

# Large Language Models: Opportunity, Risk and Paths Forward

A new expert.ai Survey on LLMs



## Methodology

This report summarizes survey results from 300 business, technical and academic natural language AI experts. The interviews were conducted online by expert.ai in April 2023.



## Goal

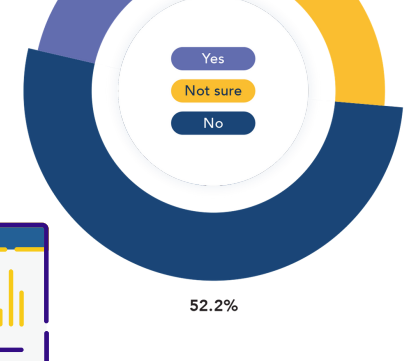
The goal is to explore potential opportunities and risks associated with Large Language Models (LLMs) and to provide recommendations for a path forward that enterprises can use in their development and deployment of LLMs.



## Few Favor a Training LLM Moratorium but Majority Want Regulation

**52.2%**

of survey participants stated that there was no need to have a 6-month moratorium on LLM training.

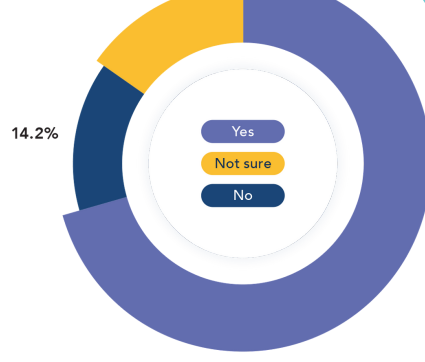


*"Once the hype has calmed down (this is similar to previous technology roll outs) the development of practical use cases will prove difficult. At the same time 'private' large language models built in house will add additional biases to an organization causing a risk to the business form a spiral of hearing what you want to rather than what might actually be real."*

- Consultant in Insurance

**70.6%**

of AI professionals and practitioners pointed to the need for commercial and malicious use of AI regulations.



## Generative AI and LLMs Can Support Lots of Enterprise Use Cases

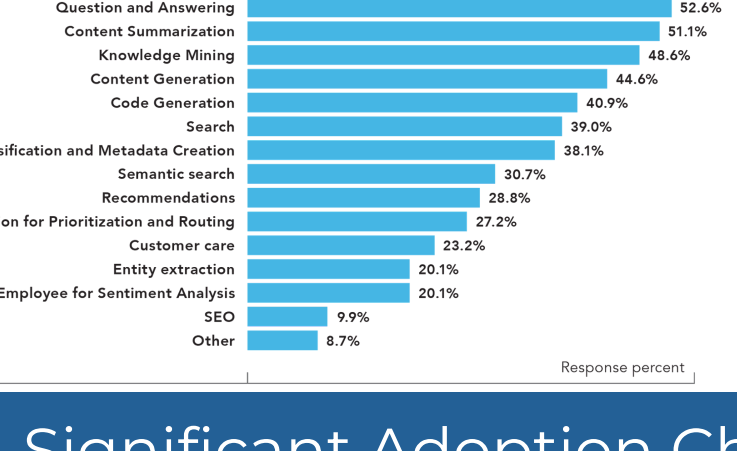
*"I see significant applications in customer care, in providing the first responses to customers, in classifying their requests. Other important applications in the analysis and classification of data contained in the company's digital archives."*

- C-Level Executive in Business Service

Enterprises have a long list of use cases to consider when deciding how to adopt generative AI and LLM capabilities.



Top AI Use Cases



Typically, they fall into 4 main categories:

- 1 Human-computer Interaction
- 2 Language generation
- 3 Information Extraction
- 4 Search

"What are the enterprise adoption challenges you see for generative AI and Large Language Models? (Select all that apply)"

## Significant Adoption Challenges Exist for Generative AI and LLMs

There are several challenges that organizations may face when adopting LLMs at an enterprise level.

Top adoption challenges include:

**73.1%**

data privacy and security

**51.2%**

accuracy and quality for production model deployment

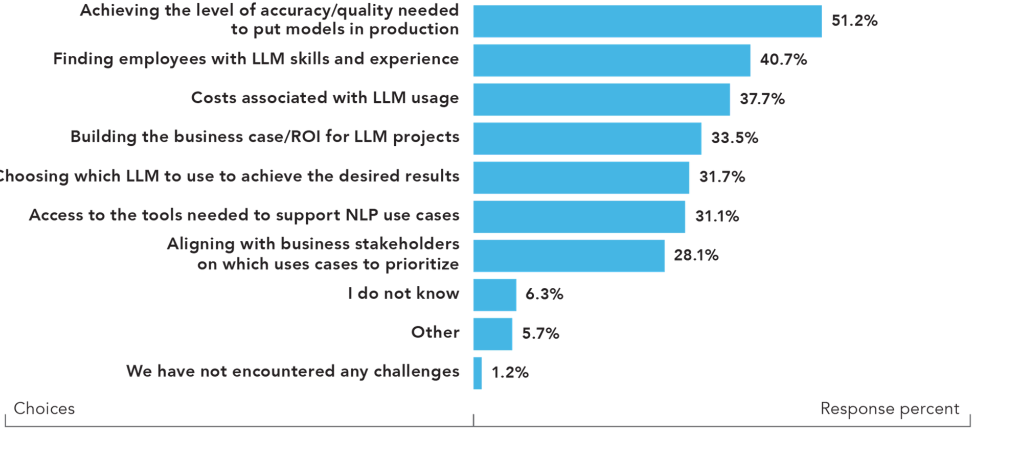
**40.7%**

knowledgeable resources on how to build and train LLMs

*"I think it will save considerable amount of time and serves as a great jumping off point for content creation but could be problematic when the content all sounds the same."*

- Business Stakeholder in Media & Publishing

"What are the enterprise adoption challenges you see for generative AI and Large Language Models? (Select all that apply)"



Overall, enterprise adoption of LLMs requires careful planning and consideration for a range of factors.

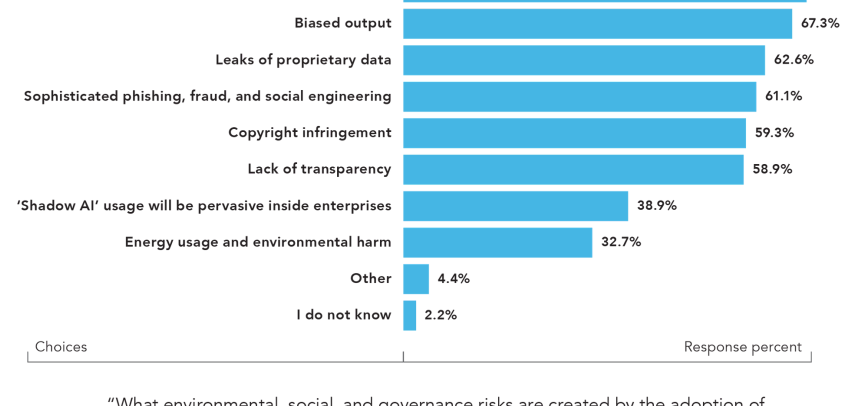
To avoid project delays and failed efforts, it makes sense to initially engage with experts in enterprise language model development, tuning and deployments.

## ESG Risks Are Real for Generative AI and LLMs

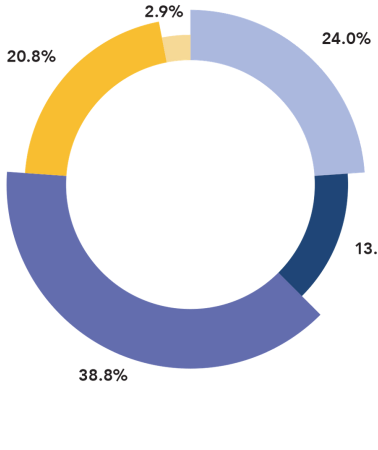
*"I believe that Gen AI and LLM will have a significant and potential disruptive impact if not managed carefully at the employee/student level. From the educational perspective it is now incumbent on faculty to raise the level of teaching done in the classroom to allow student to find the basic answers to questions through Gen AI and LLM."*

- Academic

"What environmental, social, and governance risks are created by the adoption of generative AI and Large Language Models? (Select all that apply)"



## Governance Principles Still Apply to Generative AI and LLMs



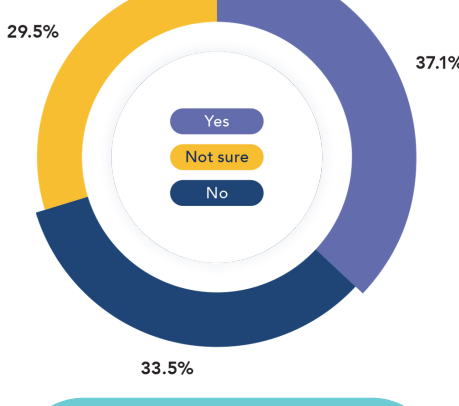
"Does generative AI and Large Language Models represent a significant change to the governance principles of managing availability, usability, integrity, and security of enterprise data?"

24.0% Yes, companies need to restrict teams from using generative AI and Large Language Models services without approval.  
13.5% No, the same principles apply.  
38.8% Yes, companies need to encourage teams to explore the potential of generative AI and Large Language Models.  
20.8% It is too soon to tell.  
2.9% I don't know.

Regardless of the direction an organization chooses, basic AI data governance principles still apply. Additional governance considerations include:

- 1 Model Governance
- 2 Ethical Governance
- 3 Regulatory Governance
- 4 Stakeholder Engagement
- 5 Human Centered

## Enterprise-Specific Language Models are the Future

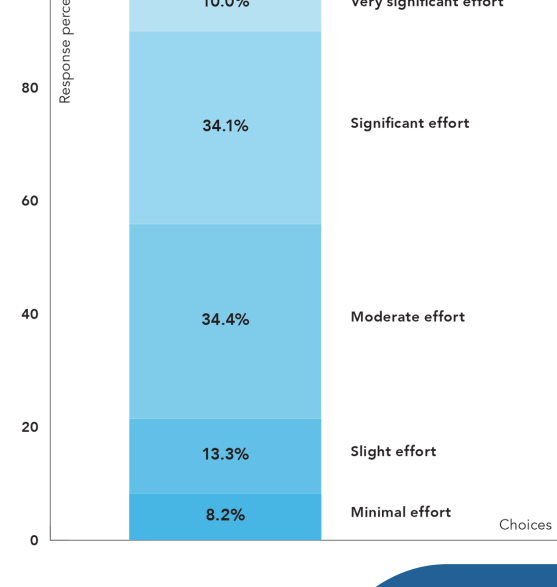


"Is your company considering building its own business specific Language Model, or adapting/tuning an existing one?"

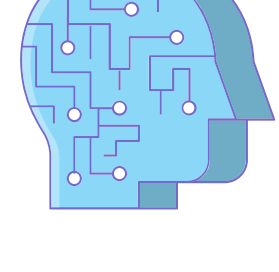
37.1% of enterprises are already considering building enterprise-specific language models

*"Best case, as a partner for generating ideas. For example, biomedical research is an enterprise akin to 100 near-entrusted examiners of a very large elephant, each examining their own small patch. It seems like AI might help here."*

- Business Stakeholder in Life Sciences



"How significant is the effort you anticipate training LLMs for your business and deploy the model(s) effectively?"



*"Enterprise-specific language models with a human-centered approach are part of the future. Business natural language use cases always require some degree of domain-specific training applied to existing proprietary or open-source LLMs. Specific enterprise models can be smaller, more efficient, faster and less resource-hungry while still maintaining high performance. Having subject-matter experts monitoring and refining data and inputs throughout the process ensures accuracy, transparency and accountability."*

- Marco Varone, Founder & CTO of expert.ai

Want to learn more?

