

AI in 2024 – hopes and hurdles

Insights Report
March 2024



1. Objectives for the research

Objective 1

Establish the pain points and barriers of AI

Objective 2

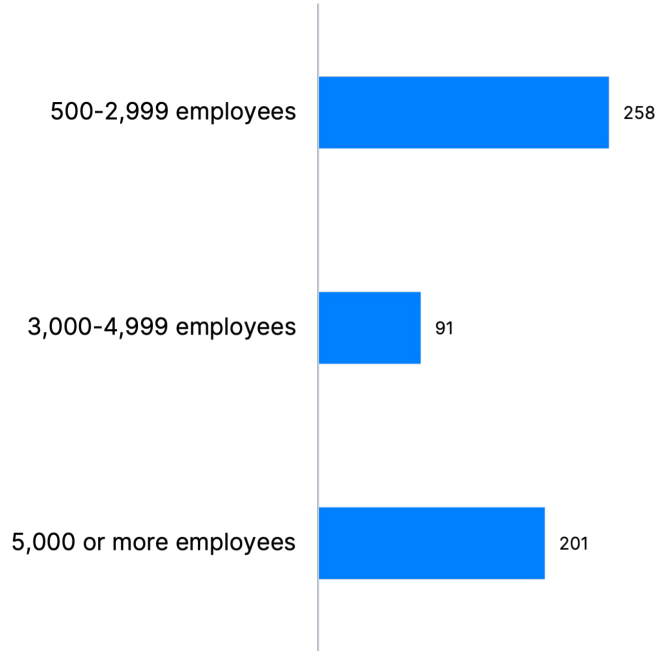
Evaluate if skill shortages exist for AI and GenAI

Objective 3

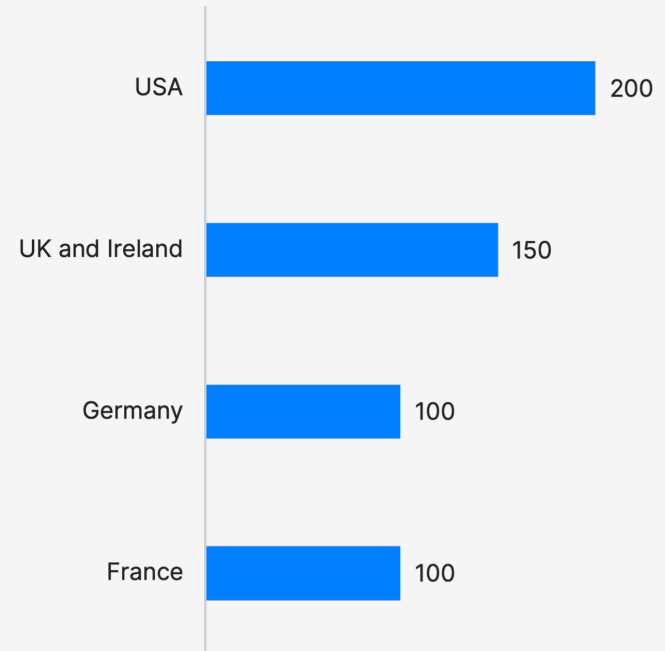
Determine the extent to which GenAI is being used in the organization



Vanson Bourne interviewed 550 respondents in December 2023 and January 2024, split in the following ways...



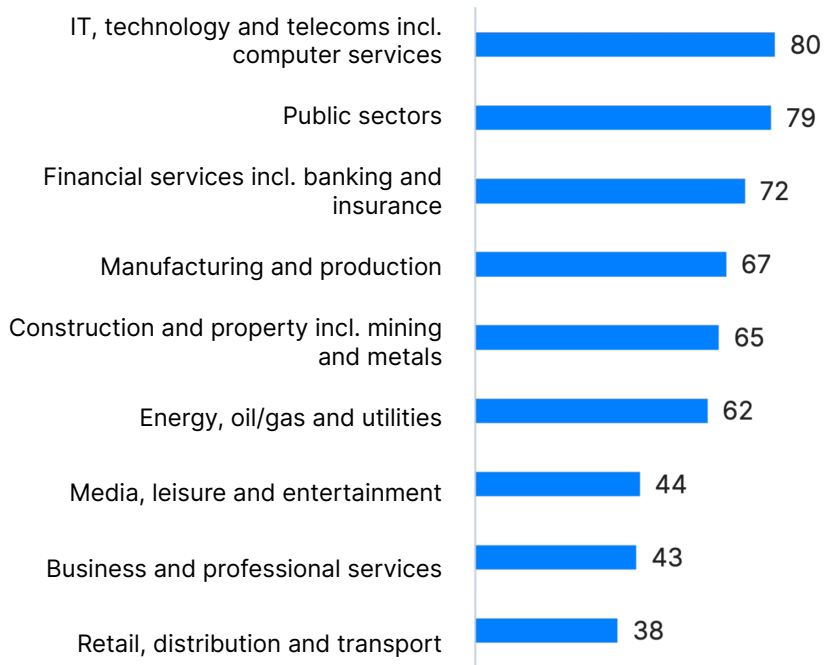
Approximately, how many employees does your organization have globally? [550]



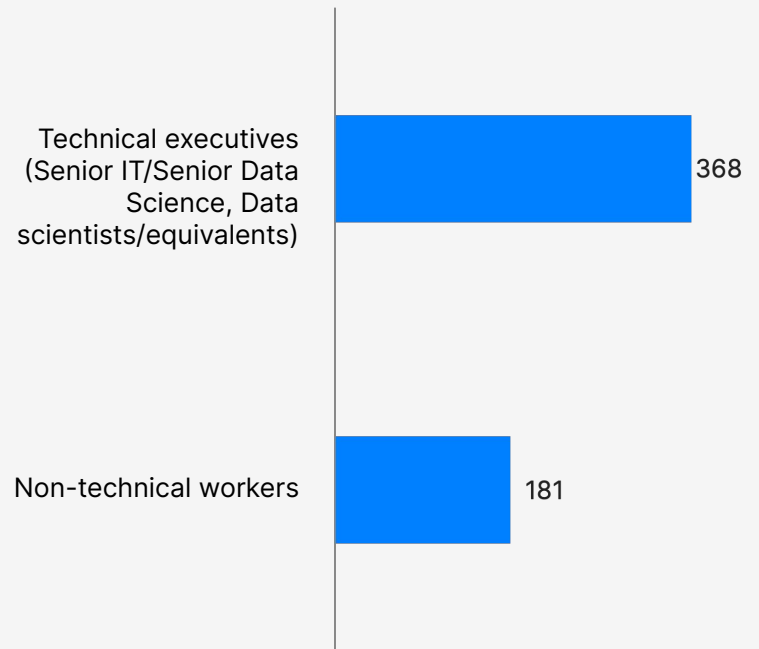
Respondent Country [550]



Vanson Bourne interviewed 550 respondents in December 2023 and January 2024, split in the following ways...



Within which sector is your organization? [550]



Respondent Type [550]



Despite some setbacks, AI seems to be here to stay

96%

Of respondents' organizations have faced barriers limiting their use of AI (Q10)

97%

Of respondents' organizations are dedicating part of their global annual revenue to investing in AI/ML models in the next 1-2 years (Q18_1)

81%

Of respondents' organizations at least mostly to fully trust the output of AI/ML models (Q21_1)



Five key areas of interest:

Organizations' AI journey

Large Language Models (LLMs) and AI for decision making

Generative AI use

The juxtaposition of technical vs. non-technical workers

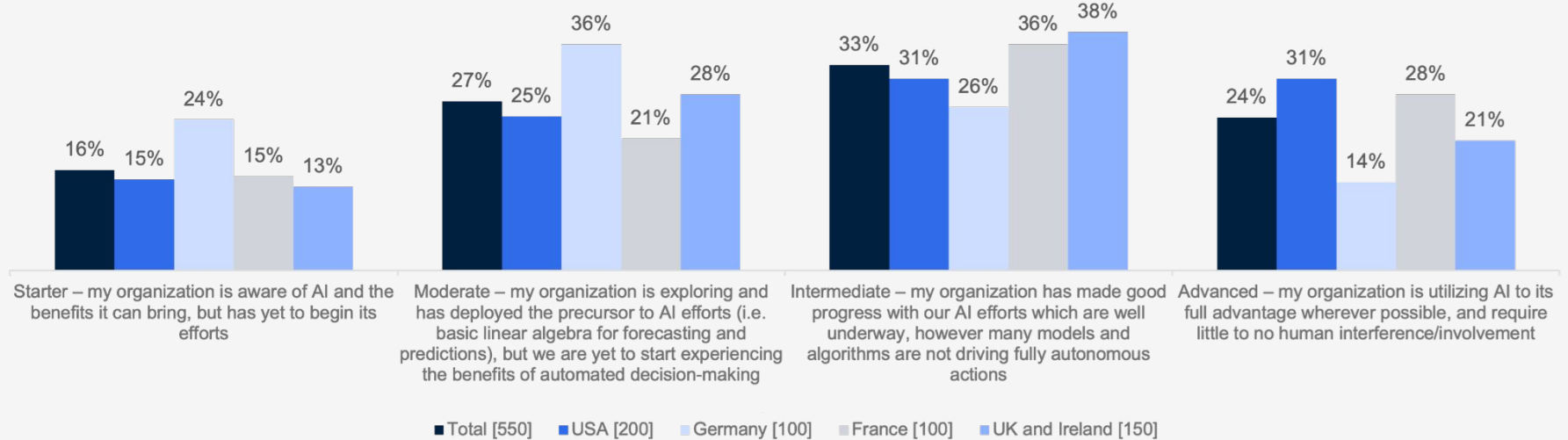
Senior data decision makers and data workers AI experiences

1. Organizations' AI journey



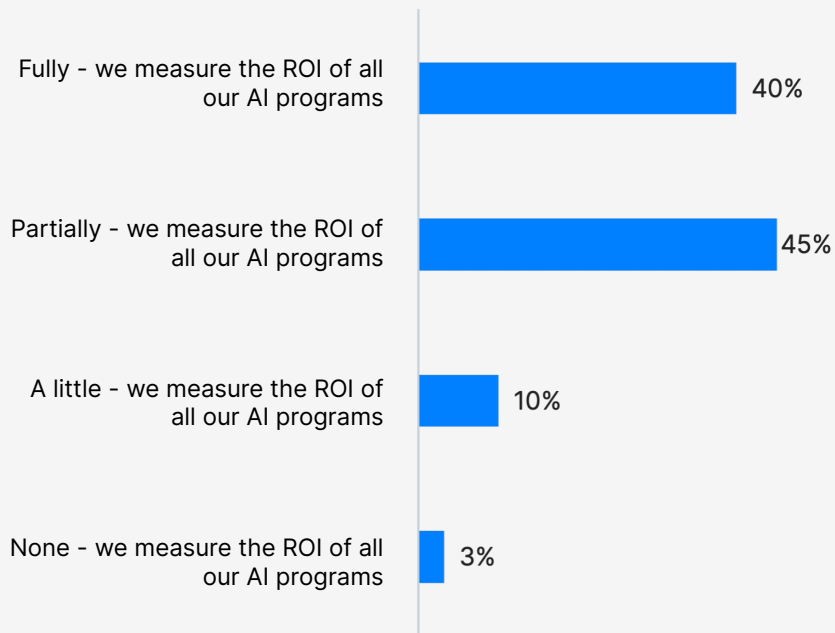
Organizations are making progress with their AI efforts, but organizations in France and the USA are paving the way

Only one in four (24%) have reached the advanced stage of having AI within their organization, with others not far behind indicating progress is being made. On a regional level, German organizations are most likely to be at the starter stage, likely navigating through the large extent of regulations around AI and perhaps even watching other markets such as the USA and France leading the way. Although another consideration is the cultural approach to AI adoption, with the USA more likely to approach it with enthusiasm and urgency while, German organizations may hold a cultural hesitancy towards it/the associated risks, and would prefer to wait to see how it develops.



Thinking about the previous definition of Artificial Intelligence (AI), which of the following best describes how far along your organization is on its journey to using AI in its true, sophisticated form? [Base sizes in chart]. Split by region. Not showing all answer options (Q1)

Most organizations keep track of the ROI on their AI programs to some degree and over half report a financial return in the past 12 months



Only four in ten (40%) fully measure the ROI of their AI programs. But with many measuring it partially or less, these organizations are missing out on understanding the true value it can hold.

The financial ROI for AI programs, for those who measure it from a little to fully, was 52%, on average, in the last 12 months. Unsurprisingly, leading as examples (slide 8), this ROI is highest in the USA and France (55% and 54% respectively).

Moreover, organizations at the starter phase of AI adoption are acknowledging a 62%, on average, ROI – indicating the financial benefits start high before suboptimal data leads to underperforming AI models, and negatively impacts financial return.

On average, financial ROI is slightly higher (56%) for those who build their own AI models, compared to those using third-party vendors, be that open-source (52%) or closed-source (51%).

To what extent do you measure the ROI of your organization's AI programs? [550]. Not showing all answer options (Q7)
What is the level of financial return on investment (ROI) on your organization's AI programs in the last 12 months? Only shown to respondents who measure ROI [528] (Q8)



However, challenges are present, and most organizations have faced barriers limiting their use of AI

96%

Of respondents' organizations have faced barriers limiting their use of AI

6%

Is the average global annual revenue lost due to underperforming AI programs/models that are being built using inaccurate or low-quality data which therefore leads to misinformed business decisions, of the organizations in this survey

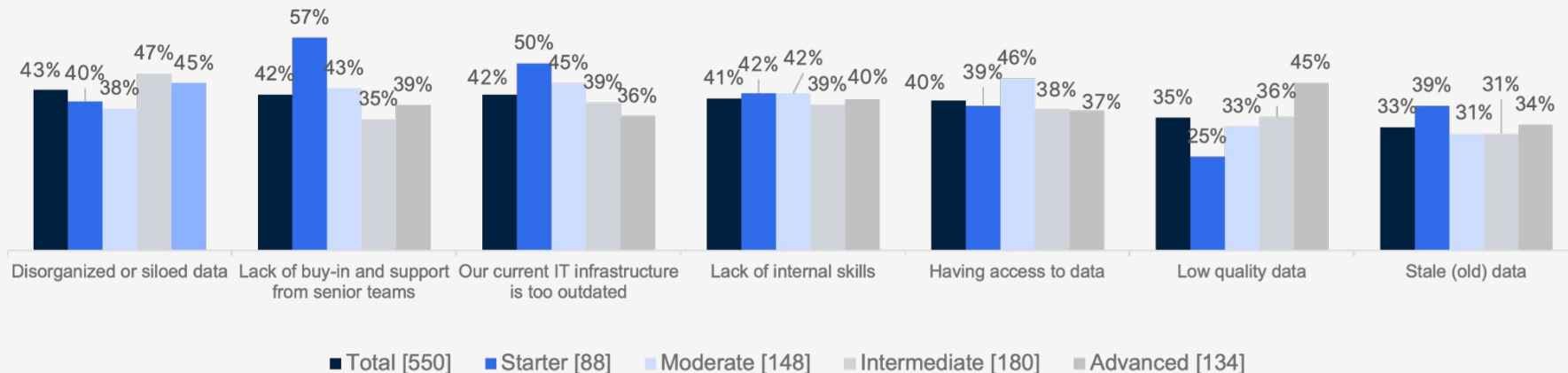
More information in appendix (slide 47)



Which of the following barriers are limiting your organization's use of AI? [550]. Not showing all answer options (Q10)
Approximately what percentage of your organization's global annual revenue is lost because of underperforming AI programs/models that are built using inaccurate or low quality data which therefore leads to misinformed business decisions? [550] Showing average only.(Q9)

As organizations reach the advanced stage, data quality becomes a key barrier

Organizations that are in the early stages, specifically in the starter phase of AI implementation are facing barriers which point to a need in a company culture shift. These barriers are lack of buy-in and support from leadership (57%), outdated IT infrastructure (50%) and lack of internal skills (42%). But as organizations progress with their AI to the advanced stage, the quality of data becomes a more prominent issue. For AI models to produce the best output, the data being used needs to be of the utmost quality. As noted on the previous slide, subpar data leads to severe financial loss.

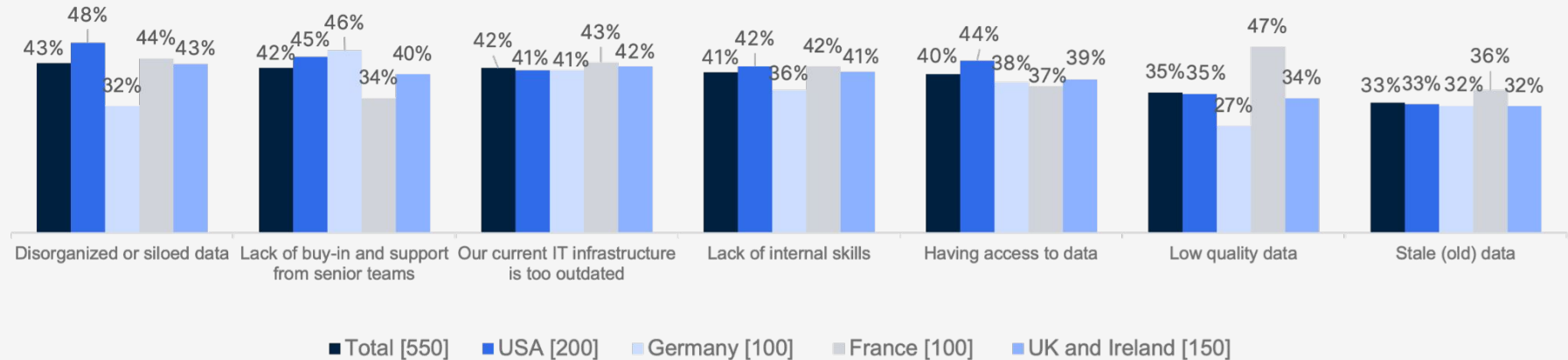


Which of the following barriers are limiting your organization's use of AI? [Base sizes in chart]. Split by AI maturity stage. Not showing all answer options (Q10)



Data issues are a big hurdle even for those ahead of the game

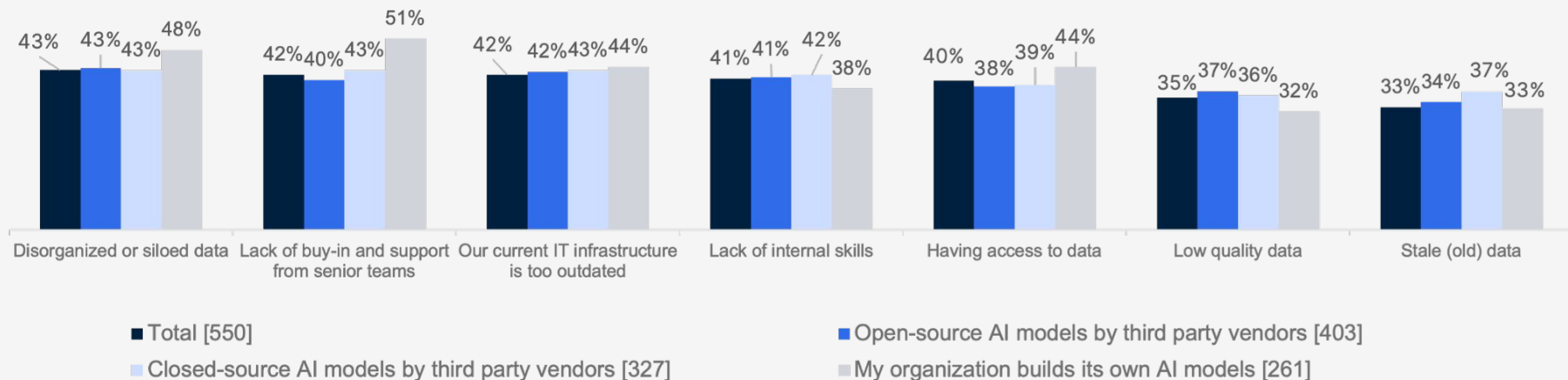
As we saw in the previous slide (slide 11), those more advanced face more data quality barriers, and this is demonstrated here for France, where organizations are ahead in their AI maturity (slide 8). Similarly, organizations in the USA, despite being ahead, are facing a multitude of data barriers from siloed data (48%), data access (44%), low quality data (35%) and stale data (33%). For organizations to progress further in AI, and requiring less human intervention – data issues must be resolved first.



Which of the following barriers are limiting your organization's use of AI? [Base sizes in chart]. Split by regions. Not showing all answer options (Q10)

Those building their own AI models face different barriers

Organizations utilizing both open-source and closed-source models are facing similar barriers. However, when organizations shift to building their own models, they begin to encounter more barriers surrounding siloed data (48%) and lack of buy-in and support from senior teams (51%) and having access to data (44%). Positively, the barriers surrounding data quality and staleness reduce for those who have built their own models, indicating that these data challenges have already been mostly overcome, as good quality data is a prerequisite to building AI models.

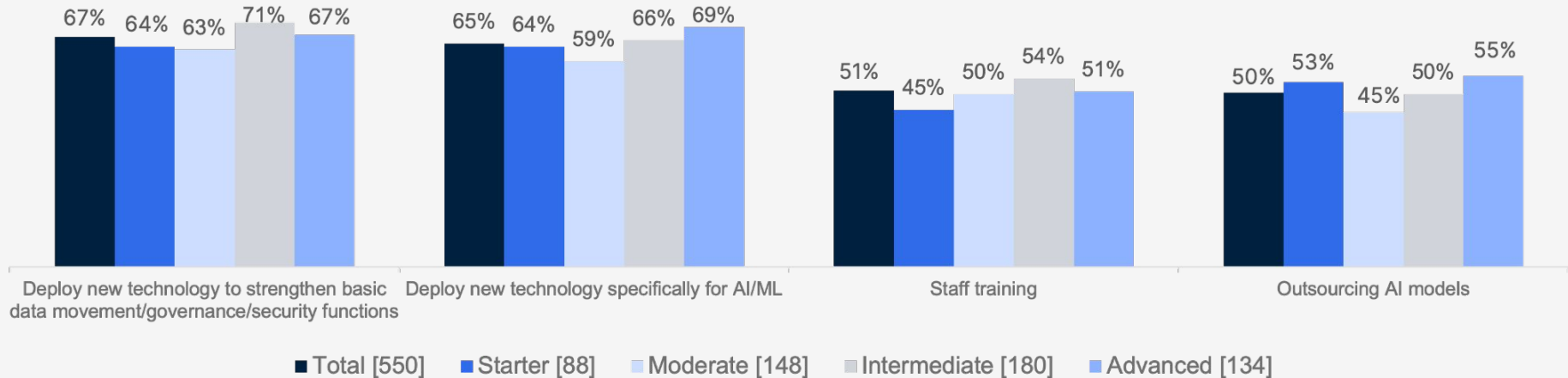


Which of the following barriers are limiting your organization's use of AI? [Base sizes in chart]. Split by AI Approach. Not showing all answer options (Q10)



Data issues will likely be addressed by many organizations soon, although closing the skills gap will be needed too

Investment into new technology to strengthen data movement/governance/security functions will ease the data issues felt by many, particularly those more ahead with their AI journey (outlined on slide 8). Filling the skills gap within organizations is another key investment area for many in the next 1-2 years. This investment is vital as these skills are required to make the most of the AI programs within the organization and can help strengthen the ROI.

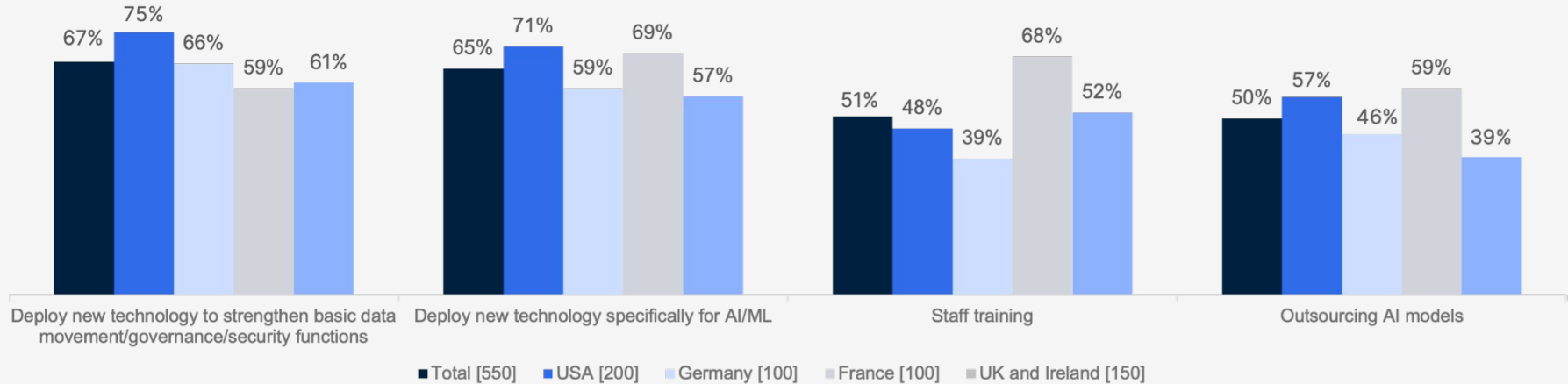


Which of the following investments does your organization plan to make in the next 1-2 years to enhance its AI use? [Base sizes in chart]. Split by AI maturity stage. Not showing all answer options (Q23)



Regional regulations may be the underlying reasons organizations aren't fully automating with AI

Organizations in the USA are most likely to be investing in new technology to improve data movement/governance/security (75%), and for AI/ML (71%). They're ahead of the game, and by investing in data movement/governance this reduces the barrier of siloed data mentioned previously (slide 12). French organizations have likely begun realizing the benefits of AI, and therefore driving their increased investment but they're facing issues with data quality (slide 12) which may be shifting their focus to staff training to continue the journey. Meanwhile, the UK and Ireland and Germany are still investing, but to a lesser degree – perhaps tight data regulations, such as GDPR, make them hesitant to make the jump to fully automated processes in their organization.

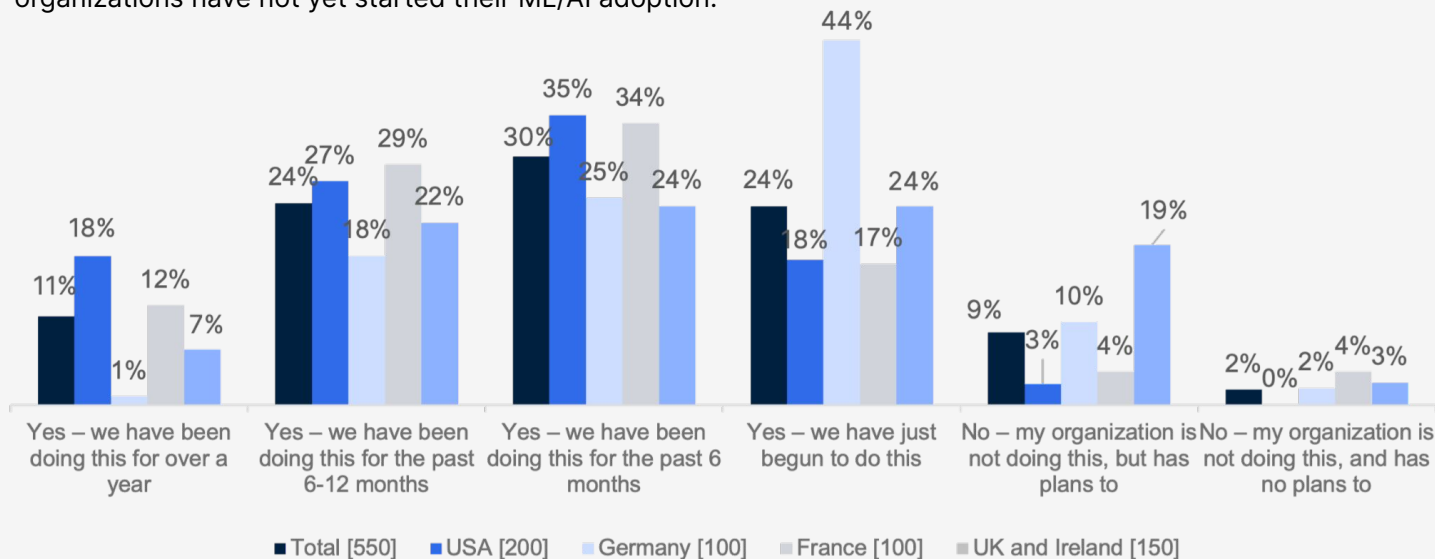


Which of the following investments does your organization plan to make in the next 1-2 years to enhance its AI use? [Base sizes in chart]. Split by region. Not showing all answer options (Q23)

2. LLMs and AI for decision making

The majority of organizations are leveraging ML/AI methodologies to help with decisions around business processes

Nearly nine in ten organizations (89%) are using ML/AI methodologies to build models that can automatically make predictions and decisions, with the US and French organizations likely to have been doing this the longest, which is expected from what we saw on slide 8. Organizations in Germany are more likely to be at their beginning of their ML/AI adoption journey (44%), while around one in five UK organizations have not yet started their ML/AI adoption.



13%

Is the average investment proportion of organization's global annual revenue that has been/will be dedicated to ML/AI investments in the next 1-2 years

Is your organization using ML/AI methodologies to build models within its business applications that are being used to automatically make predictions and/or decisions around business processes? [550]. Not showing all answer options (Q4)
 What proportion of your organization's global annual revenue has been/will be dedicated to the following types of AI investments in the next 1-2 years? AI/ML Models. [548] Only shown to organizations that have not prohibited GenAI. Showing average only. (Q18_1)

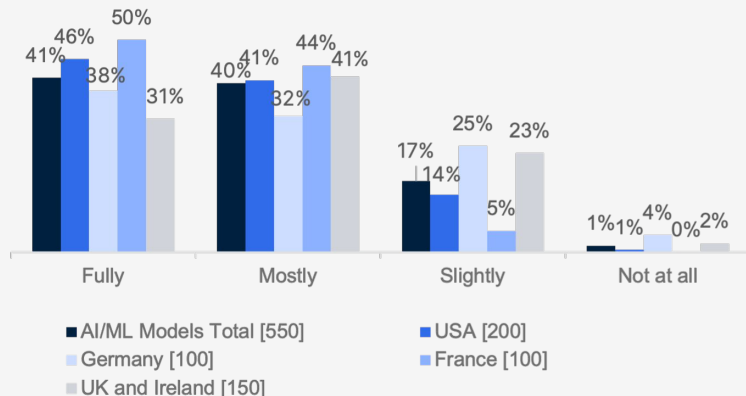


Organizations consider the output of AI/ML models and LLMs mostly or fully trustworthy

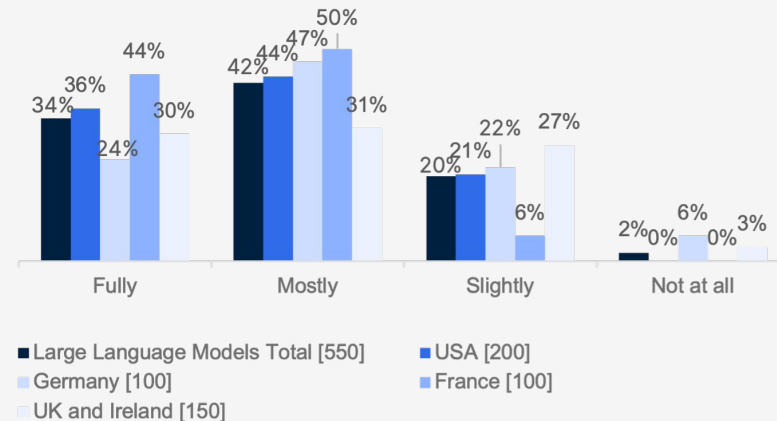
Positively, the majority of organizations fully or mostly trust AI/ML models and LLMs, although trust levels are somewhat higher for AI/ML models than LLMs, possibly spurred on from the perception of LLMs being prone to data hallucinations and inaccurate outputs. But, there is still trust in their output as organizations use them, but the output is likely met with caution. Trust levels are higher among organizations in France and USA, where more organizations are at an advanced stage with AI adoption.

Advanced Organizations [134]	Fully trust
AI/ML models	55%
LLMs	42%

Trust levels in AI/ML output



Trust levels in LLM output

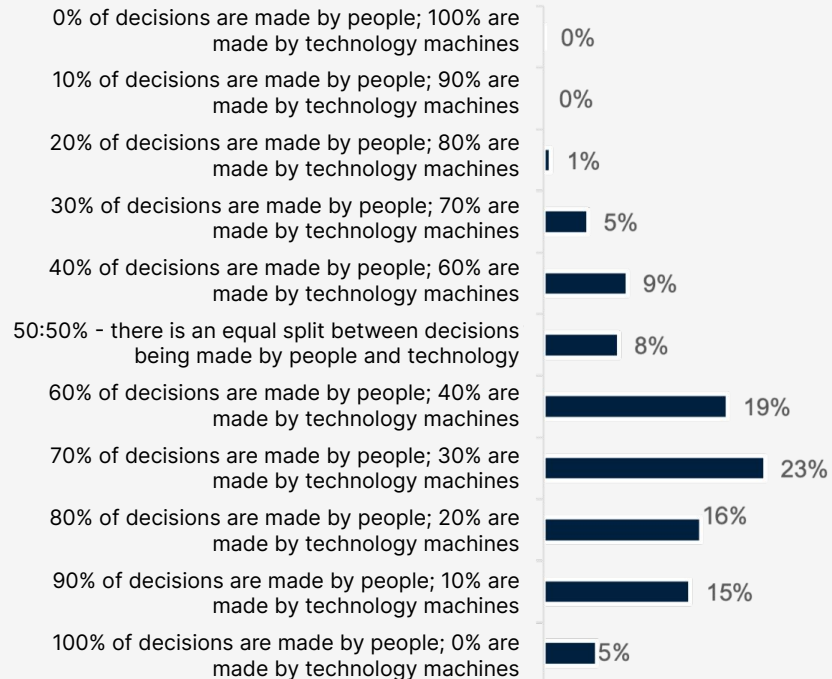


To what extent does your organization trust the output of the following? AI/ML Models/Large Language models (LLMs). [Base sizes in chart]. Split by region. Not showing all answer options (Q21_1, Q21_3)

Nonetheless, people are still needed to make decisions

While most organizations have at least some trust over outputs, the human element of decision making is still needed. This could be due to a range of factors – a lack of complete trust in the technology, data quality issues, or the need to consider other factors than those contained within the technological models.

Organizations will need to ensure staff are trained to understand the capabilities of the technological models and how to use them most effectively – and when human oversight may be necessary.



68%

Of decisions are made by **people** on average

32%

Of decisions are made by **technology/machines** on average

What proportion of decisions are made by the people in your organization versus technology/machines? [550].
Not showing all answer options (Q3)



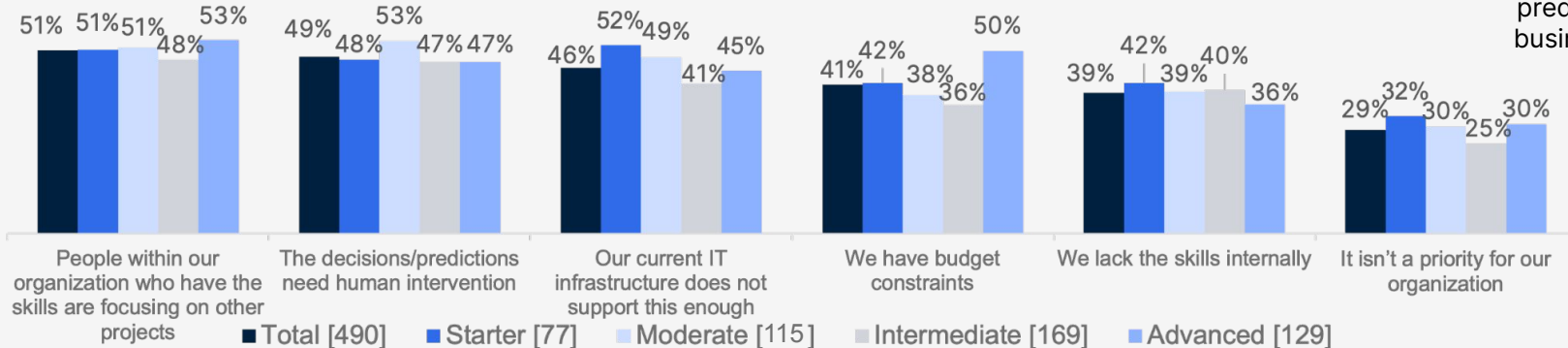
Nearly three quarters are facing barriers when building models to help make predictions and/or business decisions

With the human element strongly needed (slide 19), it is no wonder that humans are the top barrier to building models that can make predictions and business decisions, both in terms of having the skills/capabilities available, and in the ability to make decisions where human input is needed. Organizational culture is also a large factor – with around 3 in 10 organizations stating it isn't a priority for their organization.

While starters may face slightly more barriers, advanced organizations are more likely to report budget constraints, maybe as they are more likely to recognize or have seen the benefits of these solutions and could have a longer “wish list”.

71%

Of organizations surveyed are facing barriers when building models from business applications to automatically make predictions and/or business decisions



What barriers, if any, does your organization face when building models from business applications to automatically make predictions and/or business decisions? [Base sizes in chart – base of those organizations who are building models at Q4]. Split by AI maturity stage. Not showing all answer options (Q5)

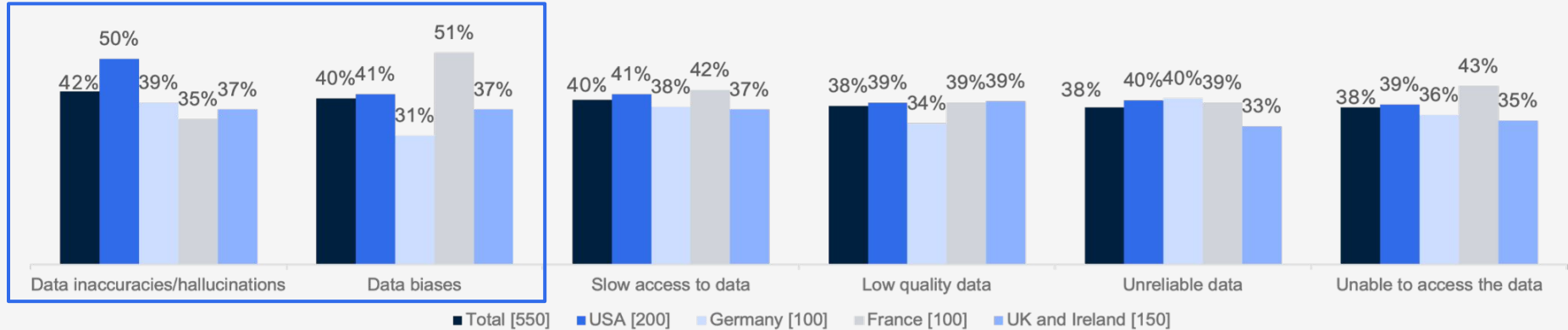
Leveraging LLMs also come with their own set of data related challenges

While most organizations are leveraging LLMs, many are experiencing a range of data issues. This could have wide ranging repercussions for organizations – it could lead to incorrect or ill-informed decisions, reduce trust in the LLM or willingness of staff to use the tool, and absorb staff time in locating, identifying and correcting the data. Getting the data correct as a first step should help to make the rest of the process more seamless and productive.

While all countries experience the same issues, data inaccuracies and hallucinations are more commonly cited in the USA, whereas German respondents were least likely to cite data biases as a challenge.

97%

Of organizations leverage Large Language Models (LLMs)



If your organization leverages Large Language Models (LLMs), which of the following challenges are experienced? [Base sizes in chart]. Split by region. Not showing all answer options (Q11)

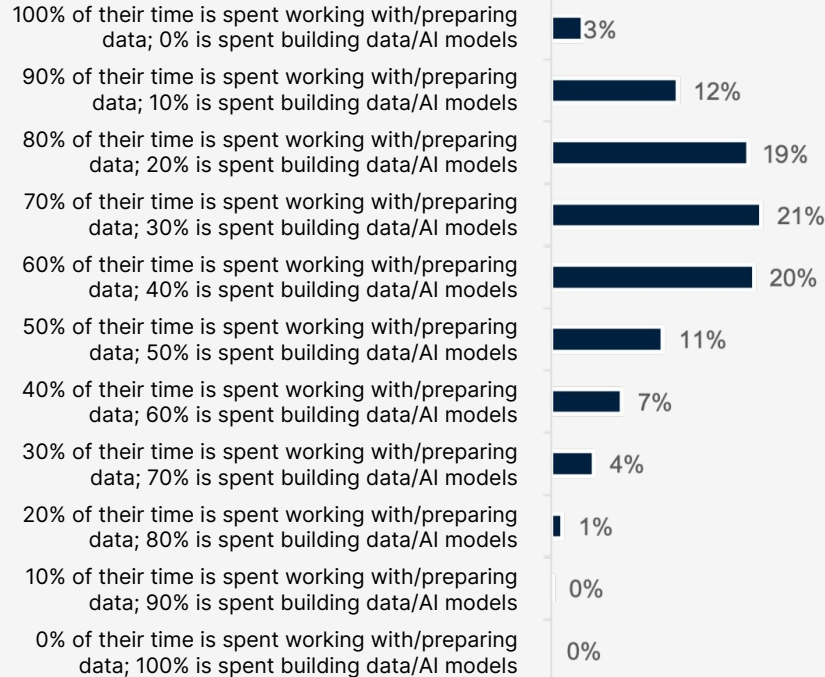


Therefore, it is unsurprising that more time is spent preparing data than actually building models with it

Dealing with all these data issues (slide 21) is highly time-absorbing for organizations, but a necessary step if organizations are to ensure the decisions and predictions produced by the models are to be reliable.

Investments in data processing and cleaning tools may therefore be highly valuable to organizations and allow them to increase/speed up their adoption of AI models. Freeing up data scientists' time to build AI models, may result in higher job satisfaction too, as their skills will be fully utilized

Further to this, if the data isn't high quality or sufficient, time resource is wasted on its preparation. Organizations need to invest in high quality data



67%

Proportion of time spent working with / preparing data, on average

33%

Proportion of time spent building data/ AI models, on average

Approximately, what proportion of time are the data scientists within your organization working with/preparing data versus building AI models?[550]. Not showing all answer options (Q22)



3. Generative AI use



Organizations are moving ahead with adopting GenAI but some concerns may hold them back

Organizations are excited about the potential of AI and are planning to increase their adoption of the technology but have concerns that may slow down their adoption. Providing reassurance, training and troubleshooting solutions to organizations will be key to drive adoption over the next few years.

Despite some setbacks, AI seems to be here to stay

86%

Of respondents' organizations have fully or partially adopted and implemented a Generative AI policy and/or strategy (Q12)

97%

Of respondents' organizations are dedicating part of their global annual revenue to investing in Generative AI in the next 1-2 years (Q18_2)

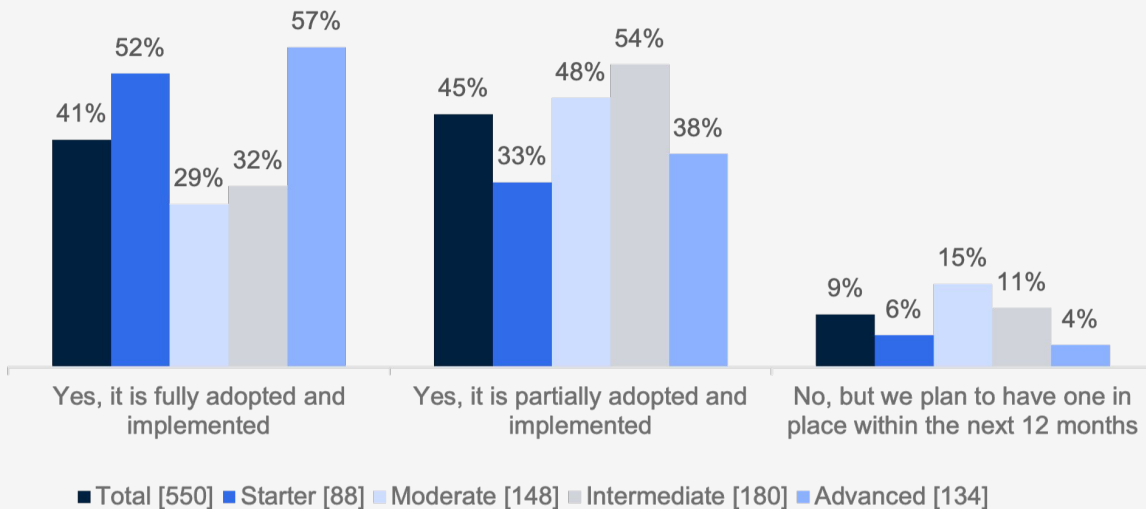
99%

Of respondents' organizations currently have concerns over using Generative AI (Q15Combi)



Most organizations have begun to adopt GenAI to some extent

Despite its relatively new emergence, most organizations have begun to adopt GenAI to at least some extent. This varies by sector, with construction, financial services and manufacturing among the sectors most likely to have fully adopted and implemented GenAI. These are more technical sectors that could view GenAI as a solution to simplify operations, perhaps pushing the adoption and implementation. Starter organizations are also more likely to have adopted GenAI, perhaps because they have fewer legacy solutions/processes in place.



	Yes, it is fully adopted and implemented
Construction and property [65]	52%
Financial services [72]	51%
Manufacturing and production [67]	49%
Public sectors [79]	41%
Energy, oil/ gas and utilities [62]	37%
Media, leisure and entertainment [44]	36%
Business and professional services [43]	33%
Retail, distribution and transport [38]	29%
IT and Technology [80]	29%

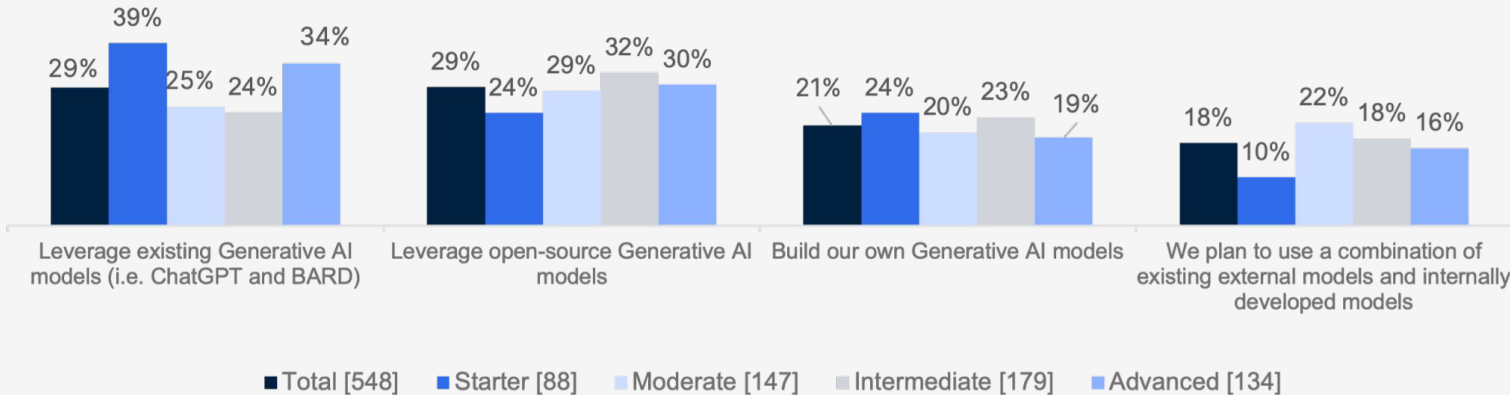


Does your organization have a policy and/or strategy in place for organizational use of Generative AI? [Base sizes in chart]. Split by AI maturity stage. Not showing all answer options (Q12)

Organizations are expecting to leverage a mix of GenAI models in the next 12 months.

Organizations have yet to form a strong preference for a particular type of GenAI, but many are leaning towards leveraging existing GenAI models and open-source GenAI models as these are likely simpler to implement and lower cost options

Starter organizations are more likely to use existing GenAI models, perhaps as they are more focused on speed of implementation. Differences also exist by country, with German organizations more likely to use open-source models (42%) and French organizations more focused on using existing GenAI models (40%) (appendix: slide 49). But when it comes to building their own models, France (23%) and the USA (23%) are ahead as they likely already possess the internal skills to do so, being more advanced in their AI journey overall



12%

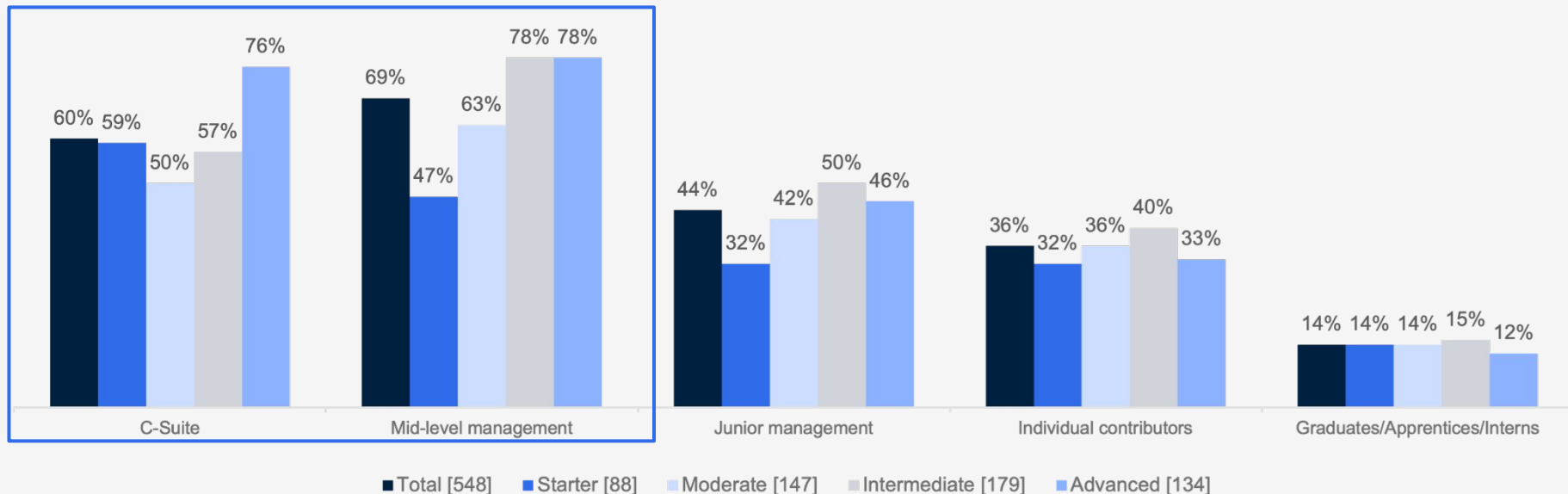
Is the average investment proportion of organization's global annual revenue that has been/will be dedicated to GenAI investments in the next 1-2 years



In the next 12 months, which approach does your organization plan to take in order to leverage Generative AI models? Only shown to organizations that have not prohibited GenAI. [Base sizes in chart]. Split by AI maturity stage (Q17)
 What proportion of your organization's global annual revenue has been/will be dedicated to the following types of AI investments in the next 1-2 years? GenAI Models. [548] Only shown to organizations that have not prohibited GenAI. Showing average only (Q18_2)

Mid-level management and above are using GenAI

Senior management are most likely to be using AI, probably to save valuable time or allow them to effectively delegate tasks. As these are generally time-poor employees with growing responsibilities, it makes sense that they would be the first in an organization to be granted access to the higher capabilities of GenAI. It also shows the level of trust among senior managers in organizations of GenAI, something that should help aid GenAI adoption among more junior staff in the future.

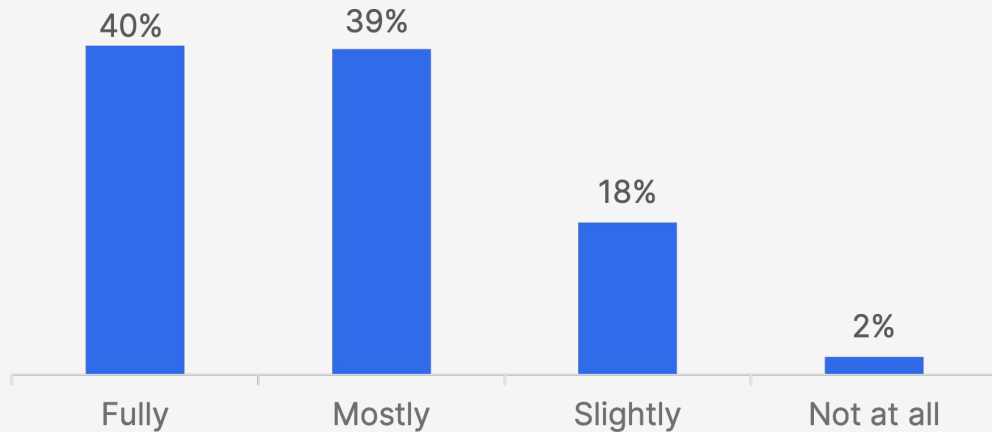


Which of the following employee types are using Generative AI across your organization? [Base sizes in chart]. Only shown to organizations that have not prohibited GenAI. Split by AI maturity stage (Q24)



GenAI model output is well trusted

Nearly eight in ten (79%) trust the outputs of GenAI, despite its relatively new emergence in the market. Trust levels were highest among US organizations, this is unsurprising considering they're more likely to be advanced in their AI adoption journey (slide 8), while German organizations were least likely to trust GenAI output/be advanced in their AI journey as they have stricter regulations surrounding data protection. This has repercussions, as some organizations will not be willing to adopt GenAI unless they are certain of its trustworthiness – providing more detail/information on 'how' it operates and improving the accuracy of outputs (without human intervention) may help GenAI adoption within organizations. But as GenAI becomes more mature, and the concerns reduce, the degree of trust may improve organically.



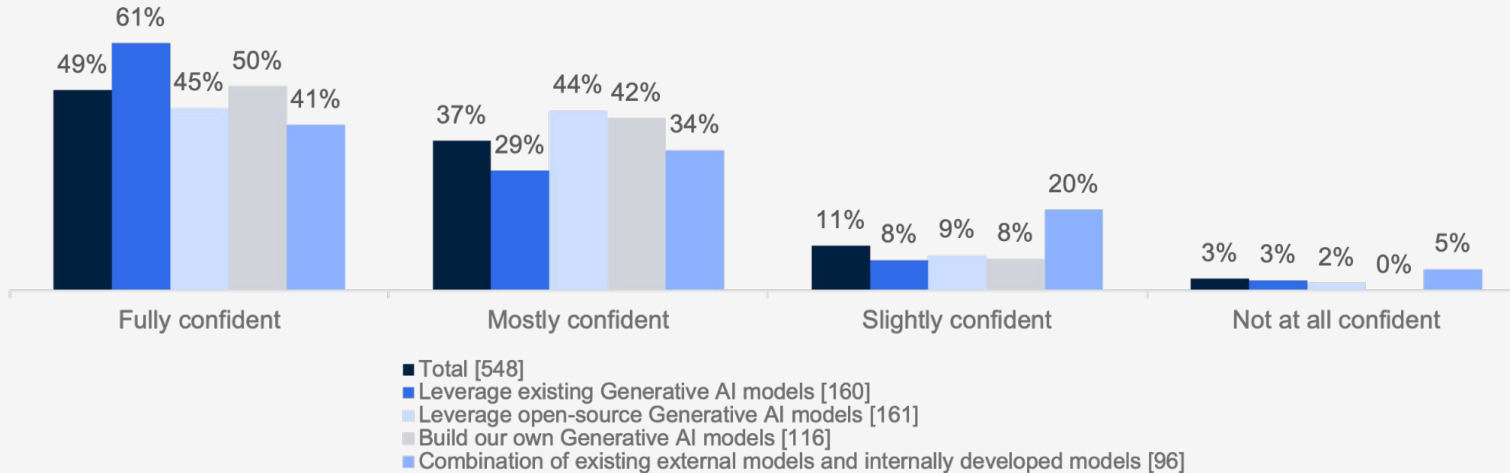
Region	Fully Trust GenAI Models
USA [200]	47%
France [100]	48%
UK & Ireland [150]	31%
Germany [100]	30%



The majority of organizations are confident that GenAI can be trusted to make strategic business decisions (with some human oversight)

Over six in ten (61%) organizations leveraging existing GenAI models express full confidence in its ability to make strategic decisions indicating that organizations are trusting the existing models despite the fact not much is known, and many have concerns (slide 31). There is a possibility that they're living in hope of its capabilities, with many jumping on the bandwagon since their competitors are too. Especially as seen earlier, many organizations are still contributing human input into their models (slide 19), perhaps thus highlighting the high confidence is the combination of technology and human input.

Those leveraging open-source models are not as fully confident, as many are still adopting skills and exploring GenAIs full usage.



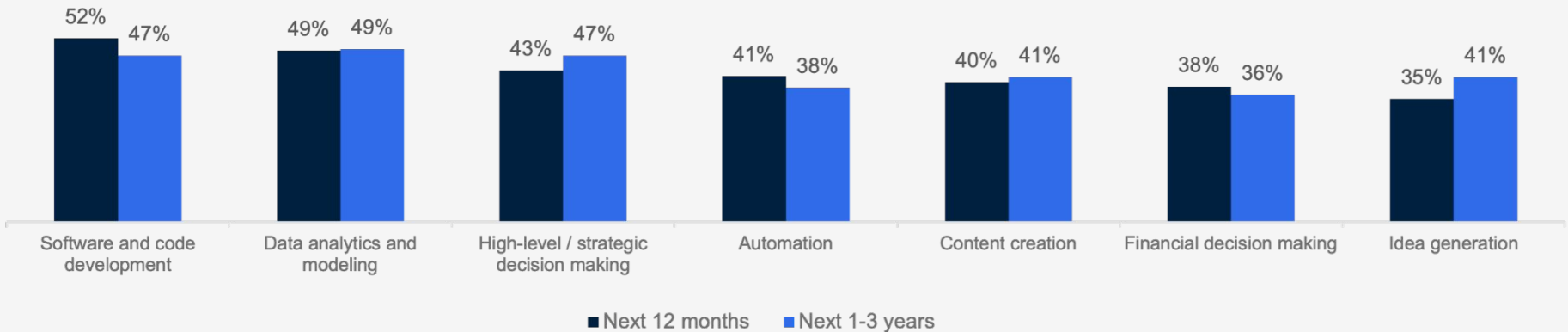
33%

Of respondents believe human oversight is fully to partially needed with strategic business advice



Organizations are hoping to use GenAI for a variety of use cases in the next few years

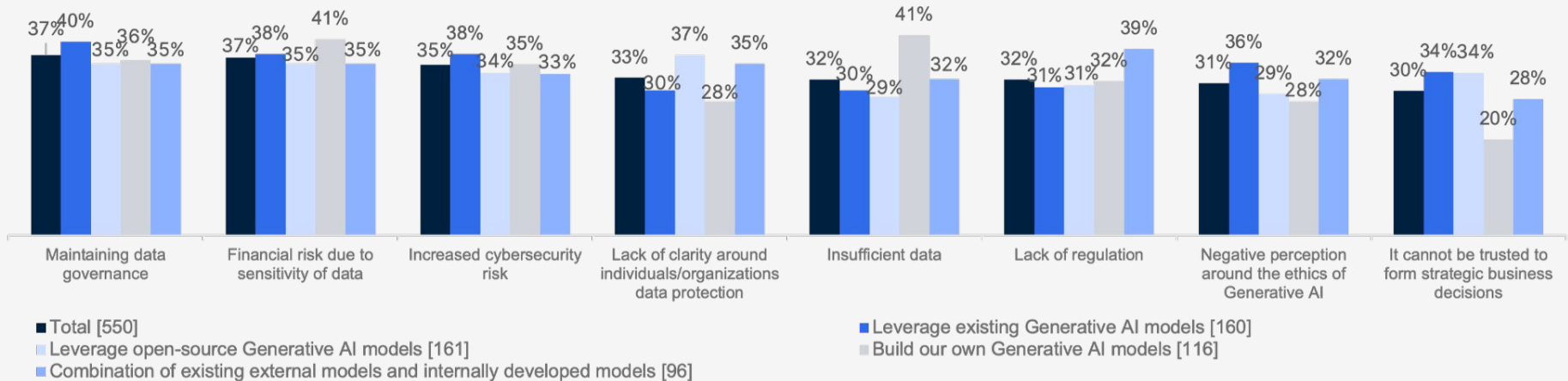
Organizations have plans for Generative AI, with the most noticeable increase in high-level/strategic decision and Idea generation making over the next 1-3 years. This aligns to what was touched on in slide 28 and 29, with organizations having full trust in the output and full confidence in its strategic business decision capabilities. With those who make the business decisions often being quite 'time-poor' it's understandable why they're outsourcing to emerging technologies. Moreover, organizations are using it for software and code development and data analytics and modeling in the next twelve months which could potentially be used to build other AI models through coding and modeling. But first organizational concerns surrounding the technology need addressing (slide 31).



What are the most important use cases that Generative AI is being used or planning to be used for across your organization in the next 12 months? Combination of responses ranked first, second and third. [548] Only shown to organizations that have not prohibited GenAI. (Q19ACombi, Q19BCombi)

Despite many adopting the tech there are concerns holding organizations back

Data issues are holding back organizations from building AI/ML models, and now they're a stumbling block in GenAI too, with those building their own GenAI models struggling mostly from insufficient data. Although, in slide 32, this insufficient data covers a breadth of data issues. There is a theme emerging around its newness to market, presenting new challenges around trust, ethics, lack of regulation and maintaining data governance. As the technology matures, and more regulations are in place, it may reduce or limit the concerns surrounding trust, ethics and data governance. In the meantime, organizations are hiring skills to hopefully ease these concerns too (slide 34).

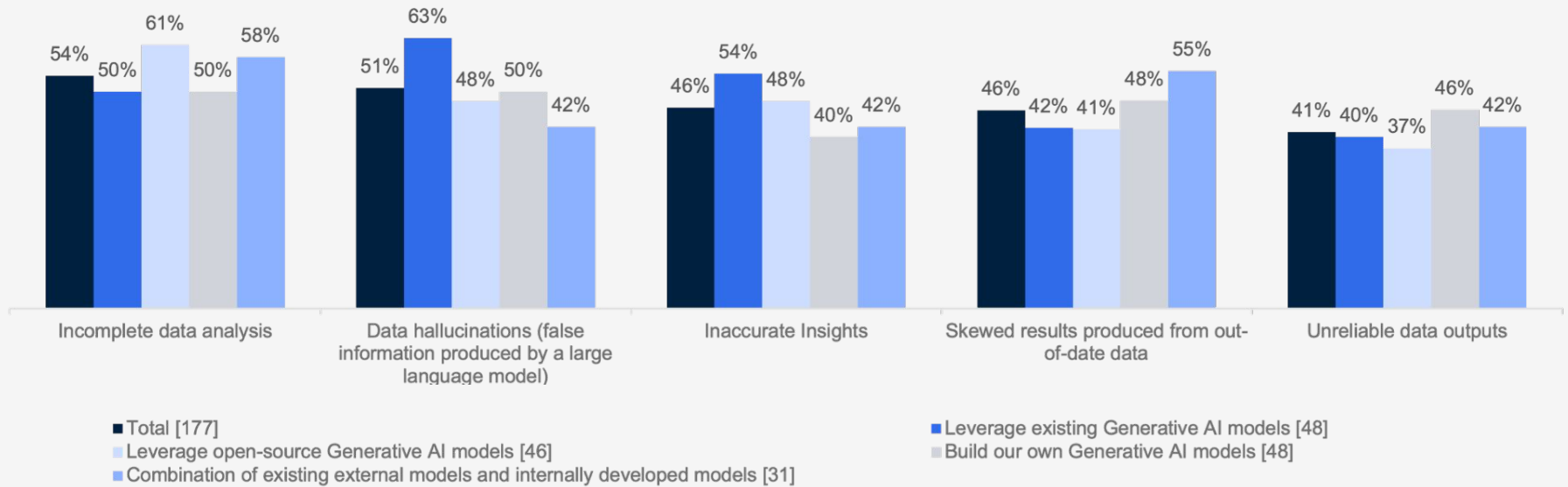


Which of the following are your organization's greatest concerns on using Generative AI? Combination of responses ranked first, second and third. [Base sizes in chart]. Split by GenAI approach. Not showing all answer options. (Q15Combi)



Data issues remain prevalent in GenAI

Data issues go further than insufficient data, organizations are facing a wide range of data issues. Yet those leveraging existing models face more data hallucinations and inaccurate insights overall, which may be contributing to the creation of inaccurate outputs. Those leveraging open-source GenAI models are experiencing incomplete data analysis. Regardless of the GenAI approach being taken, the best data is still a necessity for more accurate outputs, which would ultimately lead to increased trust in the models.



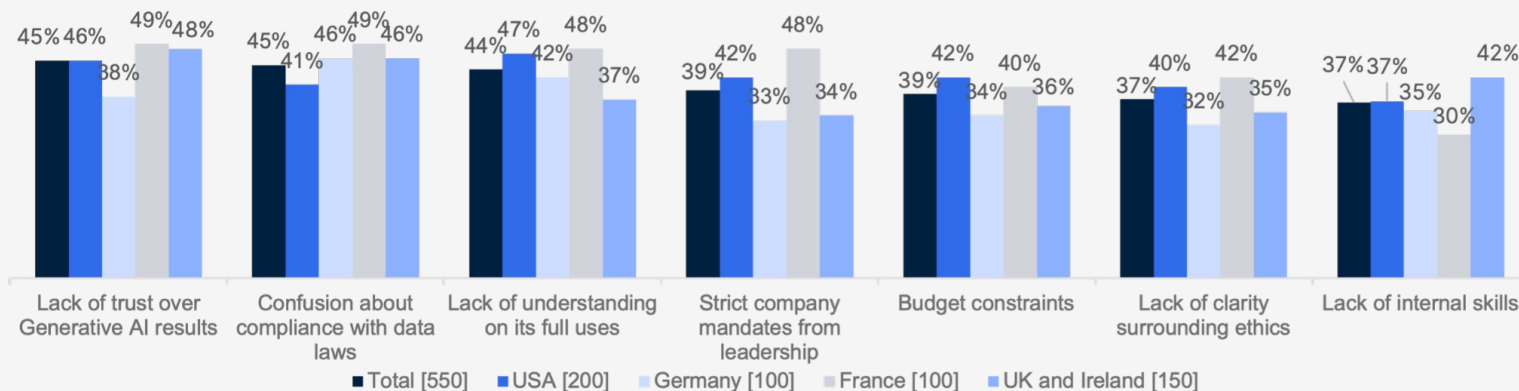
With insufficient data being produced by Generative AI being one of your organization's concerns, which of the following are impacting your organization? Only shown to organizations that have concerns over insufficient data [Base sizes in chart]. Split by GenAI approach. Not showing all answer options (Q16)

Nearly all organizations recognize overcoming barriers will be part of the journey to reaping the full benefits of GenAI

Organizations operating within Germany generally face fewer barriers than those in other regions. But these organizations are likely using GenAI less as they're more likely to be in the starter phase of AI adoption (slide 8), and additionally have less trust (slide 28) as their cultural reluctance may be holding them back from using AI further. In contrast, French organizations that are further along in their adoption journey (slide 8) are facing heightened barriers surrounding trust, as well as confusion, in several areas, which may be due to EU data regulations inhibiting their progress with GenAI implementation. One key issue across markets is the lack of clarity surrounding ethics (37%) which may be driving the need for new skills to navigate this emerging area of AI and ethical considerations.

98%

Of organizations say they face some sort of barriers when using GenAI

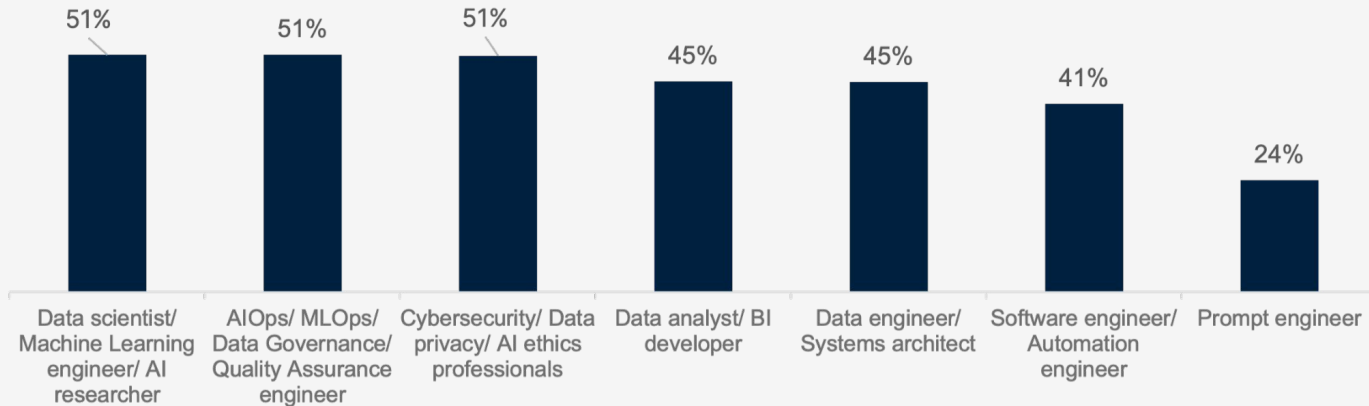


Which of the following barriers are limiting your organization's use and/or adoption of Generative AI? [Base sizes in chart] Only shown to organizations that have not prohibited GenAI. Split by region. Not showing all answer options. (Q20)



Organizations are planning to fill the skills gap

As Generative AI becomes more widely used in organizations, this will open the demand up for skills to effectively implement it further. With nearly all organizations (98%) planning to add or develop skills and/or jobs in the next 12 months to drive GenAI usage further, it is notable that this AI is being widely adopted. In the previous slide, clarity surrounding ethics is a barrier, but organizations are planning to hire or develop AI ethics professionals which will likely reduce that barrier in time. Additionally, a lack of internal skills is a barrier for many (37%), specifically the UK and Ireland (slide 33), with more organizations hiring, this barrier can be overcome in part, though organizations should continue to invest in ongoing training of employees as this technology develops quickly.



98%

Of organizations are adding or developing skills/jobs in the next 12 months to enhance their Generative AI skills



Which of the following skills/job roles would your organization need to add or develop in order to more fully utilize Generative AI in the next 12 months?. [548] Only shown to organizations that have not prohibited GenAI. Not showing all answer options. (Q25)

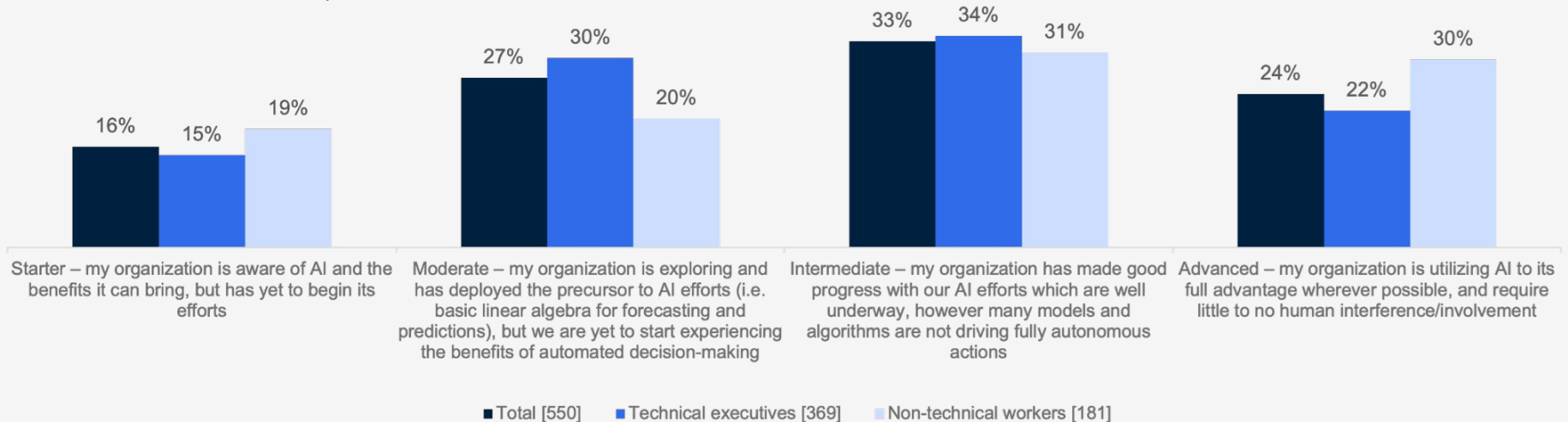
4. The juxtaposition of technical vs. non-technical workers

Technical executives [369] are respondents from IT or Data Science/Analytics departments, from all seniority levels in the organization.

Non-technical workers [181] are from a variety of different departments including: Business direction and strategy, Design/research and development, DevOps, Production/manufacturing, Engineering, Risk/fraud/compliance/governance, Logistics/supply chain/transport/fleet, Customer services, and Finance. They are from all levels of seniority in the organization.

Those building and operating the models perceive their organization as behind AI adoption

Only one in four (24%) have reached the advanced stage of having AI within their organization, but those in non-technical positions believe their organization is more advanced with AI (30%) than those in technical positions (22%). There may be a sense of naivety with these respondents being unaware how far AI can truly go, and they believe their organization has hit the glass ceiling. Respondents operating in the technical departments feel their organizations aren't as advanced as others, possibly due to the skills limitations and human intervention still required.



Thinking about the previous definition of Artificial Intelligence (AI), which of the following best describes how far along your organization is on its journey to using AI in its true, sophisticated form? [Base sizes in chart]. Split by respondent type. Not showing all answer options (Q1)

However, they both admit that human intervention is still widely used

With only one in four organizations considered to be in the advanced stage of AI adoption (previous slide), it is clear the human element is still strongly needed.

This could be due to a range of factors – a lack of trust in the technology, data quality issues, or a misconception of their organization’s AI use between those involved in building AI models and those not.

As organizations move more into the advanced stage of AI implementation, there is a hope that there will be less human involvement needed. But first, barriers surrounding data need overcoming.

0% of decisions are made by people; 100% are made by technology/machines

10% of decisions are made by people; 90% are made by technology/machines

20% of decisions are made by people; 80% are made by technology/machines

30% of decisions are made by people; 70% are made by technology/machines

40% of decisions are made by people; 60% are made by technology/machines

50% of decisions are made by people; 50% are made by technology/machines

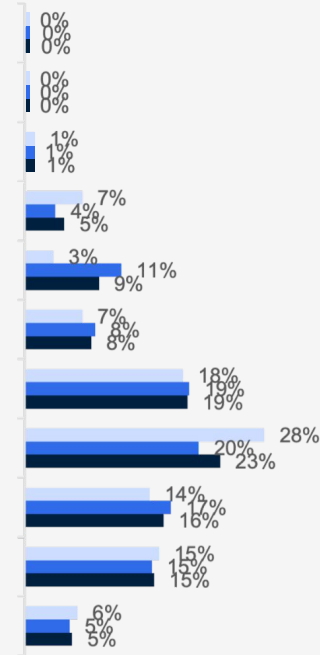
60% of decisions are made by people; 40% are made by technology/machines

70% of decisions are made by people; 30% are made by technology/machines

80% of decisions are made by people; 20% are made by technology/machines

90% of decisions are made by people; 10% are made by technology/machines

100% of decisions are made by people; 0% are made by technology/machines



32%

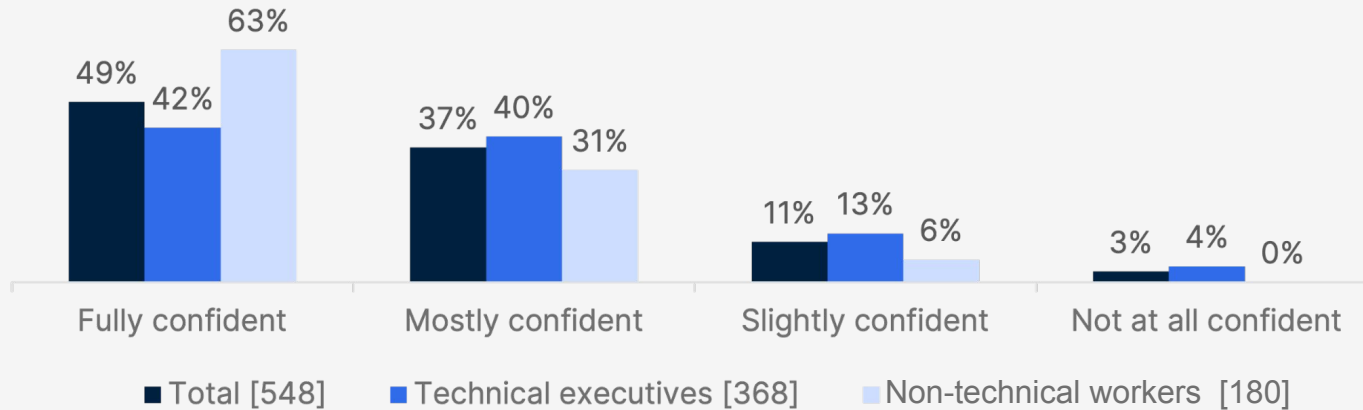
Of decisions are made by **technology/machines** on average

■ Total [550]
■ Non-technical workers [181]
■ Technical executives [369]



Trust in GenAI is high, especially among non-technical workers

As we saw on slide 36, non-technical workers perceive their organizations as more advanced, and here it is evident they hold a higher level of trust in GenAI. It may be that they're using it for more simple business tasks which has increased their trust. But for those in technical roles, the trust is lower, but context is everything – they have the niche skills and knowledge of AI and GenAI, and they're likely cautious of technology that is new-to-market as they're aware there are still kinks to be ironed out before trust can grow.



33%

Of respondents believe human oversight is fully to partially needed with strategic business advice



To what extent are you confident that Generative AI can be trusted to make strategic business decisions? Only shown to respondents whose organizations have not prohibited GenAI [Base sizes in chart]. Split by respondent type Not showing all answer options. (Q13)
Does your organization fully trust strategic business advice produced by Generative AI? [548] Only shown to organizations that have not prohibited GenAI. Showing average only. (Q14)

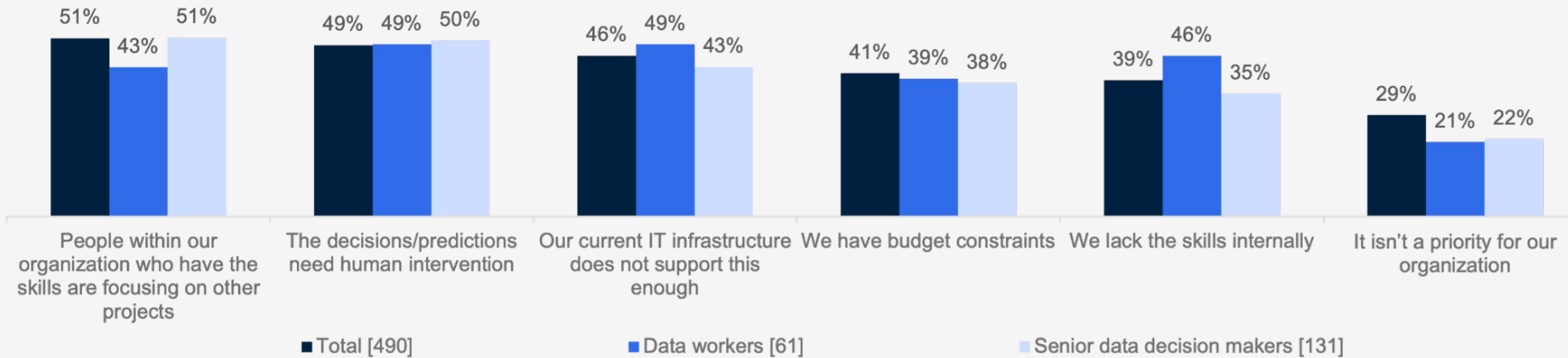
5. Senior data decision makers and data workers AI experiences

Senior Data decision makers [138] are respondents from IT or Data Science/Analytics departments, in senior management or board-members/c-level positions who are decision makers for Data science and Analytics in their organization.

Data workers [86] are respondents from IT or Data Science/Analytics departments, in mid management, junior management or technical positions who have little to no responsibility for Data Science and Analytics in their organization .

Bad data practices are still prevalent

The lower levels of trust among technical personnel, may be driven by the barriers faced below. Despite being from the same departments, it is evident they face similar barriers from different perspectives. Data workers face a company culture issue with lack of skills (46%) and outdated infrastructure (49%). But those in the senior positions are viewing employees with the skills focused on other projects (51%) as the issue, though the underlying issue may be time resource is squandered on correcting data. The organizations may very well have the skills, but whether they are being fully utilized is reliant on the data they have. Accessible, sufficient and good quality data reduces the need for human intervention, a key area for organizations to address.



What barriers, if any, does your organization face when building models from business applications to automatically make predictions and/or business decisions? Only shown to respondents using AI/ML methodologies to make predictions/business decisions. [Base sizes in chart] Split by respondent data involvement. Not showing all answer options. (Q5)

These data challenges are costing the organization valuable time and capital

0% of their time is spent working with/preparing data; 100% is spend building...

10% of their time is spent working with/preparing data; 90% is spend building...

20% of their time is spent working with/preparing data; 80% is spend building...

30% of their time is spent working with/preparing data; 70% is spend building...

40% of their time is spent working with/preparing data; 60% is spend building...

50% of their time is spent working with/preparing data; 50% is spend building...

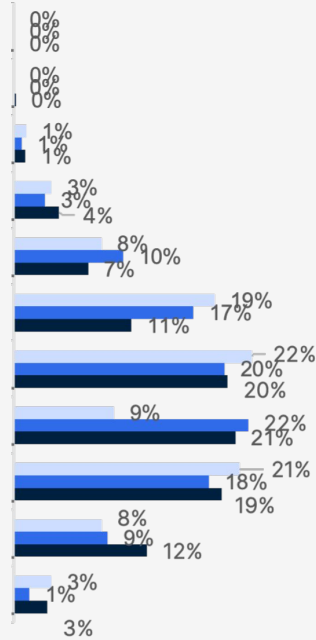
60% of their time is spent working with/preparing data; 40% is spend building...

70% of their time is spent working with/preparing data; 30% is spend building...

80% of their time is spent working with/preparing data; 10% is spend building...

90% of their time is spent working with/preparing data; 10% is spend building...

100% of their time is spent working with/preparing data; 0% is spend building...



■ Data workers [86] ■ Senior data decision makers [138] ■ Total [550]

Both senior data DM's and data workers are aligned with 64% of time, on average, spent preparing the data over building models.

But if the time is not invested into correcting the data, then the financial implication can be significant to organizations with 6% of global annual revenue lost to underperforming AI models from inaccurate data.

6%

On average, of global annual revenue is lost due to underperforming AI programs/Models

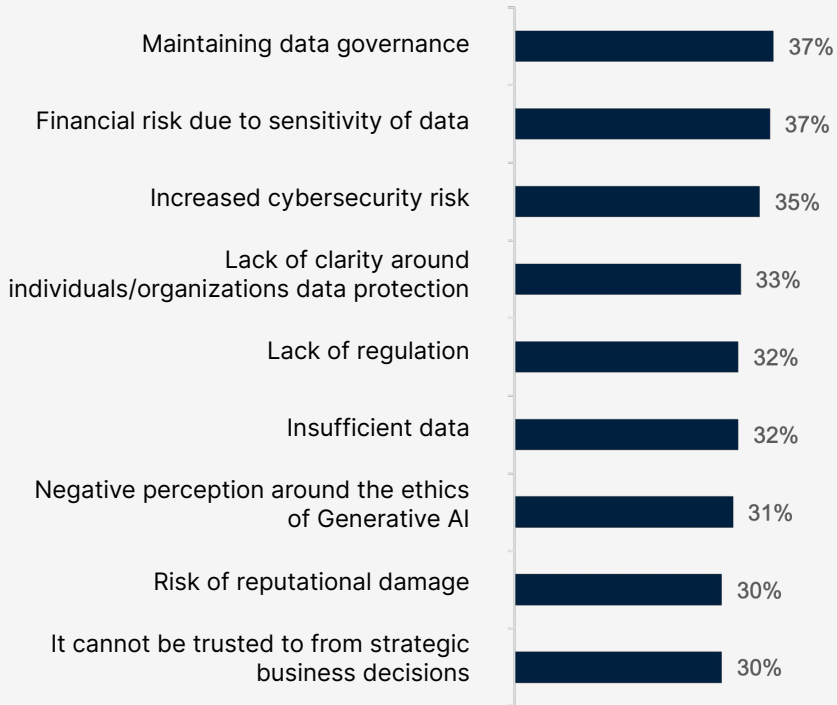
These workers are between a rock and a hard place, they're losing AI innovation time but they cannot risk costing the organization money through bad data.

Approximately, what proportion of time are the data scientists within your organization working with/preparing data versus building AI models?[Base sizes in chart] Split by respondent data involvement. Not showing all answer options. (Q22)

If measured, approximately what percentage of your organization's global annual revenue is lost because of underperforming AI programs/models that are built using inaccurate or low quality data which therefore leads to misinformed business decisions? [550] Showing average only. (Q9)



Data governance is a top concern for data workers



Respondent type by data involvement	Maintaining Data Governance
Data workers [86]	47%
Senior Data Decision Makers [138]	30%

Maintaining data governance is among the top concerns with using Generative AI. As it lacks maturity, there is a lot of uncertainty surrounding who controls or has access to the data. Within data workers, this concern increases to 47% as these employees could be held responsible for any possible data breaches, and in addition they need control and access of data to further their AI initiatives.

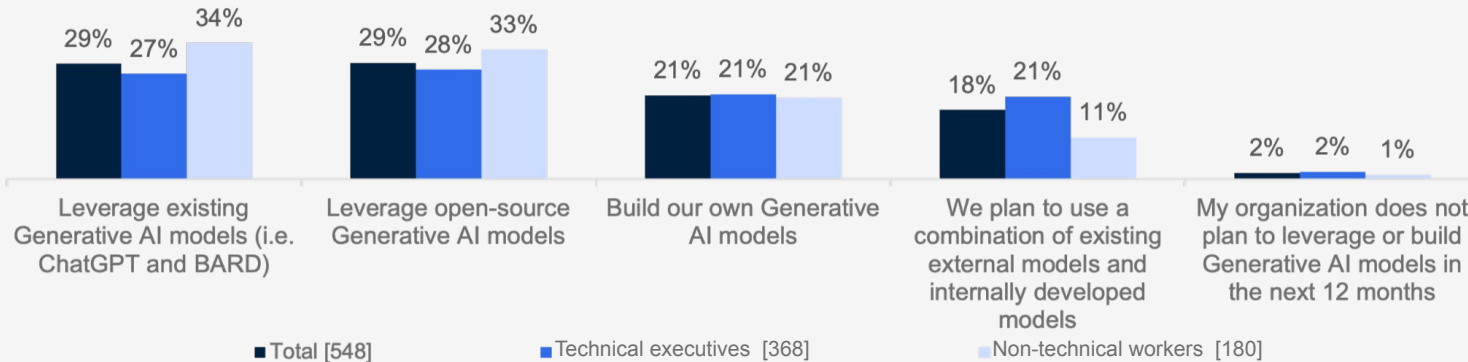
Concerns surrounding Generative AI are likely influenced by their role or which approach their organization is taking (existing models vs. building their own). As with normal AI, GenAI model approaches have their own pros and cons.

Which of the following are your organization's greatest concerns on using Generative AI? Combination of responses ranked first, second and third [550] Split by respondent data involvement. Not showing all answer options. (Q15combi)



Organizations are moving ahead with various GenAI approaches

Organizations are moving full steam ahead to implement Generative AI despite the barriers they're facing. Although there seems to be differing approaches on which method of GenAI is being adopted. Respondents in other business functions (non-technical workers) are slightly more likely to leverage existing models (34%) or open-source GenAI models (33%) perhaps as these personnel likely plan to use the models for different purposes to technical executives. However, both respondent types here are on the same wavelength when it comes to building their own models, as this will help to remedy the top concern of maintaining data governance among limiting other concerns surrounding GenAI (slide 42).



98%

Of respondents' organizations are planning to leverage or build GenAI models in the next 12 months

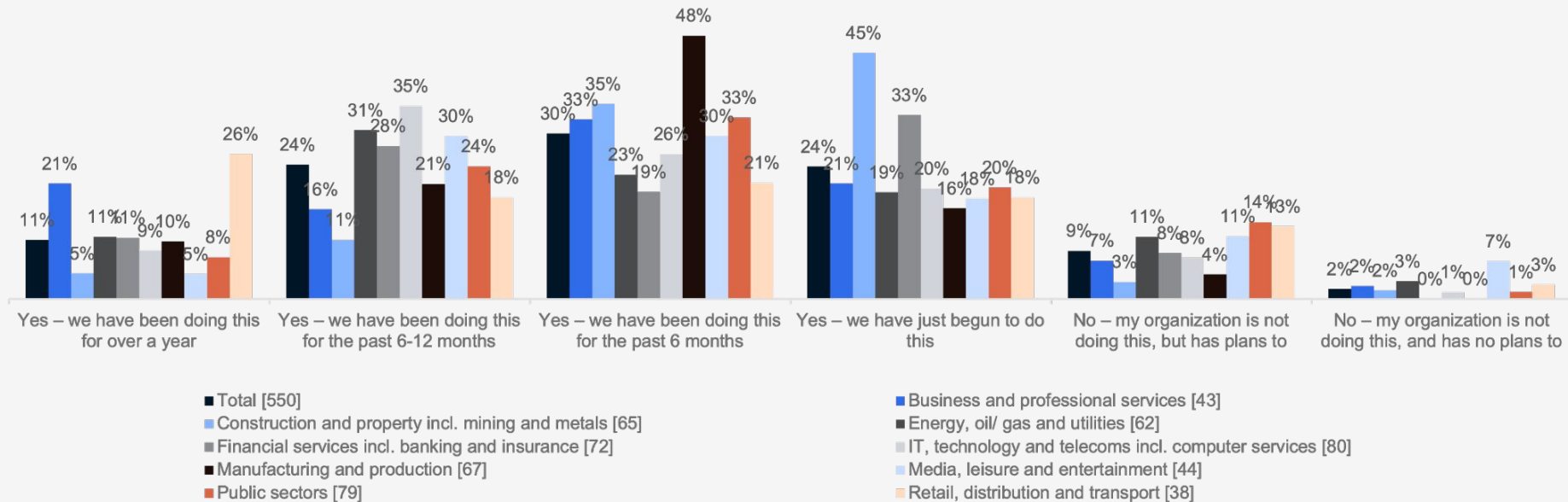


In the next 12 months, which approach does your organization plan to take in order to leverage Generative AI models? Only shown to respondents whose organizations have not prohibited GenAI. [Base sizes in chart]. Split by respondent data involvement. Not showing all answer options. (Q17)

Appendix

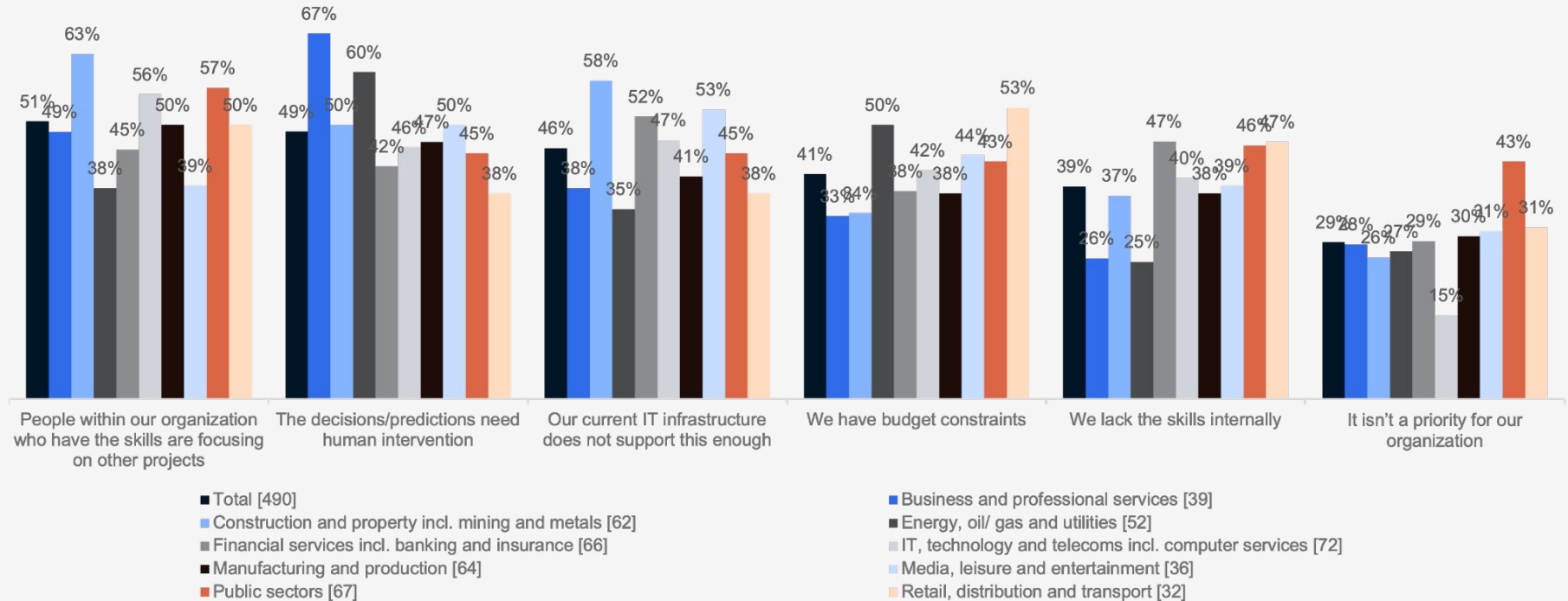


Organizations using ML/AI methodologies to build models within their business applications that are used to automatically make predictions and/or decisions around business processes, split by sector



Is your organization using ML/AI methodologies to build models within its business applications that are being used to automatically make predictions and/or decisions around business processes? [Base sizes in chart]. Split by sector. Not showing all answer options (Q4)

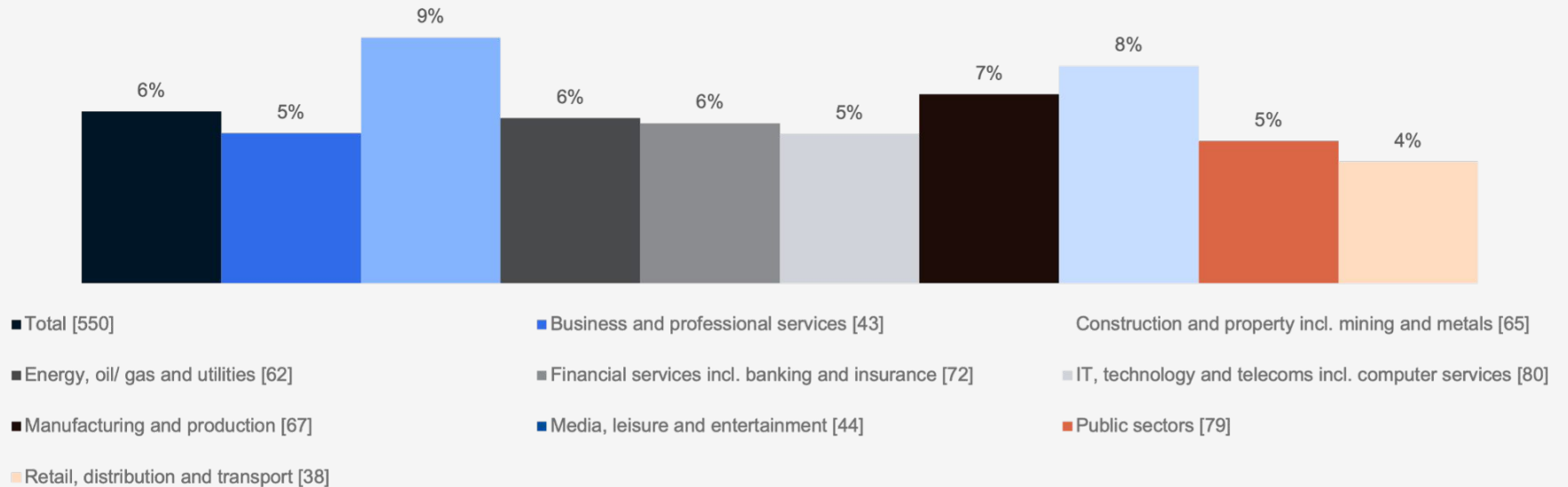
Barriers faced when building models from business applications to automatically make predictions and/or business decisions, split by sector



What barriers, if any, does your organization face when building models from business applications to automatically make predictions and/or business decisions? [base of those organizations who are building models at Q4 shown in chart]. Split by sector. Not showing all answer options (Q5)



Percentage of organizations' global annual revenue on average is lost because of underperforming AI programs/models, split by sector



If measured, approximately what percentage of your organization's global annual revenue is lost because of underperforming AI programs/models that are built using inaccurate or low quality data which therefore leads to misinformed business decisions? [Base sizes in chart]. Split by sector. Showing average only. (Q9)



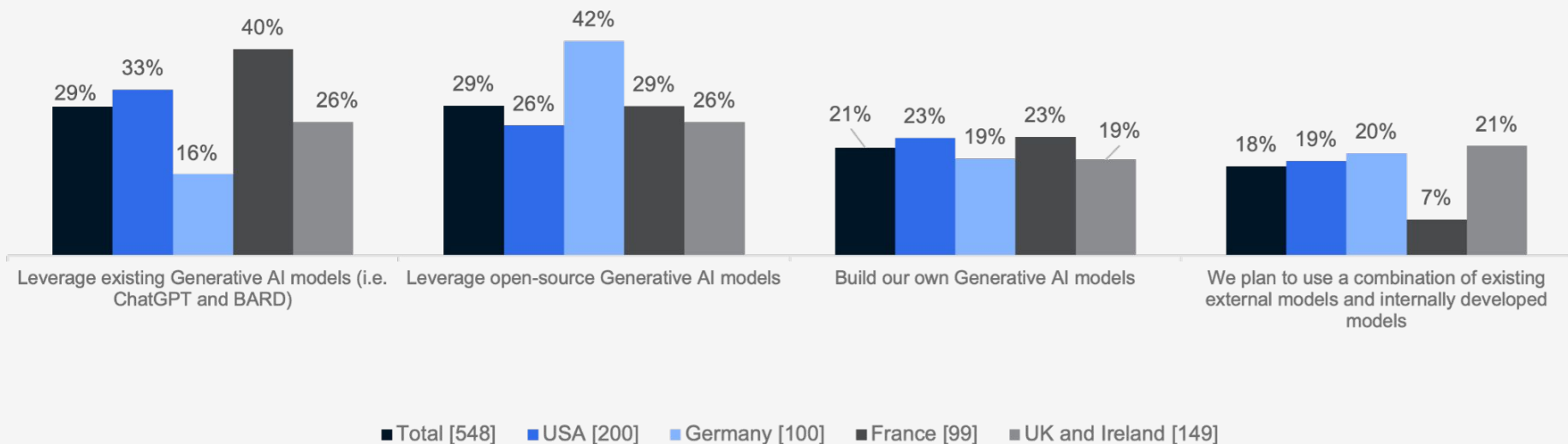
Proportion of time data scientists spend working with/preparing data versus building AI models, split by sector

Sector	Average % of time spent working with/preparing data	Average % of time spent building AI models
Total [550]	67%	33%
Business and professional services [43]	63%	37%
Construction and property incl. mining and metals [65]	76%	24%
Energy, oil/ gas and utilities [62]	61%	39%
Financial services incl. banking and insurance [72]	69%	31%
IT, technology and telecoms incl. computer services [80]	64%	36%
Manufacturing and production [67]	72%	28%
Media, leisure and entertainment [44]	68%	32%
Public sectors [79]	63%	37%
Retail, distribution and transport [38]	63%	37%

Approximately, what proportion of time are the data scientists within your organization working with/preparing data versus building AI models?[Base sizes in chart]. Split by sector. Showing average only. (Q22)



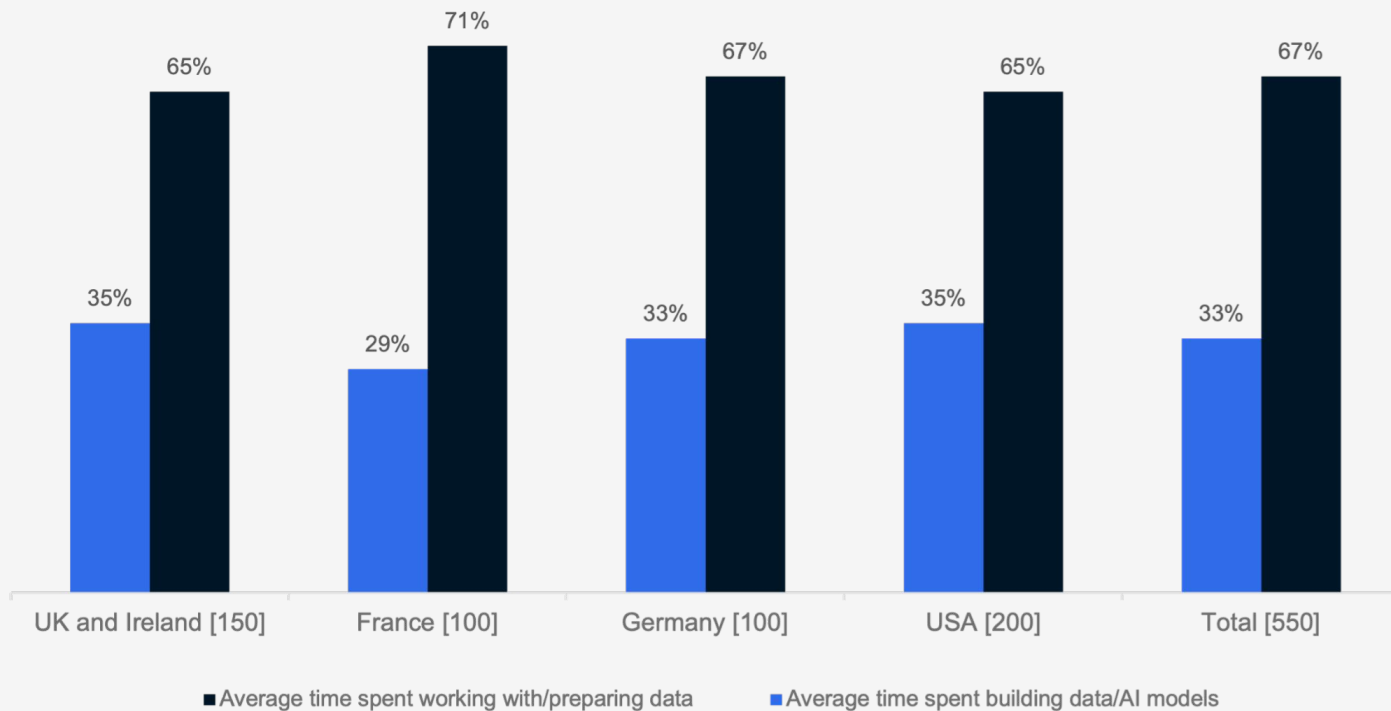
GenAI models organizations are planning to leverage split by region



In the next 12 months, which approach does your organization plan to take in order to leverage Generative AI models.? Only shown to organizations that have not prohibited GenAI. [Base sizes in chart] Split by region. Not showing all answer options. (Q17)



Time spent preparing data vs building AI models split by region



67%

Proportion of time spent **working with / preparing data**, on average

33%

Proportion of time spent **building data/ AI models**, on average



Approximately, what proportion of time are the data scientists within your organization working with/preparing data versus building AI models?[Base sizes in chart]. Split by region. Not showing all answer options (Q22)

Research methodology

550 respondents from the USA (200), Germany (100), France (100), UK and Ireland (150) were interviewed via online surveys. Respondents were from organizations with 500 or more employees, operating in private or public sectors. Those surveyed were from organizations with global annual revenues between \$25 million to over \$50 billion (USD), with over 70% of respondents from organizations with a global annual revenue of over \$500 million (USD). The average global revenue of all organizations in the sample is \$5.6 billion (USD).

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