Global Data Strategy

WHITE PAPER

# TRENDS IN ARTIFICIAL INTELLIGENCE (AI)

2025

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# Overview

Artificial Intelligence (AI) is making a significant impact on the global data and business landscape, and it is easy to get lost in the hype surrounding this new technology. To understand the real-world adoption of AI in the marketplace, Global Data Strategy, Ltd. (GDS) conducted a survey of its clients and community members. This whitepaper explores the results of this global survey and provides insights regarding the implications and impacts of AI in the industry.

# Survey Details and Demographics

The AI survey was conducted in April 2025 with 55 respondents globally representing North America[1] (51%), Asia Pacific (35%), Europe (8%), Africa (2%), the Caribbean (2%), and the Middle East (2%).

A variety of industries were represented as shown in Figure 1, including Agriculture, Chemical Industry, Financial Services, Government, Manufacturing, Nonprofit, and more with Consulting showing the largest representation.

[1] Note that North America includes respondents from Canada, Mexico, and the United States.

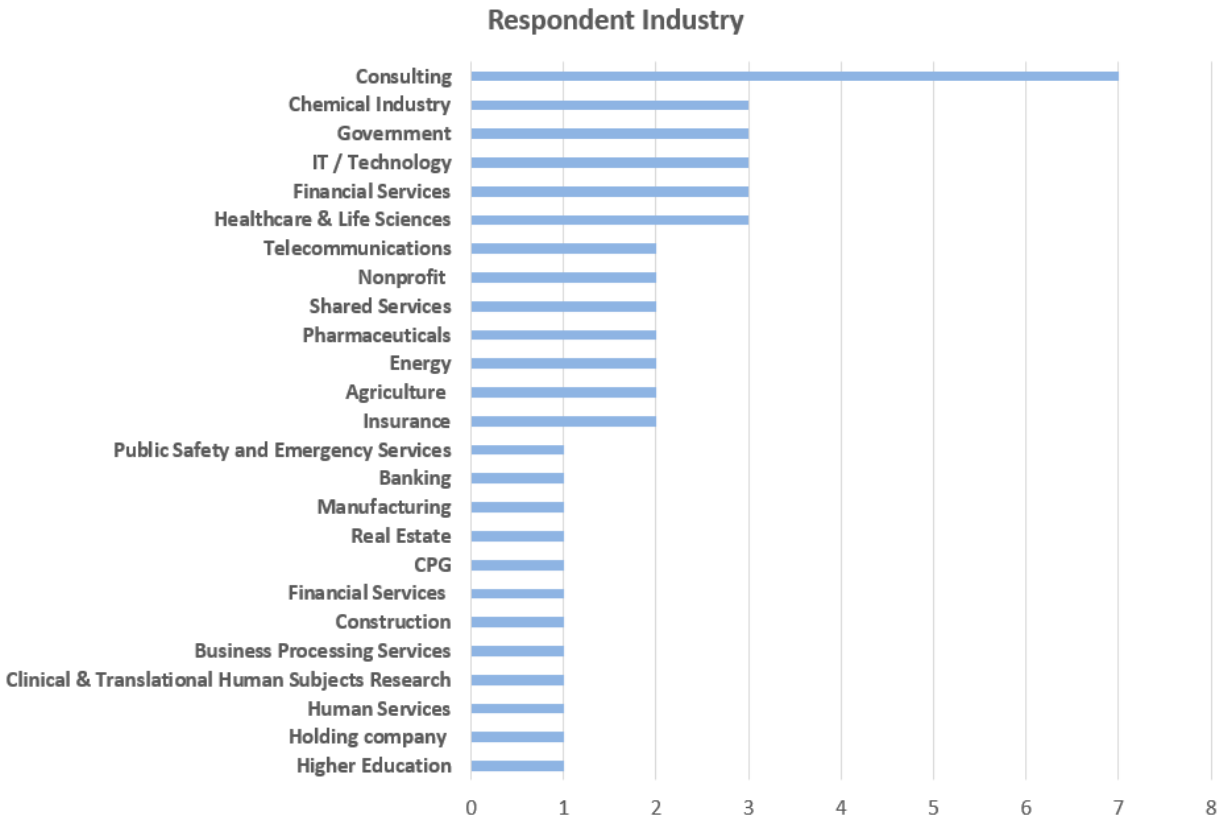


*Figure 1 Industries Represented*

# AI Adoption and Use Cases

There was a high rate of AI adoption among the organizations responding to the survey with 75% of respondents actively engaged in using AI, as shown in Figure 2.

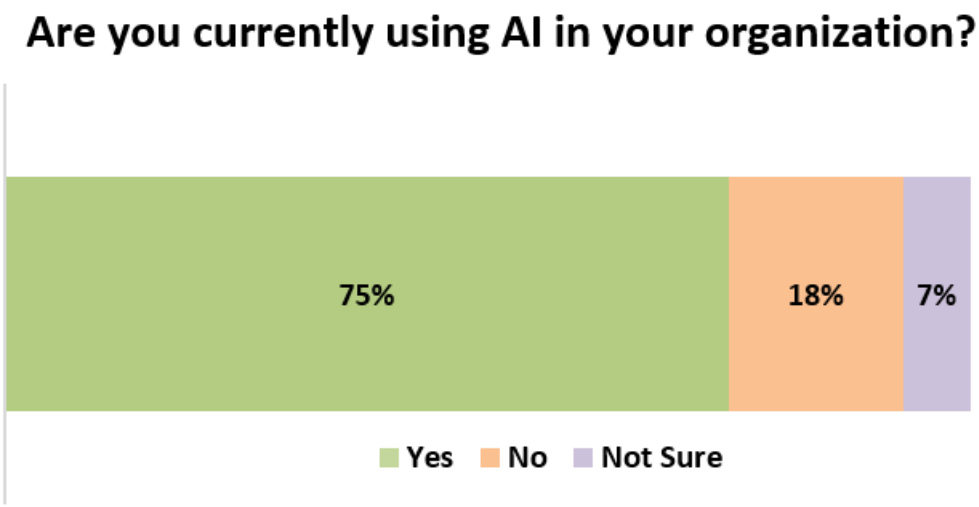


*Figure 2 AI Adoption*

For those organizations actively using AI, when asked to describe their current implementations via an open-ended response, they fell into five categories, as shown in Figure 3: Research & Summarization (36%), Content Generation (20%), Agents (11%), Analytics & Business Insights (7%), and Data Quality & Cleansing (4%). There was also a significant percentage of respondents (20%) who were in the early stages of pilots or exploration without yet implementing a defined use case or application. The following paragraphs delve into each of these use cases in more detail.

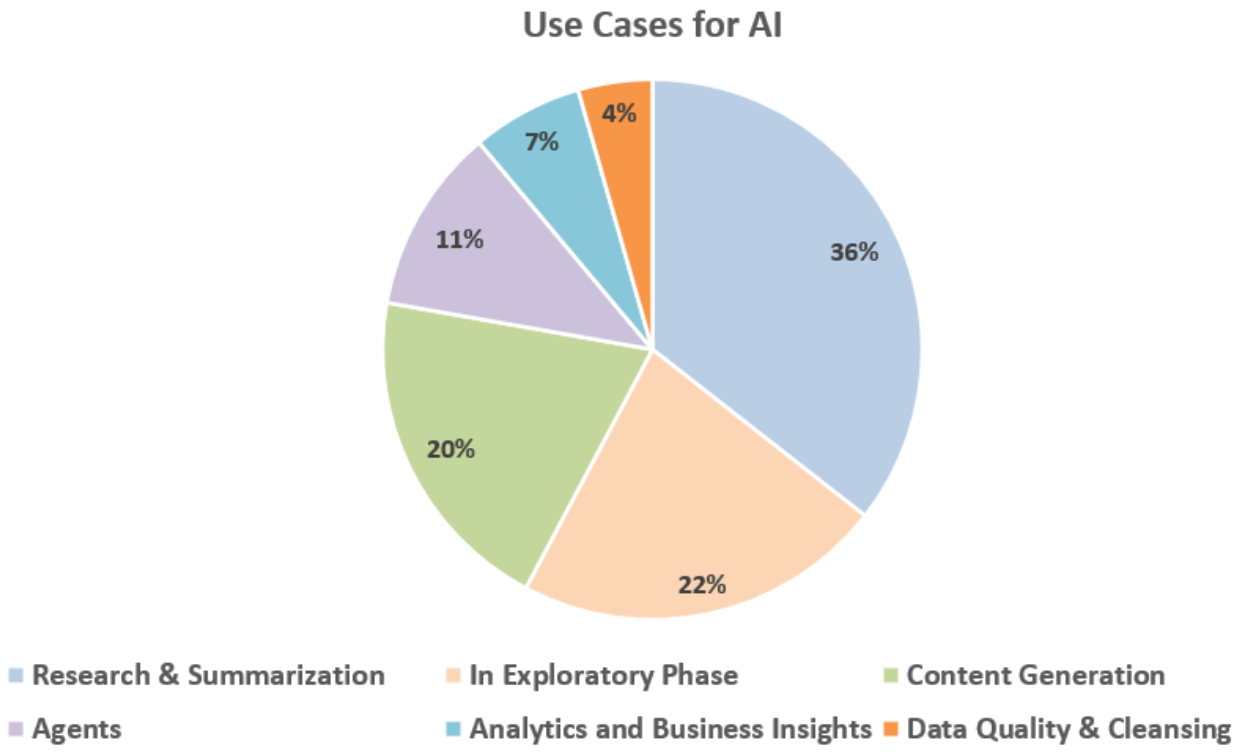


*Figure 3 Use Cases for AI*

**Research & Summarization:** Using AI for research and summarization of documents was the most common application across organizations, and one that many readers may be familiar with via ChatGPT, Microsoft Copilot, and other LLM-style applications. Respondents use these models to summarize meetings, documents, and search for information for problem-solving, e.g. for coding or meeting preparation.

**Content Generation:** Generating content from AI is another common use case across organizations and the applications were varied across industries. Common applications include generation of documents or presentations from notes, code generation for software development, creation of project plans and writing emails. Industry-specific applications included using natural language processing to abstract clinician notes and audio into medical records, anomaly detection in manufacturing, applicant screening in HR, and creation of knowledge articles based on past customer interactions.

**Agents:** Agentic AI refers to autonomous systems that can proactively take action based without human oversight. While the potential for these AI agents is tremendous, conjuring ideas of autonomous vehicles and automated supply chain automation, the

actual use cases from respondents were more mundane. Chatbots for customer service and technical support were the largest use case, and some organizations are beginning to automate manual business processes.

**Analytics & Business Insights:** Use of AI for business insights primarily fell into categories such as customer insights based on historical data and research insights based on historical documents and patterns.

**Data Quality & Cleansing:** Automation of operational data quality is another use case that has potential for growth. Organizations reported using AI for both data cleansing and for analytics monitoring data quality. One organization noted using AI to enhance the data migration process by automatically identifying data patterns, mapping fields between old and new systems, detecting anomalies, and ensuring data quality.

**In Exploratory Phase:** Many organizations are currently running pilots to identify use cases for AI. While still in the early stages of maturity, the use cases were varied across project management, communications, strategy, efficiency and automation, sustainability, data governance, data quality, and more.

# Sentiment and Adoption

Respondents were generally positive about the potential for AI's future impact on the industry, as seen in Figure 4. When asked whether AI would have a positive or negative effect on the industry, the majority of respondents (69%) showed a balanced view, indicating that the likely result would be a combination of both favorable and adverse impacts. A significant number of respondents (39%) indicated that AI would have a net positive effect. Only a small minority (2%) felt that AI would have only a negative effect.

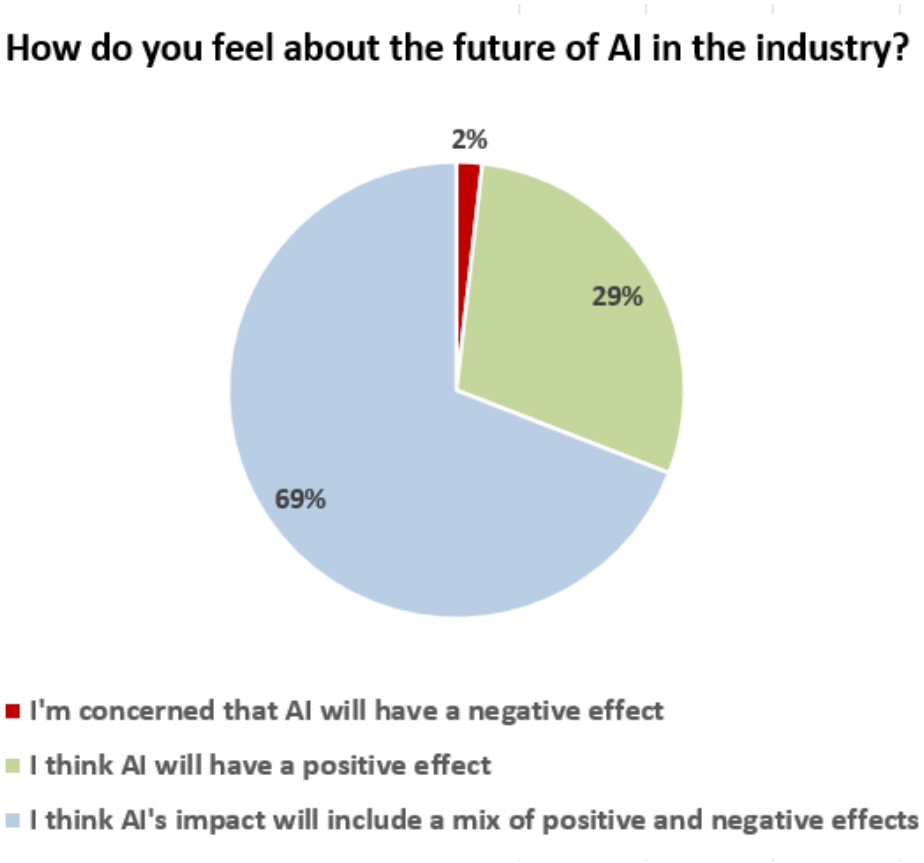


*Figure 4 Sentiment Regarding AI's Future Impact*

## Concerns Surrounding AI

When asked to enumerate their concerns surrounding AI, the most common responses focused on Governance & Ethics and Privacy & Security, as shown in Figure 5. The following sections provide more detail regarding the responses.

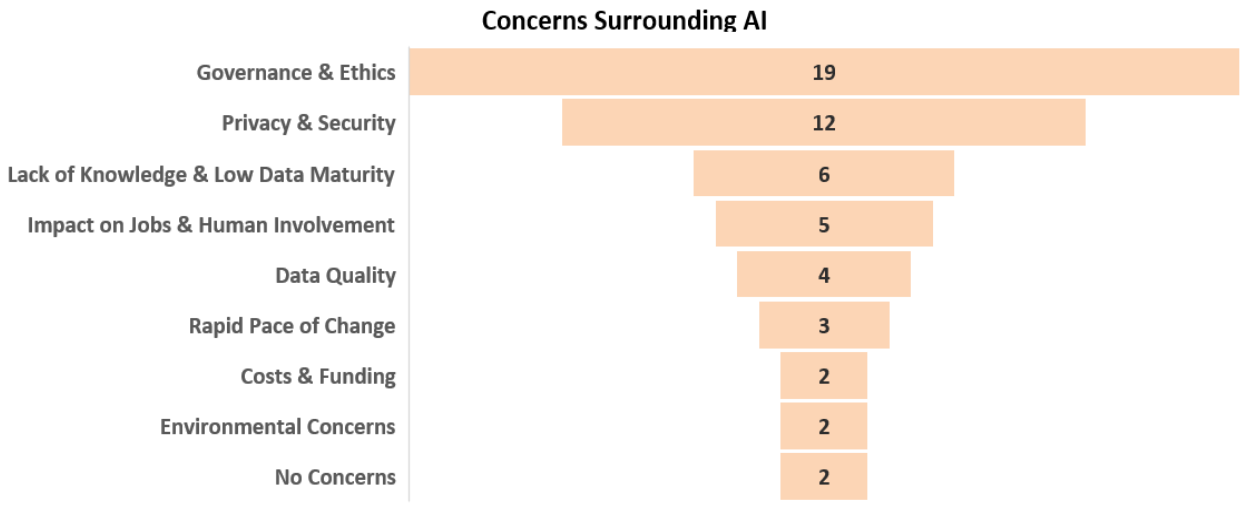


*Figure 5 Concerns Surrounding AI*

## Governance & Ethics

Respondents showed a great deal of concern around the governance and ethical use of data, and the associated legal and regulatory issues surrounding AI. Many highlighted the risk of AI providing false answers, or hallucinations, particularly without proper human involvement and oversight. There was concern that over-reliance on and excessive trust in AI would lead to poor decision-making and adverse results.

Many expressed concern that AI usage was outpacing the organization's ability to build the proper policies, governance, and guardrails to manage AI adoption. Government agencies were particularly concerned about having adequate rules in place before implementing AI. Respondents from industries that required high-accuracy, mission-critical decisions such as public health felt that the risk of hallucinations from AI was too great to allow widespread use. Similar concerns came from industries such as agriculture where incorrect decisions from AI can affect both public health as well as adversely affect crop yields.

> *"Working in a mission-critical, Public Safety and Emergency Services organization where seconds can count when saving life, property, and the environment, incorrect transcriptions, AI hallucinations, and incomplete or inappropriate summaries can lead to adverse outcomes."*

Ethical concerns were top of mind among organizations, including the risk of bias, as well as consent and transparency of data usage and decision-making from AI models. Many respondents stressed the need for human input and guidance, rather than full automation and trust in AI models alone.

## Privacy and Security

Privacy and security were top of mind for those implementing AI, including the risk of information leakage and potential risk to intellectual property (IP). Protection of personal information regarding customers, employees, patients, citizens and other individuals was a concern and many respondents cited the need for human interaction to ensure that proper protections are in place.

> *"We are concerned about the risk of AI learning data related to personal information protection and foreign exchange laws by mistake and leaking information."*

## Lack of Knowledge & Low Data Maturity

Many organizations expressed a need for better understanding of realistic and cost-effective use cases for AI that produce concrete benefit. Many comments expressed that, for example, many employees want to use ChatGPT and LLMs for "everything" without understanding the risks, results, and implications. There was a great deal of concern that people in the organization lacked a fundamental understanding of appropriate AI usage leading to both under and over utilization.

> *"We need good solid research on where AI can realistically and cost effectively be used, what tasks it is best suited for, what oversight is appropriate, and how AI can be integrated with the work that humans do."*

With these skills gaps, there was also a concern that lack of knowledge could produce incorrect results from data. Combined with the lack of AI maturity, many respondents highlighted the overall lack of data maturity and the need for guidance and education on both proper data usage combined with AI usage.

## Impact on Jobs & Human Involvement

There was widespread concern among respondents regarding the impact on jobs and human involvement in the workforce. While there was unease regarding displacement of jobs, particularly for manual or easily automated tasks, there was an arguably more philosophical concern over the loss of human creativity and agency in the workforce as employees "outsource" their decision-making to AI models and agents. One respondent in particular stressed concern over the loss of order, structure, and repeatable methodology that would result with an over-dependence on AI.

> *"As AI takes over tasks once performed by humans including routine work like data entry and more complex roles like analytical decision making, concerns mount over large scale workforce disruptions and deepening economic divides."*

Others were more positive about the potential collaboration between humans and AI when used correctly. These respondents saw AI as a co-intelligence partner with a human-in-the-loop component for areas such as software programming or document authoring. Some saw this as a democratizing effect in which more employees have wider opportunities for advancement than was available previously as they learn to incorporate AI into their work.

## Data Quality

Effective and ethical AI depends on a strong data foundation, and a number of respondents expressed concern regarding the overall quality and trust in the organization's data foundation. This poor data quality has a detrimental effect on the results and actions taken from AI, which can have significant negative impact both internally within the organization and externally to customers, suppliers, and society at large.

> *"Due to our data quality and integrity issues across multiple source systems, there is a real concern that insights, recommendations and new products developed are not based on accurate data."*

### Rapid Pace of Change

Several respondents were concerned with the rapid change in the industry and being unable to have a stable set of technologies, concepts, and governance models on which they can base their development. As one respondent put it "It's a big investment, and we don't know which vendors (AI platform and solution providers) will become long-term market leaders." Many felt that it was premature to place significant investment in AI until the market and vendor landscape stabilizes.

### Costs & Funding

Cost and funding for AI was a concern as platforms, software, and skills need to scale. In particular, organizations were concerned that without better knowledge of the proper use-cases and implementation patterns, cost run-up will be a risk as pilot projects potentially outpace initial cost expectations.

### Environmental Concerns

Environmental concerns were raised by organizations noting the material impact on the environment, particularly with land and electrical consumption from the data centers powering AI.

## Who is Driving AI?

A positive sign in AI adoption is that the majority of organizations (61%) cited that AI initiatives were driven by both business and technical stakeholders working together. Only a small percentage of initiatives were led by IT only (24%) and an even smaller percentage by business stakeholders only (16%). With the potential for AI use-cases to be deeply engrained into business operations, this collaboration between business and IT stakeholders is a promising trend.

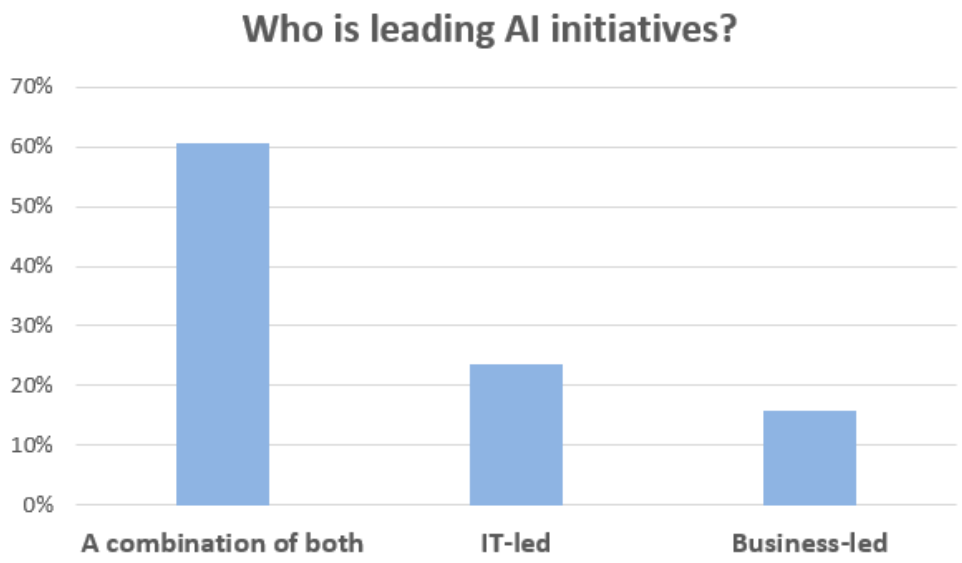


*Figure 6 Who is leading AI initiatives*

# Types of Data Used in AI

A large part of the opportunity surrounding AI is the ability to leverage a wide range of data sources beyond traditional databases, such as documents, video, photos, and more. Figure 7 shows that the largest focus for AI among responding organizations is on documents and text-based information, which aligns with the proliferation of usage in LLMs such as ChatGPT, Google Gemini, etc. Images and video files are also in use, particularly for use cases involving generative AI, and respondents including other data sources listed audio and sensor data as additional inputs.

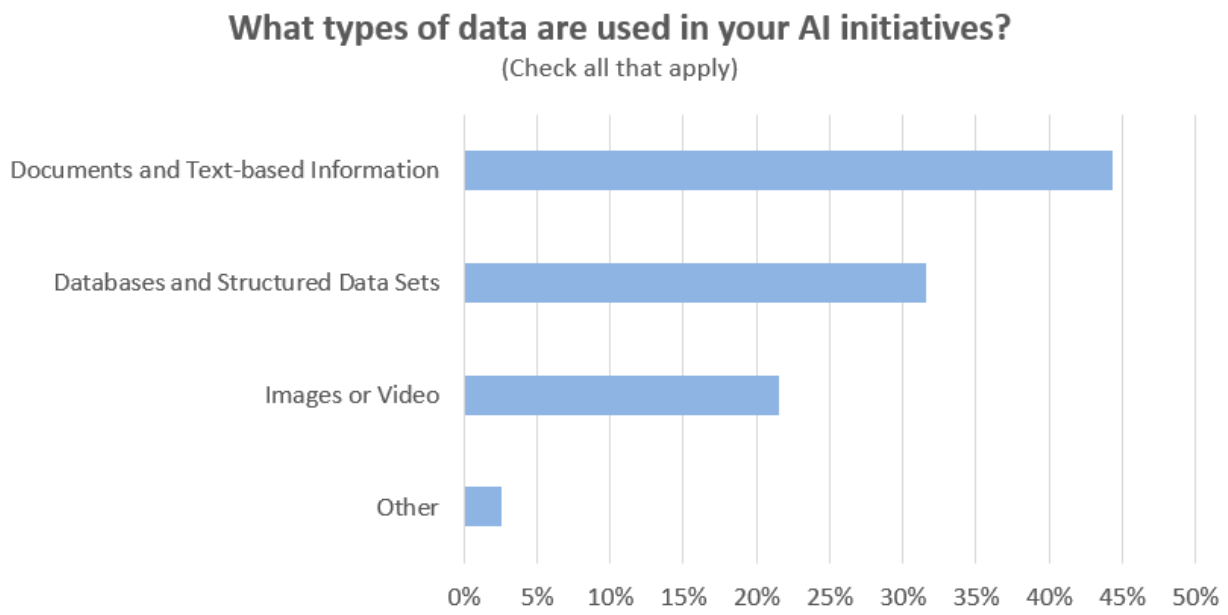


*Figure 7 Types of Data Used for AI*

Databases and structured data sets are also in use, particularly as organizations look to customize LLMs beyond public data sets. As organizations realize the power of their data as a strategic asset, as well as the risk of making business decisions based on generally available data sets, they are implementing Retrieval Augmented Generation (RAG) where LLMs can leverage an organization's own trusted data sets, which are often stored in structured databases.

# Summary & Conclusion

Artificial Intelligence has the potential to change the way the world does business, and the majority of organizations surveyed have a positive and optimistic outlook regarding the opportunities that AI can bring. At the same time, however, there are concerns over the governance and guardrails around AI, as well as the quality and ethical use of the data used to power AI models. Organizations admitted to being in the early stages of adoption and at times overwhelmed with the pace of change in the industry and the difficulty in keeping abreast of the latest technology and methodologies. That said, most organizations surveyed are activity working together with both business and IT to explore creative ways to leverage AI effectively and are excited about the opportunities AI can bring.

# About Global Data Strategy, Ltd. (GDS)

Global Data Strategy Ltd. (GDS), is a data management consulting company specializing in the alignment of business drivers with data-centric technology. Our expertise has been gained in helping organizations across the globe drive value from their data, ranging from large multinational corporations to small nonprofit organizations. Our passion is in helping organizations enrich their business opportunities through data and analytics. Our services and training offerings include:

- Data Strategy
- Data Governance
- Metadata Management
- Data Architecture
- Data Quality
- Analytics & Business Intelligence
- Master Data Management (MDM)

We provide our years of experience to help you achieve your data-driven goals and are passionate about helping customers make the most of their data assets. Find out more at www.globaldatastrategy.com or email info@globaldatastrategy.com.