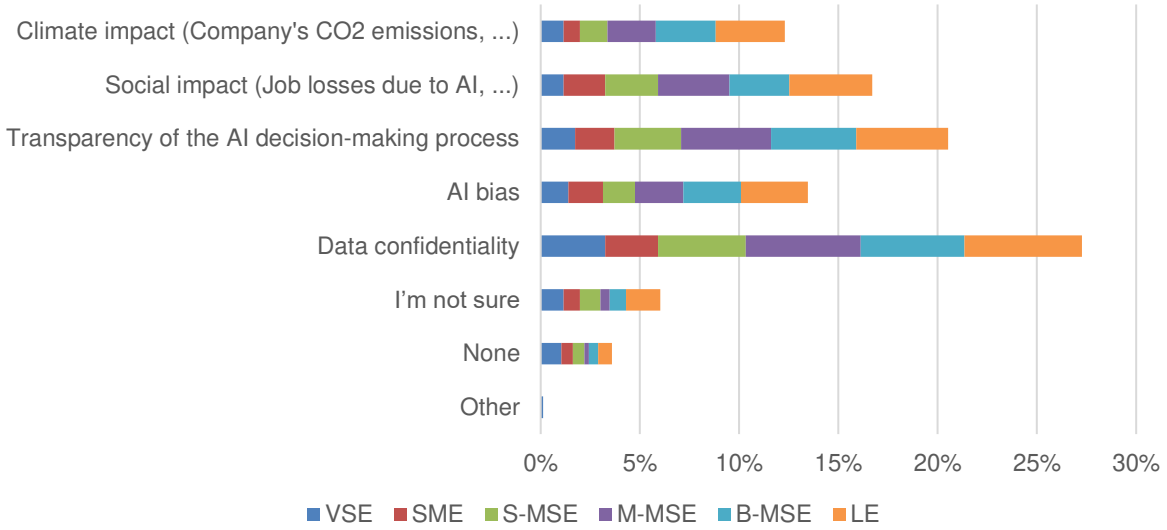
The VSEs show a high frequency of updating their ethical guidelines, with a large proportion of updates taking place on a monthly basis.



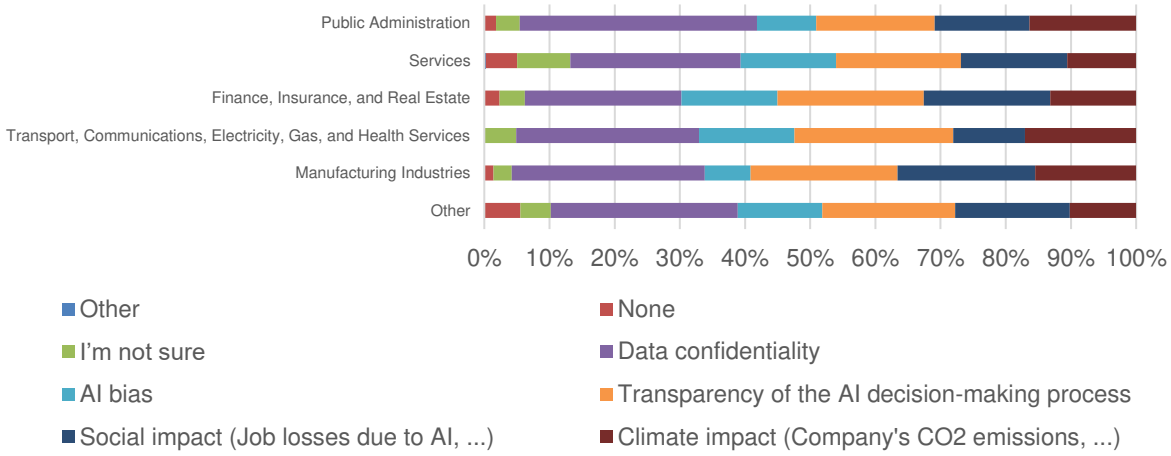
For French respondents, the quarterly frequency is clearly dominant, while for British respondents, the quarterly and monthly frequencies are neck and neck.

6.7.3.8 Which of the following ethical considerations does your company emphasize in its AI projects?

(0.9 responses per respondent)



4 out of the 5 considerations proposed received close votes, between 20 and 23%, with the issue of trust lagging behind.



The utilities and public administration sectors exhibit distinctive patterns in their AI ethical priorities that set them apart from other industries. The utilities sector emphasizes transparency and accountability as its core concerns, while notably placing less emphasis on fairness and trust. Public administration, in contrast, demonstrates an overwhelming focus on confidentiality and transparency, which together constitute 68% of their stated priorities. Interestingly, public administration shows a complete absence of accountability concerns in their ethical framework.

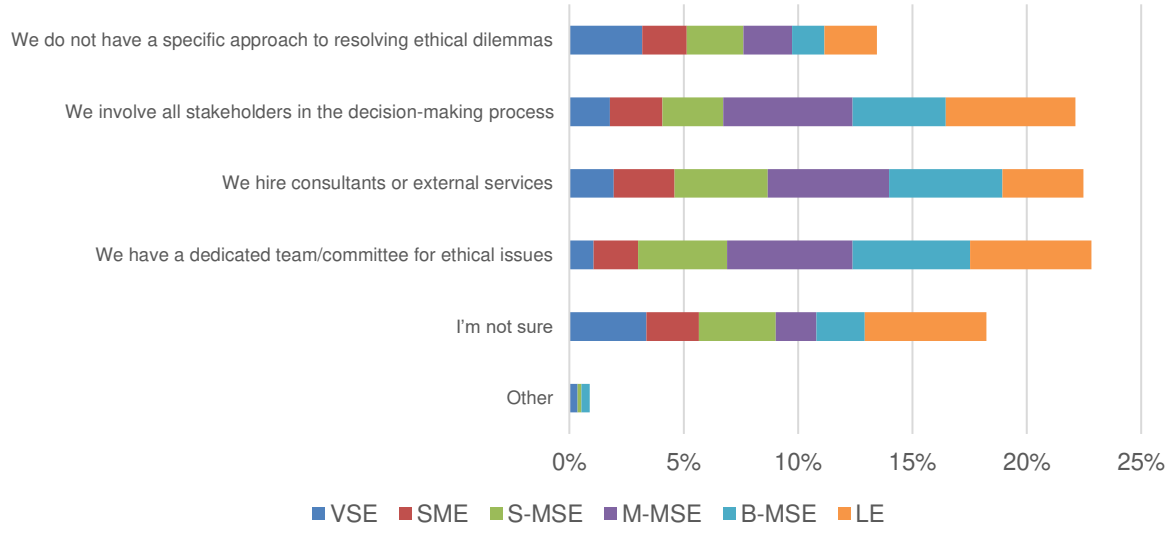
ete absence of accountability concerns in their ethical framework.

The financial sector reveals its own unique pattern, with trust emerging as a dominant concern. This emphasis likely stems from the sector's particular context, where AI decisions can have

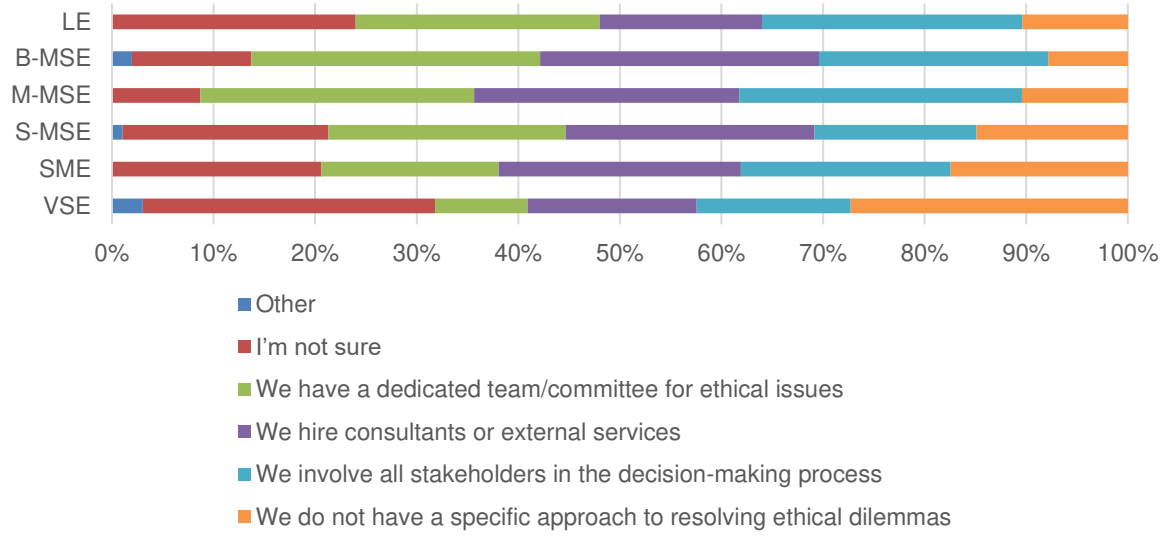
substantial economic ramifications and directly impact customer assets.

6.7.3.9 How does your company resolve potential ethical dilemmas related to the use of AI?

(1.3 responses per respondent)

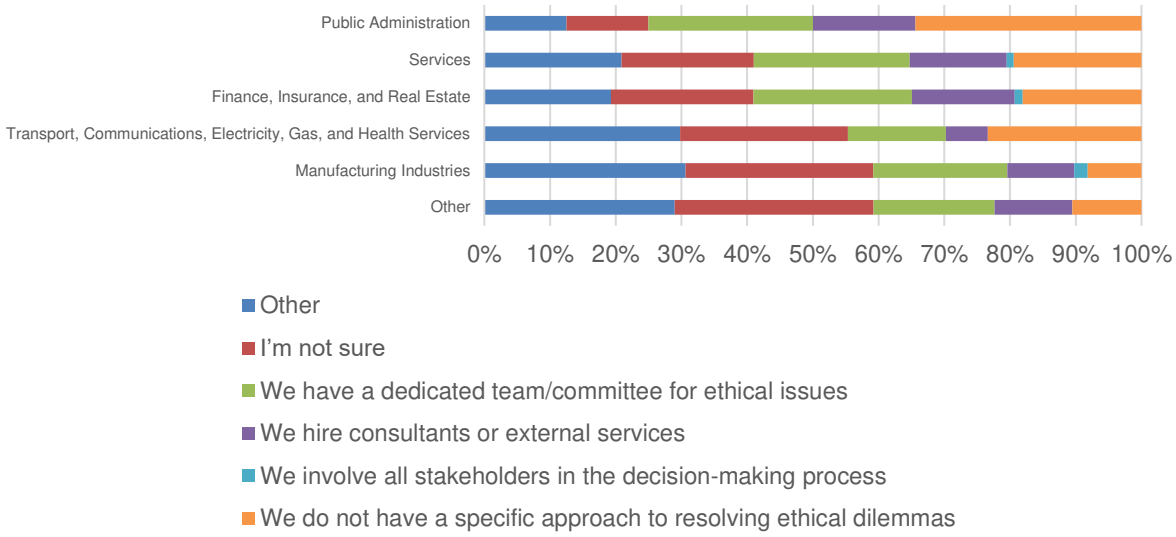


First, 14% of respondents mentioned the absence of an approach to dealing with ethical dilemmas, representing 18% of companies (taking into account multiple possible answers). The three proposed approaches are used very equally, each garnering 24 to 25% of votes.



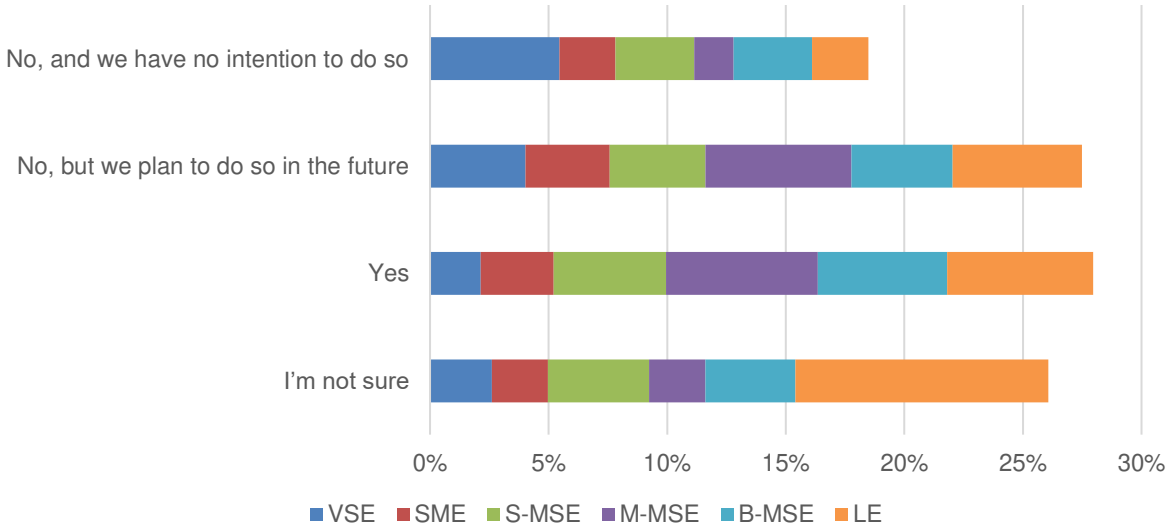
The frequency with which a committee is set up to deal with these issues increases with company size (in the case of GEs, the number of uninformed people makes it impossible to compare with other sizes), with the solution of external consultants being relatively evenly distributed across all company sizes.

Stakeholder involvement is a process that is more often implemented in mid-sized or bigger companies, as it is a process that requires organization and can be cumbersome to manage.



Industry and utilities account for over 70% of solutions in place to deal with dilemmas. Conversely, public administration appears to be struggling on this subject, with a cumulative figure of 50%, which should be qualified in view of the large number of people who do not have the necessary information to respond.

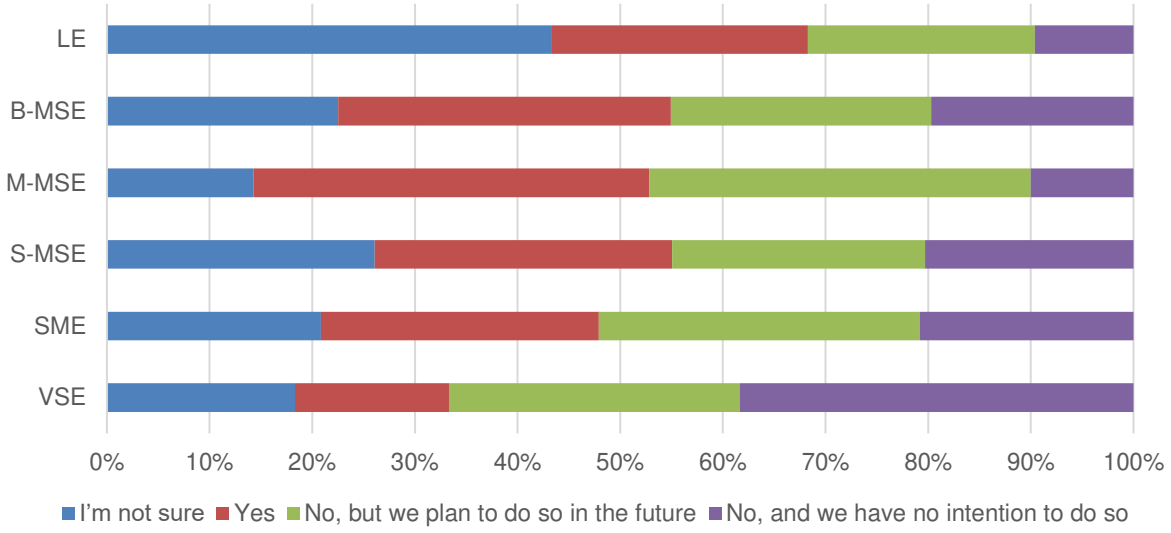
6.7.3.10 Does your company use AI tools or services aimed specifically at addressing ethical issues (e.g. bias detection, transparency tools, etc.)?



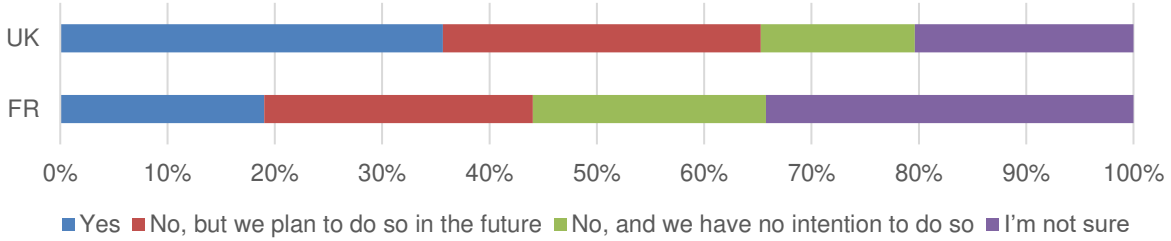
The adoption of AI ethics management tools shows strong positive momentum, with the percentage of companies equipped to address ethical challenges expected to double from 28% to 56% in the near future.

However, a concerning trend emerges: 18% of companies explicitly state they have no plans to implement such tools. This resistance varies significantly by company size. Mid-sized

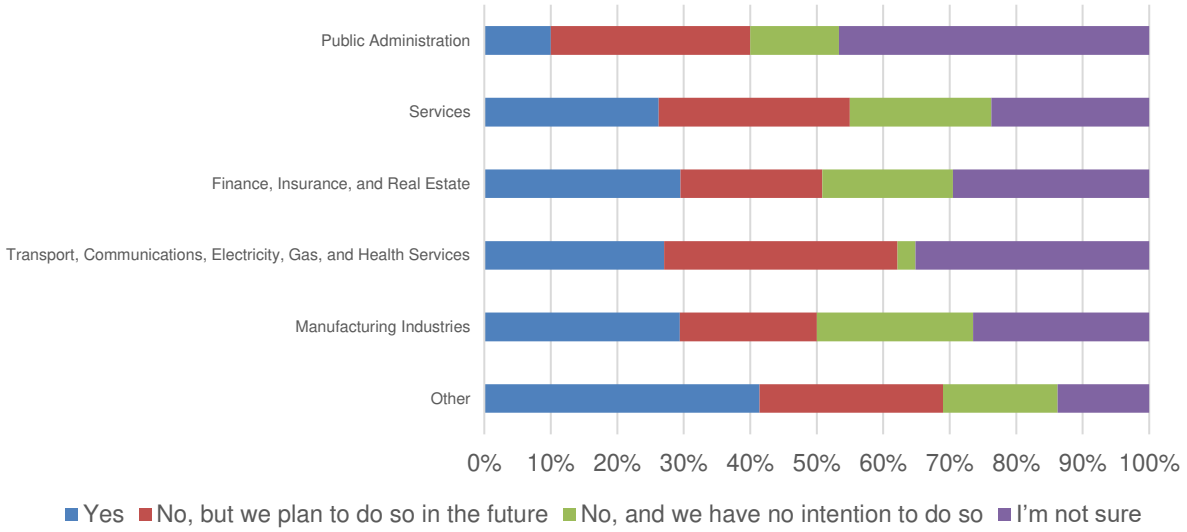
enterprises and large enterprises show greater readiness, with only 10% lacking implementation plans—though this figure should be interpreted cautiously due to information access gaps within larger organizations. Perhaps most surprisingly, 20% of B-MSEs report no intention to adopt ethics management tools, despite their presumably greater resources and exposure to AI-related risks.



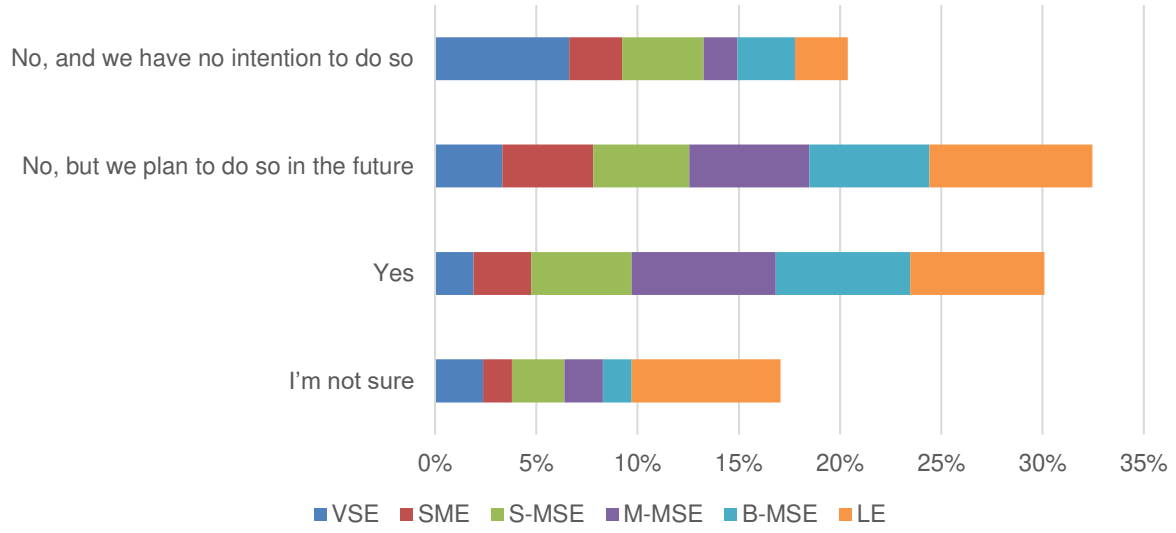
The rate of companies not intending to equip themselves is higher in France, with at least 20% of situations reported (and a significant number of people not having the information, which could increase this rate).



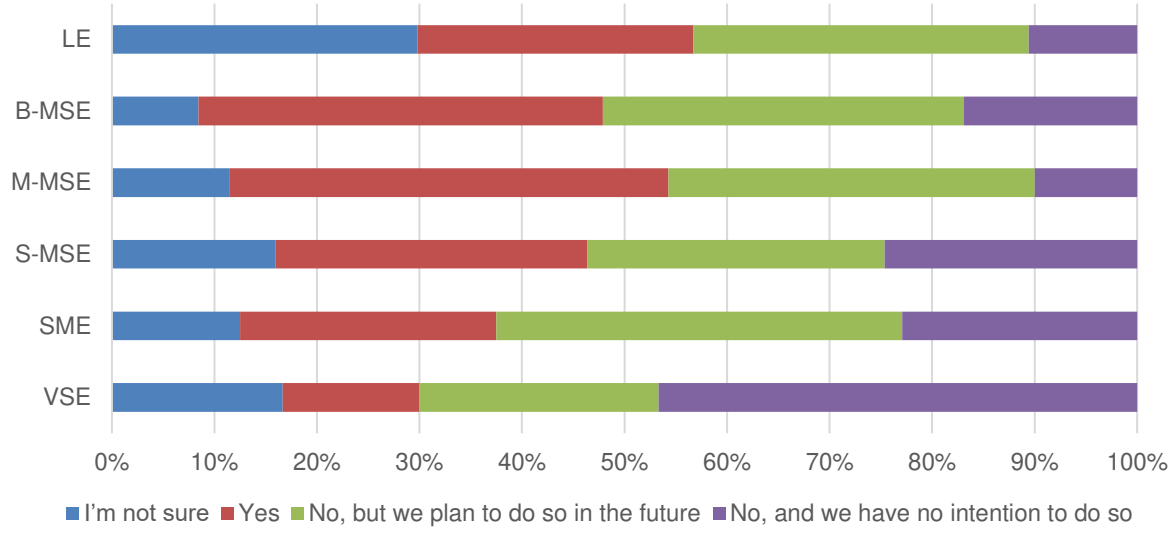
Utilities have few unsatisfactory situations, while public administration distils little information on the subject, judging by the 47% rate of people who do not have the information.


Public Administration
Services
Finance, Insurance, and Real Estate
Transport, Communications, Electricity, Gas, and Health Services
Manufacturing Industries
Other
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Yes
No, but we plan to do so in the future
No, and we have no intention to do so
I'm not sure

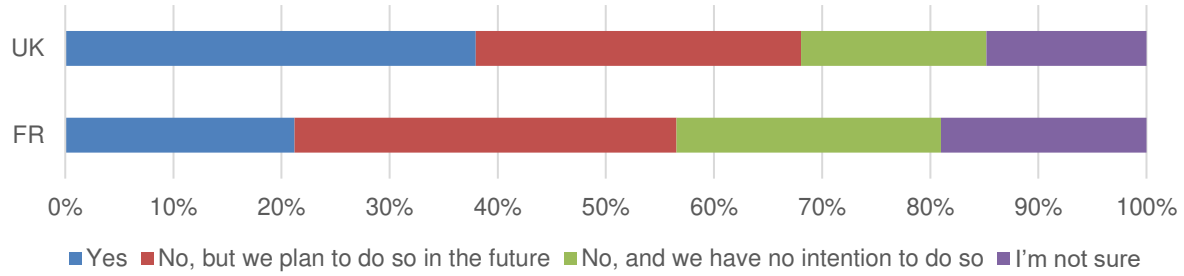
6.7.3.11 Does your company offer its employees training on the ethical use of AI?



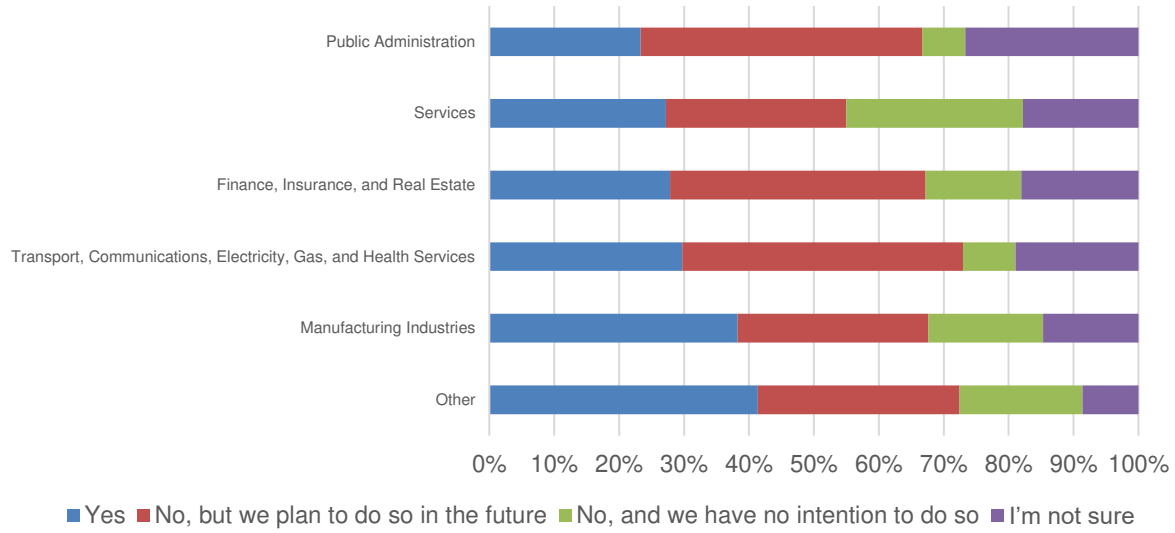
Training on AI ethics is gaining momentum, with 30% of companies already offering such training and another 33% expected to join soon. It is worth noting that 20% of companies do not plan to offer such training.



In large companies (mid-sized and larger), the rate of companies not planning to offer AI ethics training is around 10 to 15%. This can be explained by training plans that allow for more investment in these areas.

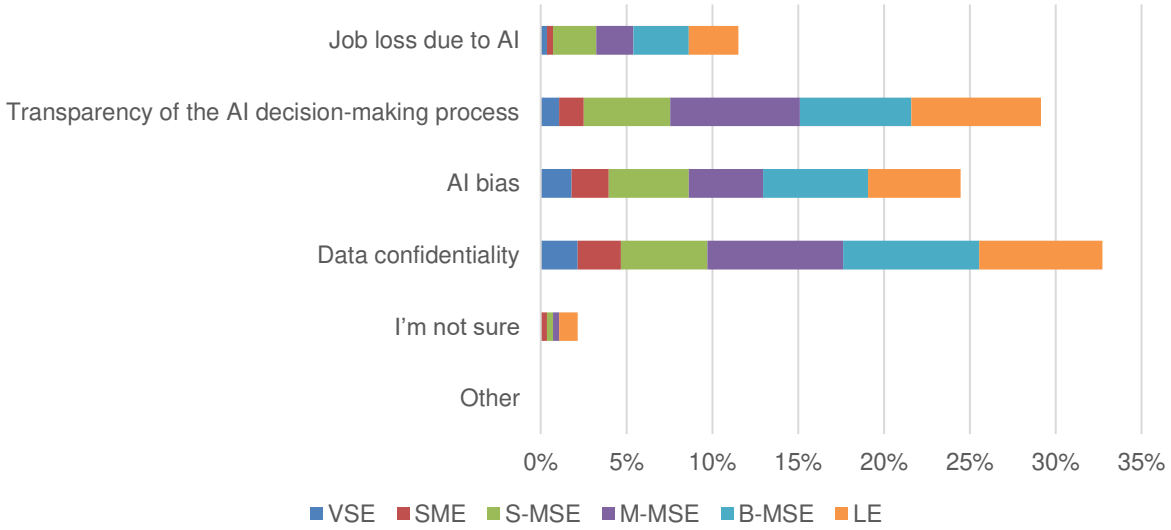


There is a significant disparity between British and French respondents, with nearly 40% of British companies having already trained their employees compared to about 20% of French companies. The total of companies that have done so and those planning to do so is nearly 70% for British companies versus less than 60% for French companies.

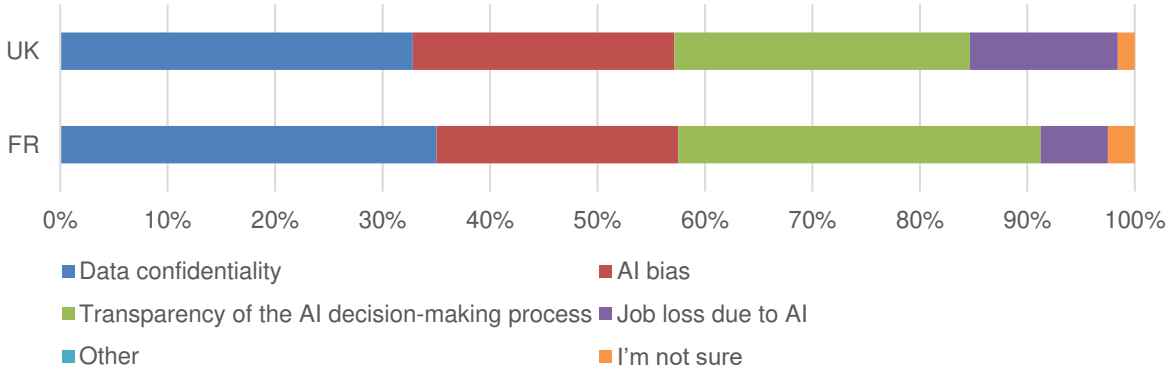


Services are well behind on the question, while utilities and public administration combine good scores with a low rate of negative responses (5 to 8%).

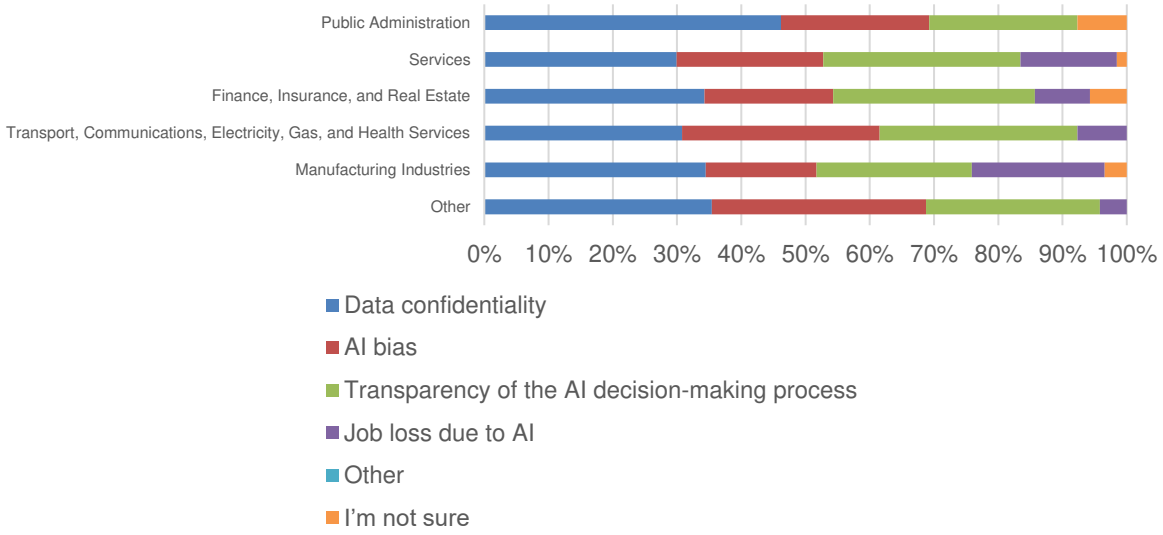
6.7.3.12 What is the main subject of this training? (66% of responses)



Confidentiality is the subject most frequently addressed in training courses, followed by transparency of the decision-making process.



French respondents indicate that the first two themes are widely addressed in training courses, while job cuts are not a major topic.



In industry, job cuts are a topic covered in training courses, much more so than in other sectors. Data confidentiality is a subject more widely dispensed by public administration, and biases in AI are also an important training topic for utilities.

6.8 Forecasts

6.8.1 To remember

50% of companies intend to increase their investment in AI, and **14%** have no intention of doing so.

72% believe AI will influence their industry, 21% do not.

66% of respondents think that the workforce will have to adapt (requalification or upskilling) to the adoption of AI in the coming decade; 11% do not.

Cultural differences between British and French respondents:

- **45%/27%** of UK respondents consider current European laws to be sufficient / insufficient respectively, a ratio reversed to **29%/43%** for French respondents.
- **50%/26%** of UK respondents believe that AI will/will not help to reduce social inequalities in the coming decade, a ratio reversed to **29%/51%** for French respondents
- **Only 5%** of UK respondents believe that cultural or regional factors play a role in the perception of AI, compared to **30 %** of French respondents.

66% of respondents put health and education at the top of the list of issues where progress is desired in the next 20 years, ahead of the environment and equality.

6.8.2 Overview table

50% **14%**	14% of companies have no plans to increase their investment in AI, including 6% who have not invested in AI to date.
21%	21% of respondents see little or no influence of AI on the future of their industry (including 7% who have not invested in AI to date). Conversely, 72% anticipate that AI will have an influence, with 29% counting on extreme influence.
61/39	Current laws and regulations are judged sufficient when it comes to AI for 61% of UK respondents (excluding "don't know") and the opposite for 39% of French respondents (excluding "is not pronounced").
66% **11%**	66% of respondents believe that the adoption of AI will require a re-skilling or upskilling over the next decade. 11% of respondents do not think so.
50/29	AI will help reduce social inequality in the next decade for 50% of UK respondents and 29% of French respondents. 26% of UK respondents and 51% of French respondents do not think so.
Health Education	are the subjects that alone garner 66% of the citations among the most eagerly awaited advances in the next 20 years, with the environment and equality together garnering 30%.

"As a major player in sustainable mobility, Alstom regularly invests in digital and AI.

The recent acceleration has required and requires adjustments in our process and product development, training and recruitment plans. After the investments of the last 10 years, Alstom has several hundred AI experts as well as an extensive network of partners in the field of AI and in particular in AI applied to the railway domain.

Striking the right balance between investment, deployment at scale and adoption remains a daily challenge, to free up the resources needed to finance these innovations at a sustained pace.

Alstom's competitive environment is heterogeneous, with two players (Siemens & Hitachi) making massive group-wide AI investments, and smaller players making limited, more targeted investments.

Facilitated access to French or European research resources would be a plus (e.g. access to CIFRE students or co-financing for applied research on sustainable mobility)." - Guillaume Rabier, VP Markets & Synergies, Alstom

6.8.3 Answers

Organizations demonstrate varying levels of conviction about AI's future impact on their industries. While 46% anticipate moderate to strong influence and plan to increase AI investments, 26% expect significant impact but remain uncommitted to accelerating AI adoption. The remaining 21% foresee no substantial influence on their industry.

Two-thirds of respondents (66%) believe workforce requalification or upskilling will be necessary within the next decade to adapt to widespread AI adoption. Interestingly, younger generations express more reservation about this need. Among those who don't anticipate workforce adaptation requirements, most still acknowledge AI's industry impact, suggesting they expect AI tools to become increasingly user-friendly and accessible.

younger generations express more reservation about this need. Among those who don't anticipate workforce adaptation requirements, most still acknowledge AI's industry impact, suggesting they expect AI tools to become increasingly user-friendly and accessible.

Health and education emerge as the primary sectors where respondents hope to see AI contributions over the next two decades. Notable regional differences exist, with British respondents emphasizing equality and accessibility, while French respondents place higher

priority on environmental applications. Both nations agree on the importance of healthcare and education applications.

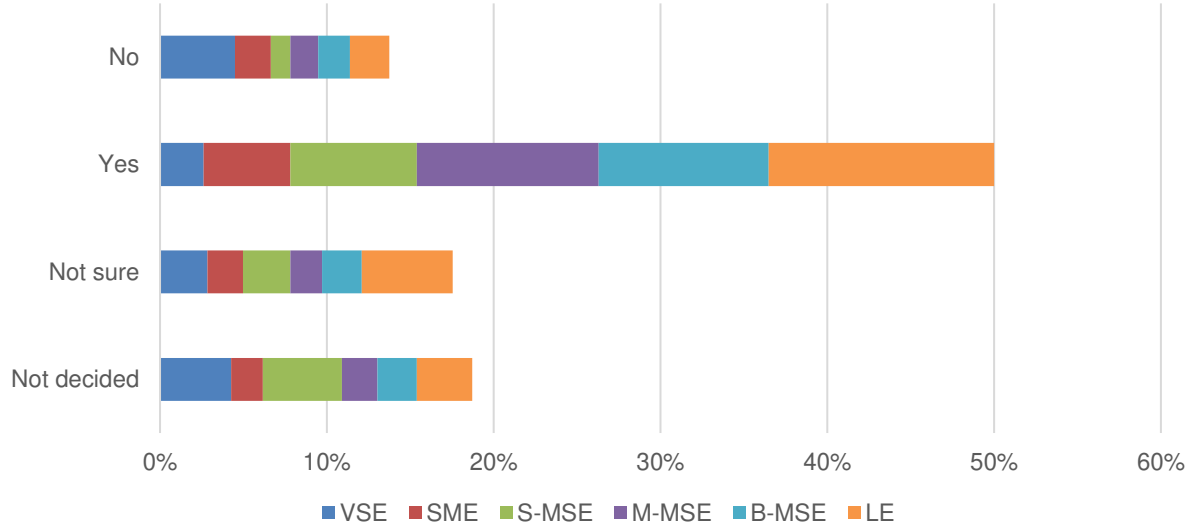
Cultural awareness and regulatory perspectives reveal stark contrasts between British and French respondents. While only 5% of British respondents recognize cultural and regional factors influencing AI perception, 30% of French respondents acknowledge such influences. This divide extends to regulatory perspectives, with British respondents expressing confidence in regulatory adequacy, while French respondents generally view European AI regulations as insufficient. Similarly, British respondents maintain cautious optimism about AI's role in addressing social disparities, while French respondents are sceptical about AI's potential to reduce social inequalities.

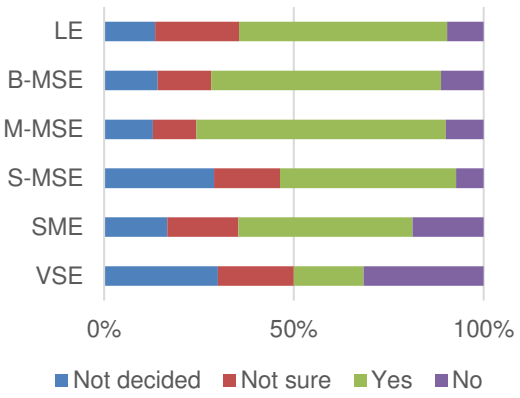
Companies broadly acknowledge AI's transformative potential across industries and workplace practices, leading to increased investment and workforce development initiatives. While optimism exists around AI's contributions to healthcare, education, and sustainability, expectations remain tempered, particularly regarding social equality impacts.

The study reveals a significant divide in regulatory confidence: British respondents demonstrate greater faith in regulatory frameworks to manage AI's evolution and implications, while French respondents express concern about the adequacy of European AI regulations.These findings suggest a complex landscape where technological optimism coexists with varying degrees of regulatory and social concern, shaped significantly by national and cultural perspectives.

6.8.3.1 Is your company planning to increase its investment in AI technologies in the future?

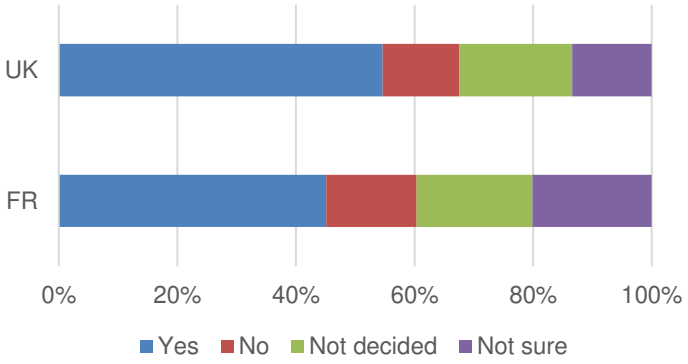
The firm responses show a clear result, with 50% positive and 13% negative.

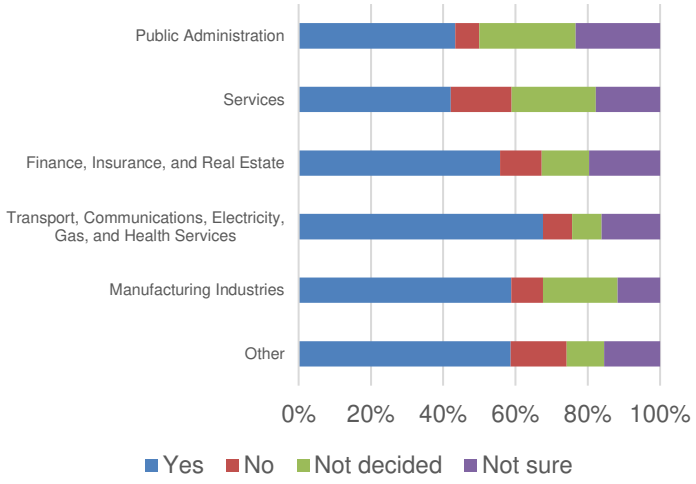




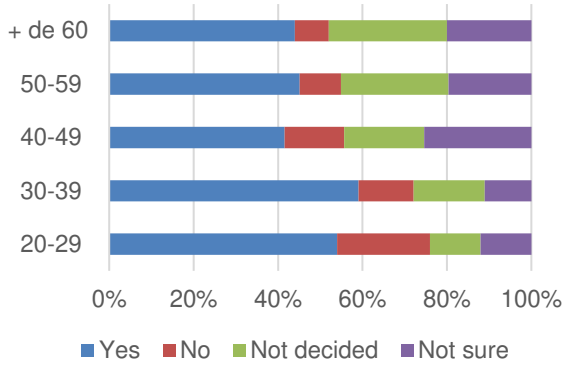
MSEs are the most assertive, while VSEs are significantly less so.

British respondents are less timid in terms of investment, with 54% answering positively compared to 45% for French respondents.



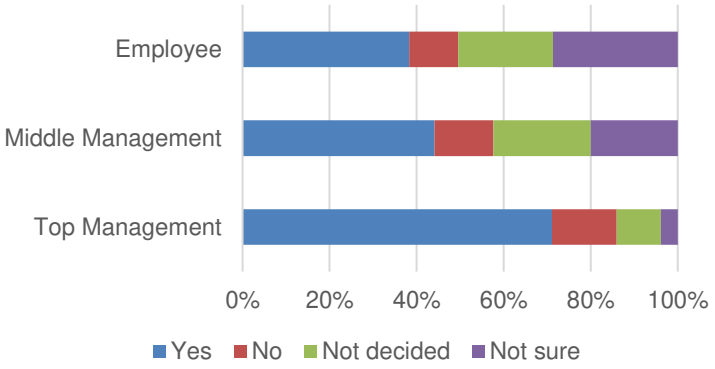


Many companies in the utilities sector seem to anticipate their acceleration in AI (68%), while the services sector stands out as more restrained (42%). Public administration shows itself to be uncertain, with the lowest rate of affirmative and negative responses (42% and 7% respectively).



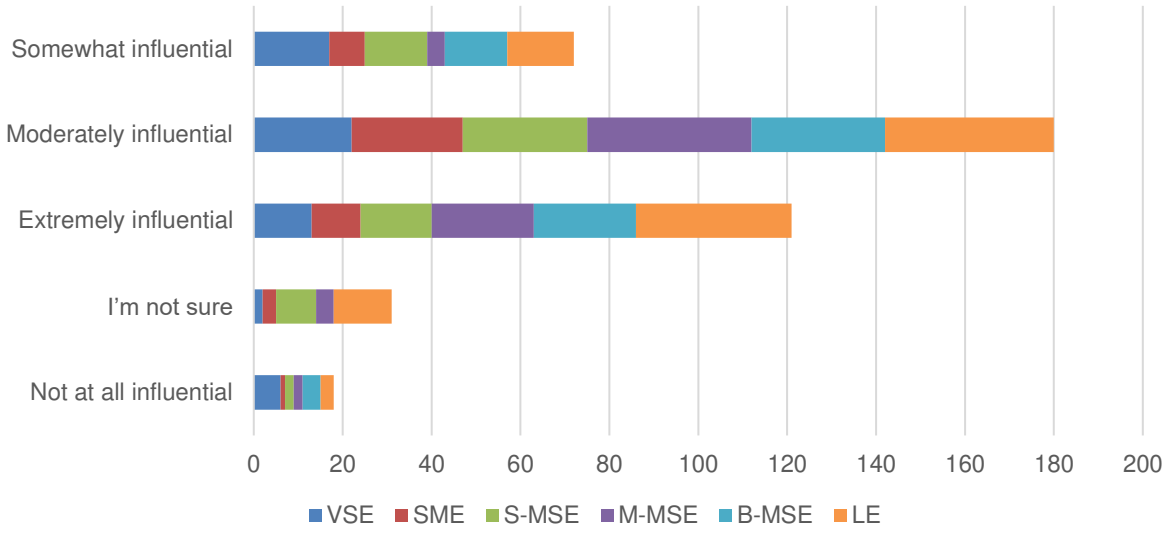
The 40-49 generation is more cautious when it comes to investments, with the lowest affirmative response rate combined with a 2nd negative response rate.

Decision-makers demonstrate the most definitive responses regarding AI initiatives, with 71% expressing clear support and 15% firm opposition. This polarized distribution reflects their intimate knowledge of company strategy and objectives, enabling them to provide more decisive answers compared to other respondents. Their position within the organization appears to minimize uncertainty and ambivalence in their responses.

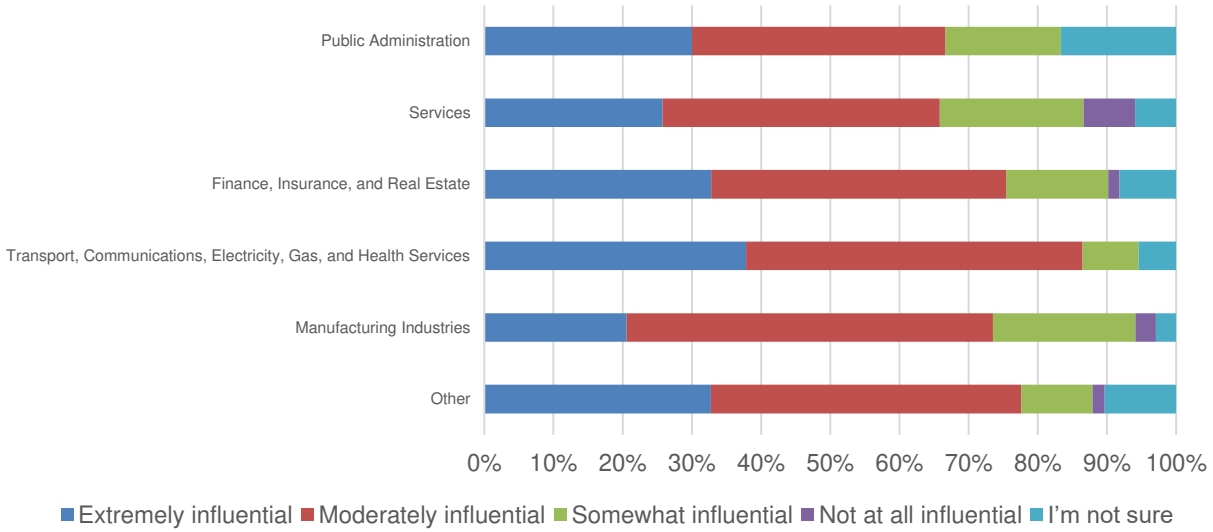


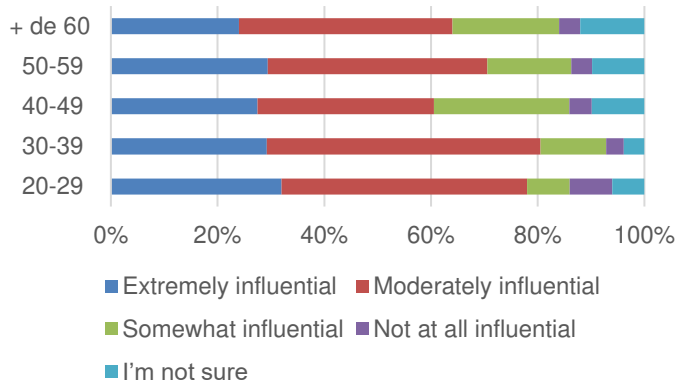
6.8.3.2 How do you see AI shaping the future of your industry?

AI will moderately to strongly influence the future of the industry, according to 43% and 29% of respondents respectively, totaling 72% of responses.



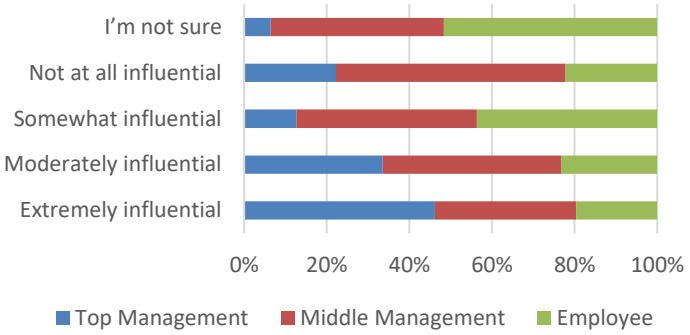
The utilities sector appears to be the most sensitive to AI (cumulative 87%), while services and public administration are more measured (66%); a situation that is fairly consistent with AI investment intentions, which showed similar relative positions.





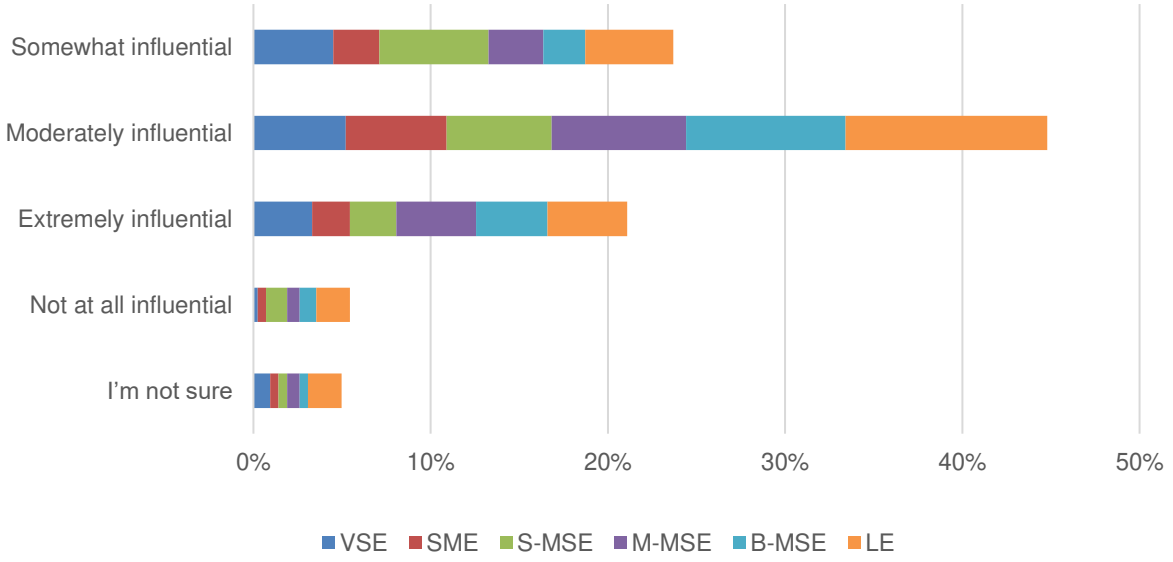
The under-40s appear to be the most convinced of AI's influence in the future, with the 50-59s also very close. The 40-49 age group are the least clear-cut, with 60% believing AI will have a strong or moderate influence, and 30% believing it will have little or no influence.

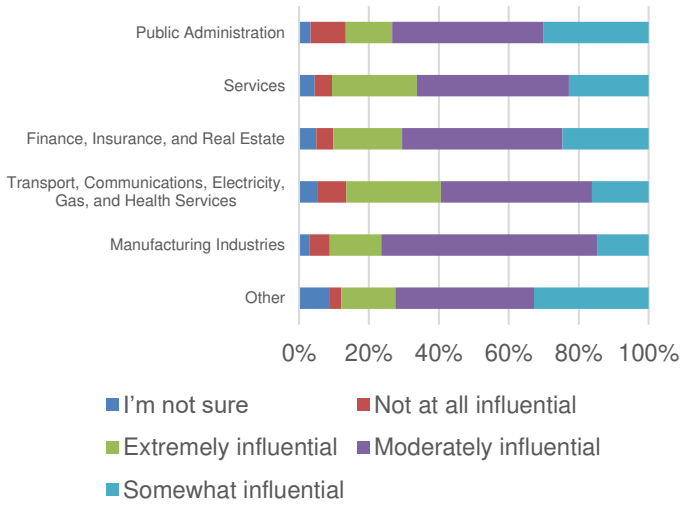
Decision-makers are massively convinced of the impact of AI (88%), employees are much more divided with 55% anticipating a strong or moderate impact, and only 20% a strong impact.



6.8.3.3 To what extent do you agree with the idea that the widespread adoption of AI will require a significant reskilling or upskilling of the workforce over the next decade?

66% of respondents agree or strongly agree with the need to adapt the workforce over the next decade, with 11% of respondents thinking the opposite.

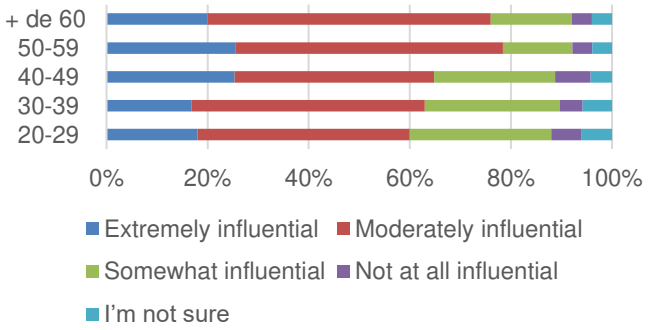




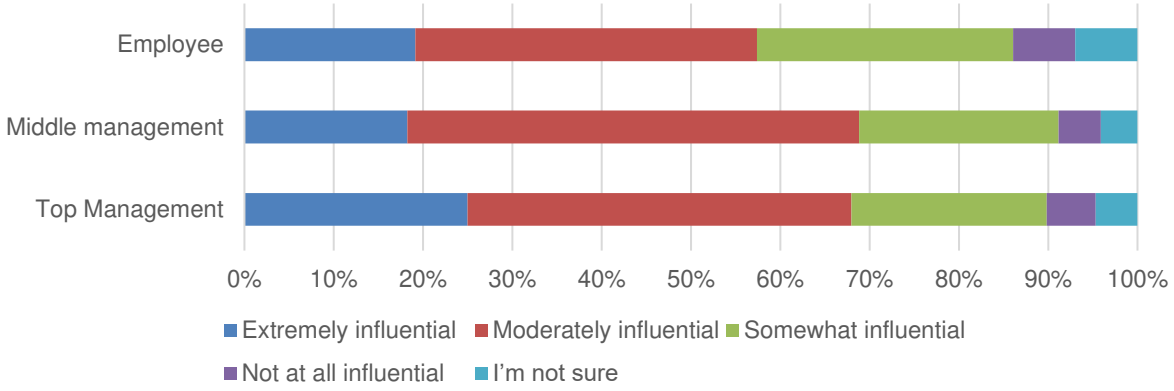
Industry appears to be the most convinced of the need to adapt the workforce; this is a sector that has undergone numerous changes in the past, leading to adaptations in the workforce, even if these were more likely to involve blue-collar workers, whereas AI is likely to extend the changes and mutations to white-collar workers. In any case, this is a sector with some experience of change.

Public administration respondents were more measured, with 57% convinced of the need to upgrade workforce skills.

Notably, the under-50s are measured on the extent of skills evolutions, either because they feel more familiar and prepared for an environment where AI is more present, or because they are waiting to better understand the evolutions generated by AI and their implications (the neutral opinion rate is



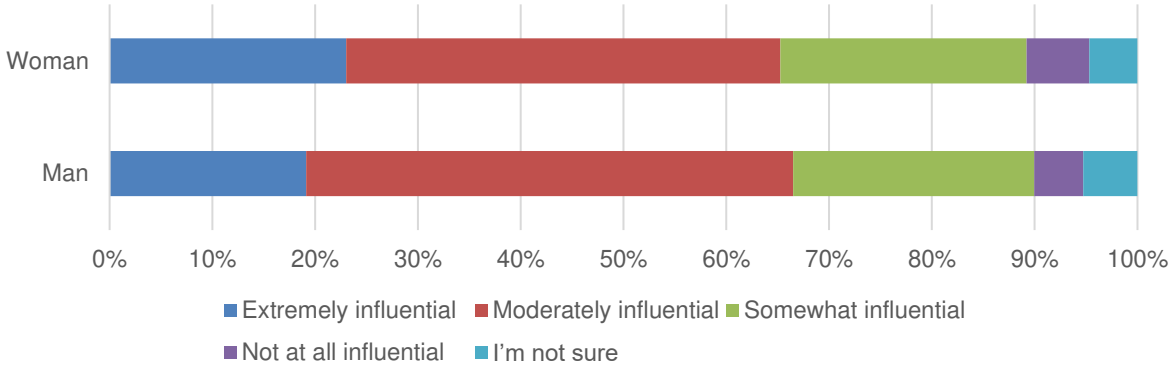
high for these generations). These generations are by definition the most concerned and may legitimately have a less clear-cut opinion to date.



Opinions are relatively homogeneous among decision-makers, middle managers and employees (with the latter slightly behind), while other questions appear more divisive.

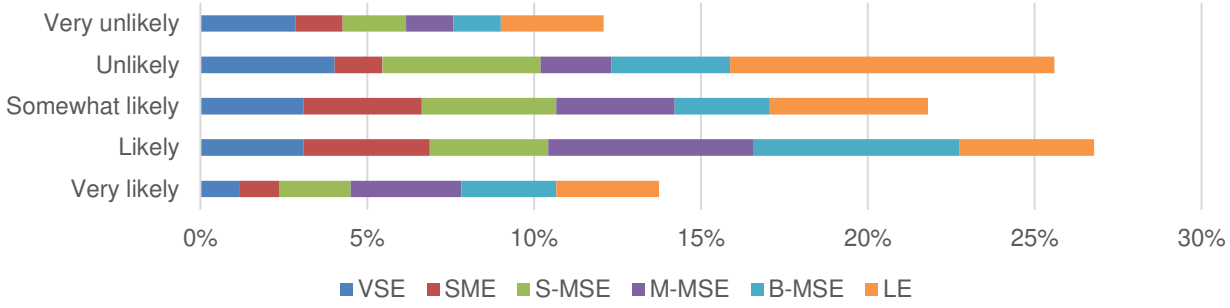
In any case, the question does not reveal any major differentiation that might, for example, indicate concern or even panic in the face of future adaptations.

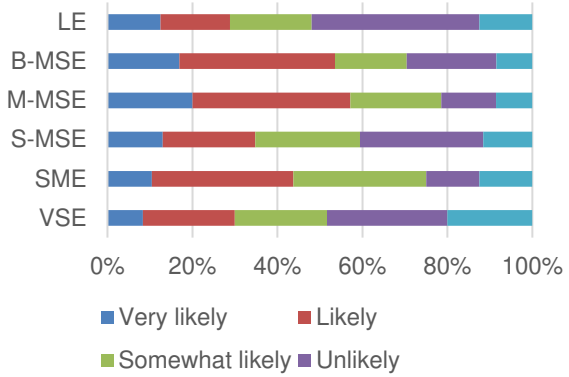
Similarly, there is no particular sensitivity to the respondent's gender:



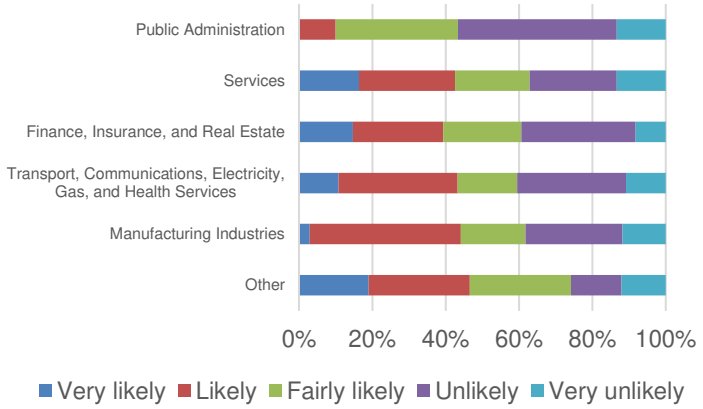
6.8.3.4 How likely do you think AI technology is to help reduce social inequality over the next 10 years?

Opinions are very divided, with an almost symmetrical curve profile between very likely/very unlikely and likely/unlikely:



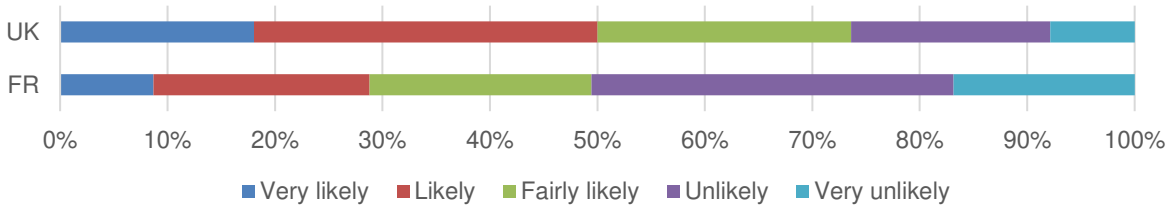


The two most extreme company size segments, VSEs and GEs, appear rather dubious, as do P-ETIs.



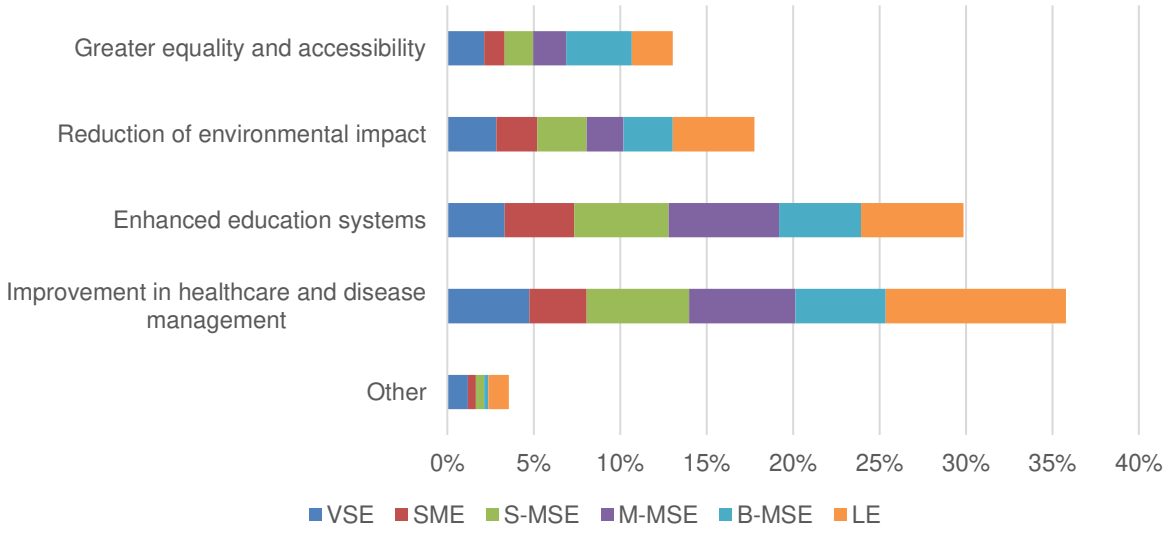
Public administration is clearly different, with only 10% of respondents believing that a reduction in inequality is likely.

The differences between British and French respondents are in fact very marked. The former are rather optimistic on the subject: 50% think a reduction in inequalities is likely, 27% think the opposite. The latter are very sceptical: 30% think a reduction in inequalities is likely, 50% think the opposite.

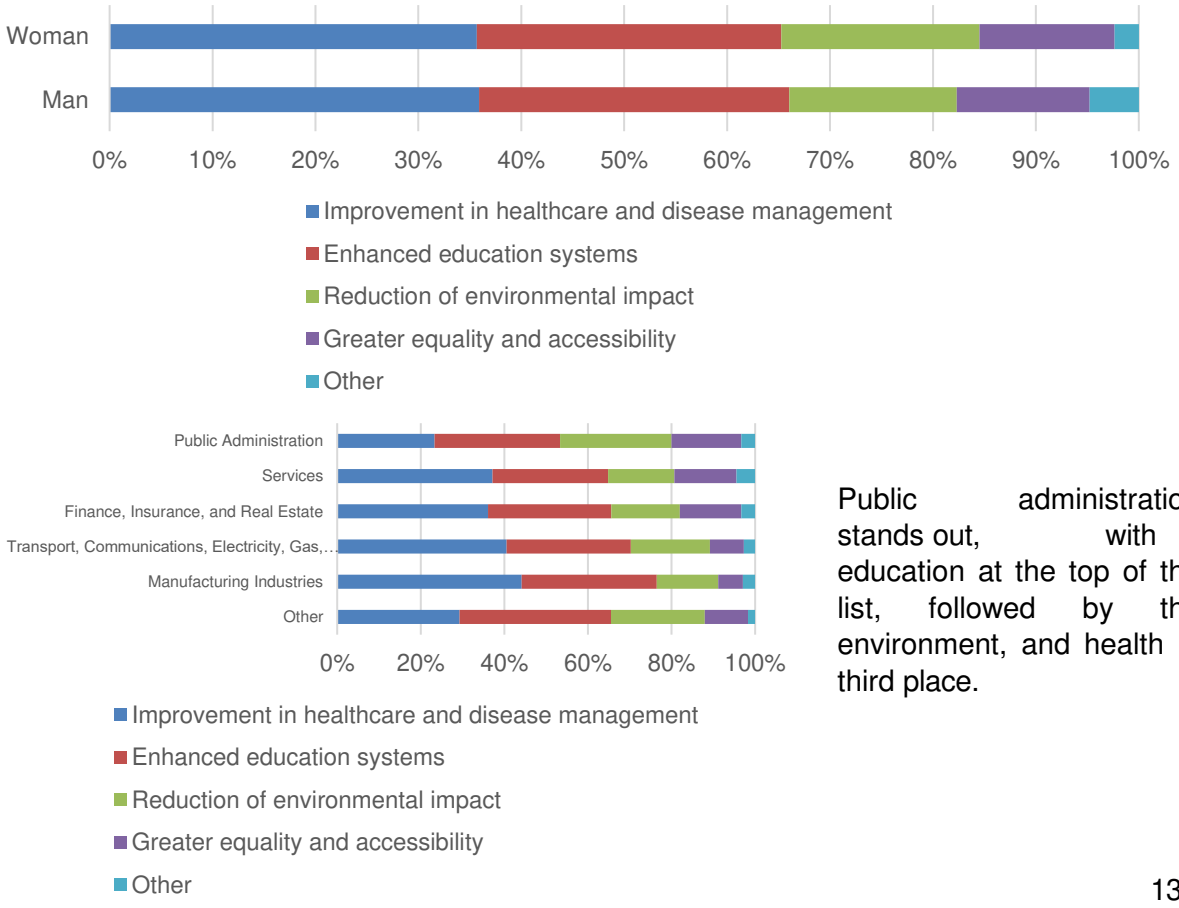


6.8.3.5 What is the most positive change or advance you hope to see from AI technology in the next 20 years, particularly in terms of societal benefits?

The responses show a pronounced hierarchy, with health and education topping the list of desired advances:



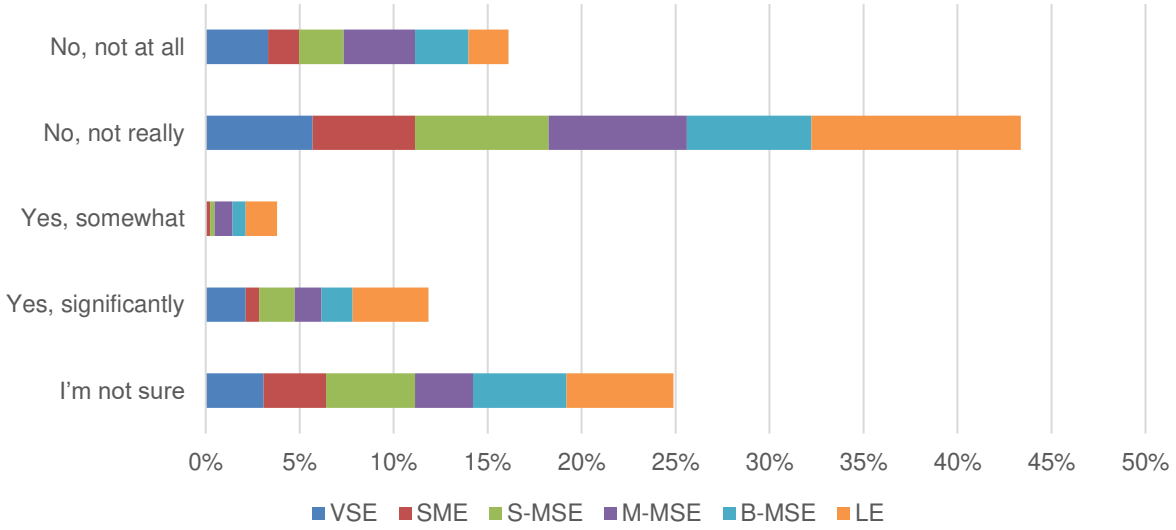
French respondents clearly prioritize their answers: health, then education, then the environment, then equality and accessibility. British respondents form two very homogeneous groups, the first with health and education almost equally prioritized, and the second including equality and the environment (placed last):



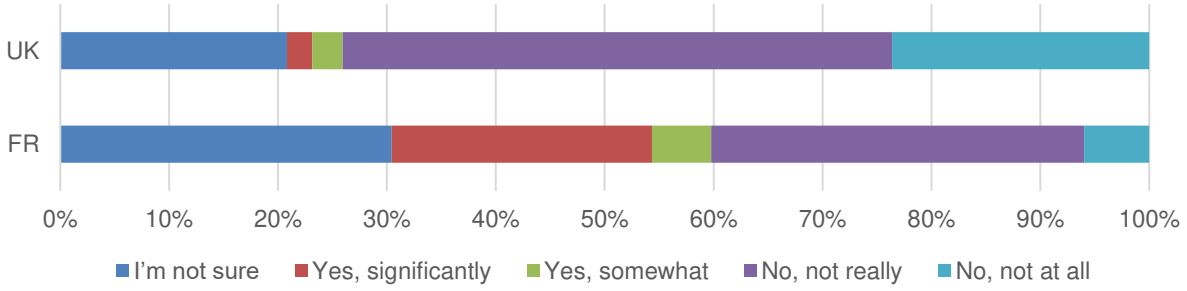
Public administration stands out, with education at the top of the list, followed by the environment, and health in third place.

6.8.3.6 Do you think your cultural or regional context influences your perception of AI? If so, could you briefly describe how?

Respondents are largely unconvinced of a cultural influence on their perception of AI, which the questionnaire contradicts at least for certain questions where responses differed significantly between the French and the British, despite their regional proximity:



30% of French respondents perceive that the cultural or regional context has an impact on the perception of AI, which British respondents do not believe at all (5%)... constituting a cultural differentiation in itself:



7 Conclusions

Our comprehensive analysis of AI adoption across British and French companies reveals a complex landscape of progress, challenges, and cultural distinctions. While organizations increasingly embrace AI's transformative potential, implementation patterns remain notably uneven across regions, sectors, and company sizes. This disparity manifests not just in adoption rates but in fundamental approaches to the technology.

The study reveals a striking paradox: despite clear evidence of AI's benefits in early adopters—particularly in productivity gains and cost reduction—many companies remain hesitant to fully commit to AI implementation. This cautious approach persists even as successful implementations demonstrate tangible business value, suggesting deeper organizational and cultural barriers to adoption.

anies remain hesitant to fully commit to AI implementation. This cautious approach persists even as successful implementations demonstrate tangible business value, suggesting deeper organizational and cultural barriers to adoption.

Data management emerges as a critical challenge in the AI journey. While organizations widely acknowledge that high-quality data forms the foundation of successful AI initiatives, many report significant gaps in their data management capabilities. This shortfall in expertise highlights an urgent need for enhanced training and skill development across all organizational levels.

lights an urgent need for enhanced training and skill development across all organizational levels.

Risk management and compliance present specific concerns, with few organizations expressing confidence in their preparedness for AI-related disruptions and challenges. This uncertainty extends beyond technical considerations to encompass ethical, legal, and sustainability implications, indicating a need for more robust governance frameworks and risk management strategies.

Looking toward the future, respondents share optimism about AI's potential to advance healthcare, education, and sustainability initiatives. However, significant cultural divergences emerge between British and French perspectives, particularly regarding AI's role in addressing social inequalities and the adequacy of European regulatory frameworks. These differences reflect broader cultural attitudes toward technology and its societal impact.

This study underscores that successful AI integration requires more than technological capability—it demands a holistic approach encompassing ethical considerations, risk management, and cultural sensitivity. The findings should serve as a valuable resource for business leaders and policymakers as they navigate the evolving AI landscape, helping inform strategies that maximize AI's benefits while ensuring responsible and sustainable implementation.

policymakers as they navigate the evolving AI landscape, helping inform strategies that maximize AI's benefits while ensuring responsible and sustainable implementation.

The contrasts between British and French approaches to AI adoption and regulation offer particularly valuable insights for cross-border collaboration and policy development. As organizations continue their AI journeys, these findings can help shape more nuanced and effective approaches to technology adoption, risk management, and ethical implementation.

8 Appendices - Complete list of questions

1. In which department do you work?
2. In your profession, do you work on the deployment of IT projects (AI, infra, servers, machine learning, data management, cloud, websites, software, apps...)?
3. Do you use artificial intelligence on a regular basis?
4. In which geographical area is your company headquartered?
5. How many employees does your company have?
6. What is your age group?
7. You identify yourself as
8. What is your position within the company?
9. What sector does your company belong to?
10. What type of work do you do?
11. What's the highest diploma you've ever earned?
12. What are the sustainable development-related uses of AI in your company? (Multiple choices possible)
13. Which departments do you think use AI the most in your company? (Multiple choices possible)
14. To the best of your knowledge, what AI models are used in your company? (Multiple choices possible)
15. To the best of your knowledge, how is AI used in your company?
16. Does your company have dedicated staff or a team responsible for implementing and managing AI technology?
17. Does your company have dedicated staff or a team responsible for implementing and managing ethical considerations in the use of AI within the company?
18. How would you rate your company's experience in data management?
19. Have you ever encountered significant problems when implementing AI within your company?
20. What was the nature of the problem(s)? (Multiple answers possible)
21. Does your company offer AI training for employees?
22. What is the main objective of the training?
23. Do you think investment in AI has been beneficial to your company's performance?
24. Your company considering increasing its investments in AI technologies in the future?
25. How do you see AI shaping the future of your industry?
26. In your opinion, how prepared is your company t o manage potential disruptions or risks associated with the use of AI?
27. In your opinion, how relevant is training your employees to manage potential disruptions or risks associated with the use of AI?
28. Is your company considering using AI for strategic decision-making?
29. Is your company exploring the use of AI for innovation and the development of new products or services?
30. Which of the following best practices for AI applications does your company implement? (Multiple answers possible)
31. Why has your company invested in AI?
32. Has your company invested in data management systems?

33. What kind of information does your company collect and use? (Multiple answers possible)
34. What ethical considerations does your company take into account when implementing AI?
35. Does your company have a set of established ethical guidelines for the use of AI?
36. Are ethical guidelines for the use of AI made public?
37. How often does your company review and update its AI ethical guidelines?
38. Which of the following ethical considerations does your company emphasize in its AI projects? (Multiple answers possible)
39. How does your company resolve potential ethical dilemmas related to the use of AI? (Multiple answers possible)
40. Has your company ever had to stop or adjust an AI project because of ethical issues?
41. Does your company offer its employees training on the ethical use of AI?
42. What is the main subject of this training? (Multiple answers possible)
43. How would you rate the importance of ethics in your company's AI strategy?
44. Does your company use AI tools or services aimed specifically at addressing ethical issues (e.g. bias detection, transparency tools, etc.)?
45. Which of the Sustainable Development Goals (SDGs) does your company primarily aim to achieve through AI? (Multiple choices possible)
46. How does your company organize decision-making for artificial intelligence projects linked to sustainable development?
47. From your point of view, how would you assess the impact of AI on sustainable development in your company?
48. Does your company monitor AI power consumption?
49. In which areas related to environmental sustainability does your company apply AI technologies? (Multiple answers possible)
50. Do you measure AI's net greenhouse gas emissions? (Net greenhouse gas emissions refer to the total emissions produced by AI operations minus any emissions offset or reduced by AI implementations).
51. Does your company have measures in place to prevent the unnecessary use of AI models on limited datasets or excessive engineering?
52. Which of the following potential negative externalities of AI have you encountered or anticipated in your company? (Select all that apply)
53. Which of the following new sustainability risks is AI creating in your company/industry? (Multiple answers possible)
54. How does your company ensure that the information used for artificial intelligence is accurate and non-discriminatory? (Multiple answers possible)
55. How does your company protect its artificial intelligence technologies against the copying or theft of sensitive data? (Multiple answers possible)
56. To what extent does data quality affect the contribution of AI to your company/industry?

57. To what extent is your company open to the implementation of data-sharing practices, while preserving the confidentiality of personal data?
58. Does your company have a dedicated team or role to ensure compliance with laws and regulations regarding the use of AI?
59. How often does your company review its AI practices for compliance with current laws and regulations?
60. Which of the following regulatory areas does your company take into account in its AI projects? (Multiple answers possible)
61. Has your company ever faced legal or regulatory difficulties regarding its use of AI?
62. How does your company guarantee the transparency and explicability of its AI systems in line with legal/regulatory requirements? (Multiple answers possible)
63. Does your company engage with policymakers or regulators on issues related to AI and its governance?
64. Do you think current laws and regulations sufficiently address the challenges and implications of AI?
65. How familiar do you think your company is with European AI law?
66. How many AI-based systems do you think your company uses?
67. What percentage of these (algorithms and data) are fully developed externally?
68. What percentage of them (algorithms) were purchased but trained or refined using in-house data?
69. What percentage of the algorithms and data were developed entirely in-house?
70. To what extent do you agree with the idea that the widespread adoption of AI will require a significant reskilling or upskilling of the workforce over the next decade?
71. How likely do you think AI technology is to help reduce social inequality over the next 10 years?
72. What is the most positive change or advance you hope to see from AI technology in the next 20 years, particularly in terms of societal benefits?
73. Do you think your cultural or regional context influences your perception of AI? ? If so, could you briefly describe how?

Creating futures

Dejan GLAVAS

dejan.glavas@essca.fr

www.essca-knowledge.fr/institut-ai-sustainability

forvis mazars

Laurent INARD

laurent.inard@mazars.fr

www.forvismazars.com

Accréditations **AACSB, AMBA** et **EQUIS**

Membre de la **FESIC** et de la **Conférence des Grandes Écoles**

Membre associé de l'**Université Catholique de l'Ouest**

Établissement d'enseignement supérieur privé d'intérêt général - EESPIG