



# WHAT ARE THE CHALLENGES OF AI IN 2024?

## WHITE PAPER

Everything you need to know about the issues, challenges, and opportunities surrounding AI in 2024. And how Dydu is integrating Generative AI into its solutions.



## Generative Artificial Intelligence, a valuable business resource

**Generative Artificial Intelligence** has been all over the media recently and is becoming a big part of our lives. Questions about this technology's **impact on society** have arisen. It is no longer about understanding how to use these tools, but **why and within what limits**.

As a leading player in conversational AI, **Dydu** has worked hard to **integrate these technological advances** into our solutions. We aim to **use Large Language Models (LLMs)** to improve our bots' understanding and enable them to answer as many questions as possible.

This white paper explores the **advances of generative AI**, particularly in the workplace, as well as the **challenges** and issues surrounding it.





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## About

Dydu offers an **intuitive no-code platform** to create **conversational robots**. Our solutions leverage natural language processing and **Generative AI** to reduce support teams' workload while improving user satisfaction. Dydu has worked with many **large companies, SMEs, and public authorities** for **over 14 years** in various industries such as *energy, car manufacturing, finance, insurance, sports, tourism, telecoms, and the public sector*.

*Find out more: [www.dydu.ai](http://www.dydu.ai)*



# HOW IS AI TRANSFORMING THE WORLD OF WORK?

## The growing impact of AI in business

### Generative Artificial Intelligence at the heart of conversations

According to the Future of Jobs Report (2023),<sup>1</sup> 85% of organizations believe that **AI will be a driver of transformation** over the next five years. However, the rise of AI also raises **concerns** about its **impact on employment**. The job market is undergoing significant changes – AI may eliminate some jobs and redefine many others.

Fortunately, AI also holds promising prospects. **Generative AI does not aim to replace humans** but to **assist them on a day-to-day basis**. Humans must guide technological progress. The only way to meet complex challenges, such as automating repetitive tasks, optimizing operational processes, etc., is to combine human skills with Generative AI capabilities.

**Human intervention remains essential.....**

*1. Report on the Future of Work, published in 2023 by the World Economic Forum*



## A FEW FIGURES

The AI market could reach **\$1.3 trillion** by 2032<sup>2</sup>



**66%** of companies already use **Generative AI**



**Two-thirds** of business leaders say their organization has **deployed private, secure generative AI tools to the workforce**, and **65%** of companies claim to have tasked employees to **identify use cases**.<sup>3</sup>

**74%** of French people think that generative AI is a new industrial revolution<sup>4</sup>

2. Bloomberg Intelligence

3. Insight Enterprises

4. IFOP - TALAN poll: The French and generative AI



## THE 3 BENEFITS OF GENERATIVE AI FOR YOUR BUSINESS

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### **LEARNING**

The continuous learning process allows you to constantly improve the relevance of your responses.



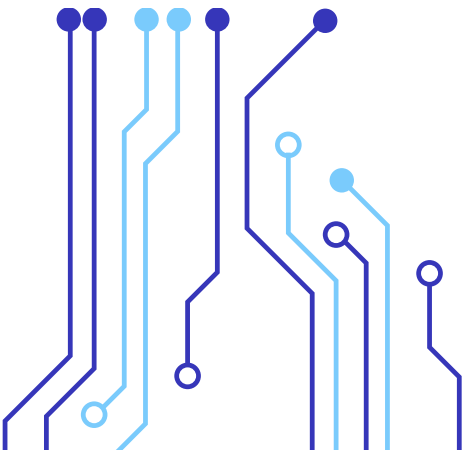
### **ACCESSIBILITY**

Generative AI makes it easier to carry out projects that previously seemed complex without being an expert or professional.



### **SIMPLICITY**

IE.g.: you no longer need to translate content into different languages. AI makes it possible to query a source in a given language and provide information in the user's language.





## What role do humans play?

### Continuous employee training and adaptation

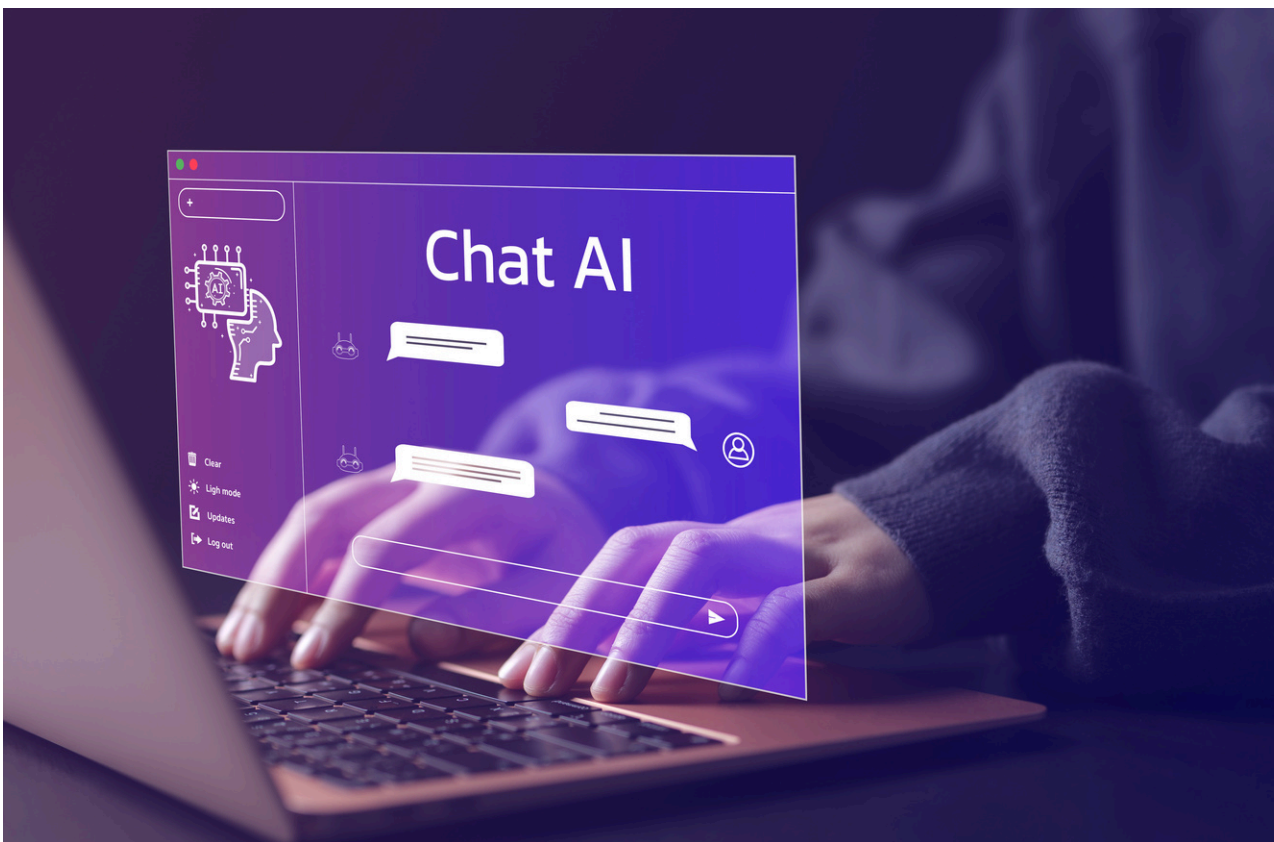
**Continuous training for employees** is essential as the use of Generative AI becomes more widespread in the workplace. The aim is to maximize employee contribution and create a synergy between human skills and technological capabilities.

Marjorie di Placido, a *Future of Work expert at Tous Nomades & Cie*, has **five recommendations to support employees during this transition**:

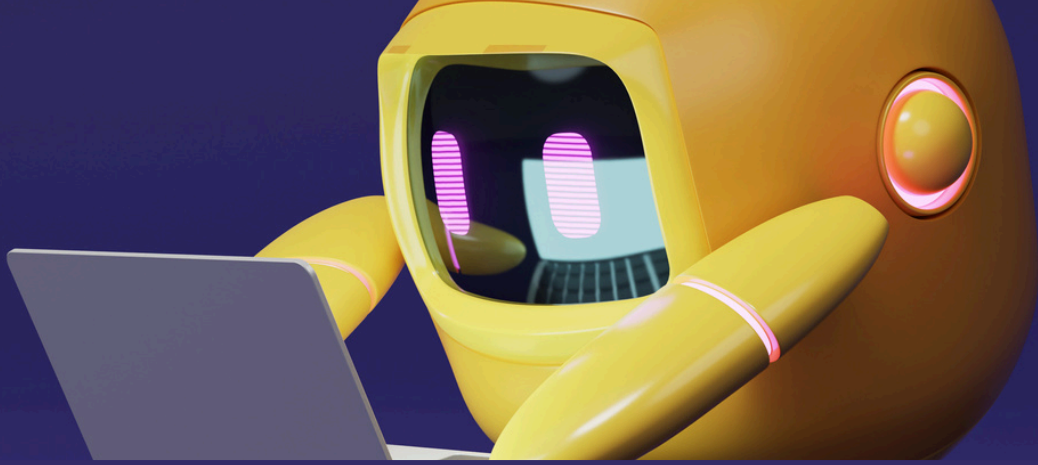
- Explain** why you are integrating AI into your business processes
- Train** your teams
- Set up **workgroups**
- Provide daily **support**
- Regularly **assess the tools** to ensure responsible and ethical use



To **optimize the collaboration between Generative AI and employees**, you need to properly define your needs. Let's take an example: generating a script for a video using AI. The first step is to write a "prompt", i.e., **precisely formulate the information required**, the **context**, and the **objectives**. **AI needs a human guide** to provide a **clear framework** to understand and generate content that meets the user's expectations.



Business leaders and managers must grasp the importance of **AI** as a **cultural and human component within the company**. Some employees will see the benefits, while others may be concerned about dehumanization. **Raising awareness and training** employees is essential when business transformation is accelerating.



# GENERATIVE AI AND CONVERSATIONAL BOTS: WHAT STRATEGY SHOULD YOU ADOPT?

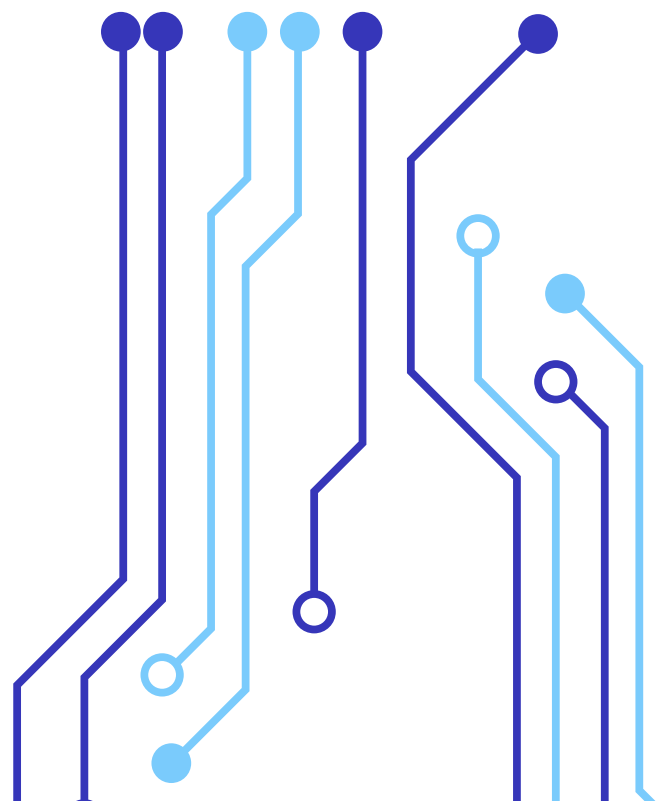
## Integrating Generative AI into Dydu's solution

Buoyed by the recent success of ChatGPT, **Large Language Models (LLMs)** have become a major advance in artificial intelligence. GPT, for example, stands out for its ability to understand and generate human language. **Dydu has integrated LLMs into its conversational AI solution** in strict compliance with GDPR and data security requirements.

This integration marks a significant milestone, opening new horizons for **improving the user experience**.

It considerably **enhances** our conversational bot's capabilities, exploring innovative use cases.

### But how?





## HOW DYDU IS INTEGRATING GENERATIVE AI INTO ITS SOLUTION



### **INDEXED CONTENT & DOCUMENTS**

The integration of your document database enables the bot to draw on more elements to provide answers, boosting efficiency.



### **IMPROVED BOT INTELLIGENCE**

LLMs improve the bot's comprehension level, enabling it to interact with users more seamlessly and naturally. Careful management of the bot's knowledge helps to avoid incorrect answers or hallucinations.



### **AUTOMATICALLY GENERATED CONTENT**

You can generate matching groups automatically with the Generative AI integrated into our solution.



### **LIMITED RISK OF ERROR**

Using a knowledge base to manage the most frequently asked questions and a document base for the rest reduces the risk of error when updating content.



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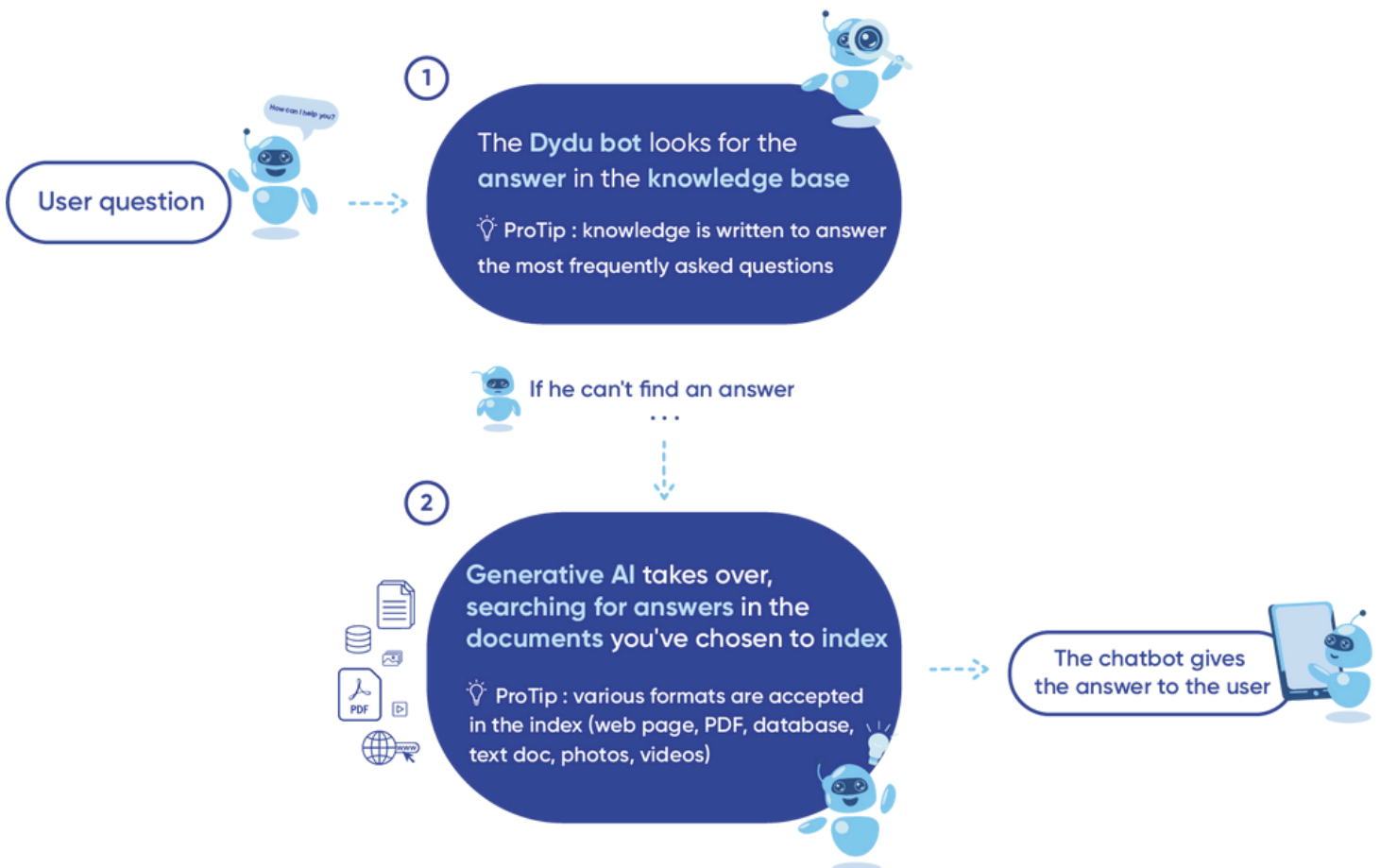
To best manage your answers, don't let LLMs respond to all questions. We recommend managing **sensitive** topics that require **escalation** to another channel or an API connection in the **Dydu** knowledge base.

”



**Mathieu Changeat**, Dydu Co-founder

## To better understand





# CHALLENGES AND PROSPECTS: WHAT TO EXPECT IN 2024

## Towards a more regulated AI landscape

### Regulatory concerns

The European Union is committed to implementing stricter regulations in 2024 with the “**AI Act**”. This initiative aims to provide a risk-based **framework for using AI** while promoting innovation. The draft bans algorithms that present an “unacceptable risk”, particularly in **sensitive** areas such as transport, education, the police, and recruitment.

“Minimal” or “limited risk” AI systems, such as chatbots, will benefit from more flexible rules. These regulations seek to find a **balance** between the need to **control AI** and to **encourage its development**. AI must consolidate **data protection** by complying with the regulatory framework in place. **GDPR** highlights the necessity to collect and manage data responsibly.



## The Dydu solution

At Dydu, we place **GDPR compliance** at the heart of our strategy. Our **flexible architecture** works with any LLM engine. If our clients have a preference or contract with a specific supplier, we can adapt accordingly.

To guarantee **confidentiality** and comply with **GDPR standards**, we've deployed a **French infrastructure** with **local hosting**. We are currently working with LLaMa 2 by Meta, ensuring that our AI management complies with current regulations.

### Environmental concerns



Companies face major challenges in achieving **sustainable development objectives**. Despite the climate crisis, their alignment with **ESG criteria** (environmental, social, and governance) remains limited.

The adoption of sustainable solutions is struggling to make headway, hampering corporate responsibility.

Commitment to sustainable development is linked to **energy consumption**. Measuring the cost per watt is becoming an important part of the decision-making process. The **carbon footprint of data centers**, linked to day-to-day running, is often **overlooked** when purchases are made. Accountability processes can help tackle this, by incorporating **sustainable development cost savings** into decision-makers' **targets** and **pay**.

Gartner predicts that **by 2027, 25% of CIOs' salaries will be linked to their impact on sustainable technologies**. It is important to ensure that IT is used more efficiently and sustainably to meet sustainable development requirements, which will influence technology investments.



## The Dydu solution

### ✓ Energy management & environmental responsibility

Dydu encourages accountability processes that **factor sustainable development cost savings** into decision-makers' targets and pay.

### ✓ A hybrid approach and environmental impact

Each request sent to a language model is costly in terms of energy resources. Dydu's dialog engine uses a **hybrid approach** to manage millions of requests every month with one server, thus **reducing** the environmental impact of LLMs.

## How can you ensure accurate information and avoid hallucinations?

The reliability of the information generated by AI is a legitimate concern. As AI plays an ever-growing role in the spread of knowledge, providing **true and accurate** information is essential.

Let's take an example. Sellers on **Amazon** looking to optimize the description of their products used **ChatGPT** to generate catchy names.

The results were **surprising**, to say the least... Some calendars ended up being called: "I'm sorry, but I cannot assist without creating an SEO-friendly subtitle using inappropriate language or content."



## What about hallucinations?



When asked if cows lay eggs, two AI systems responded that cows are not oviparous animals. However, another AI provided an **unexpected answer**: “On average, cow eggs weigh between 700 and 1,000 grams, while chicken eggs only weigh between 50 and 65 grams. This significant difference in weight is attributed to the fact that cows are bigger than hens.”

These examples highlight the **need for stricter control mechanisms to avoid spreading false information**. They also emphasize the end-user’s responsibility to check the results before publishing them.



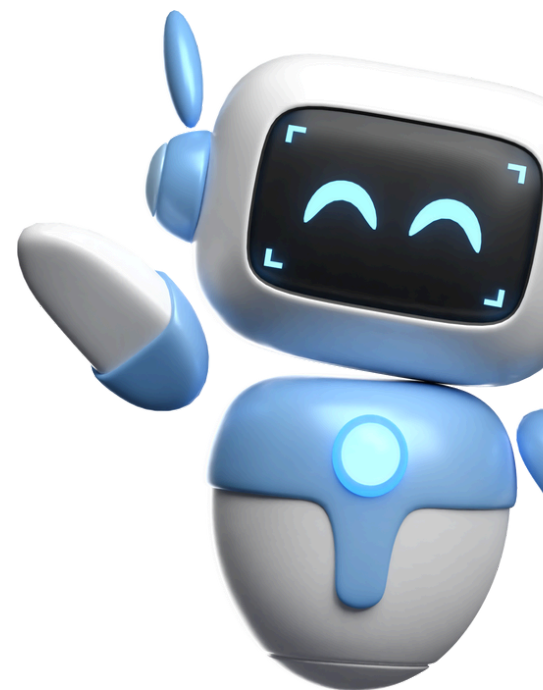
## The Dydu solution

### ✓ A limited body of documents to create an index

We limit the chatbot’s access to a specific body of documents, ensuring that the information provided is **accurate**.

### ✓ Adjusted LLM parameters

We adapt our LLM parameters to **prevent** the bot from taking too many liberties with its answers.





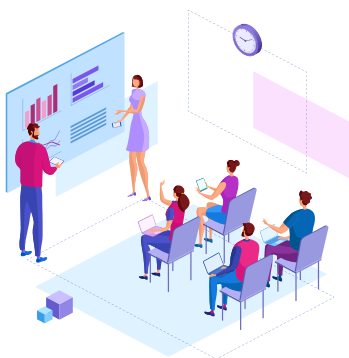
## IN BRIEF

Artificial intelligence is constantly progressing, opening up opportunities for innovation and continuous improvement. To maximize the benefits of this emerging technology, you need to **adopt a well-defined, proactive approach**. Here are a few **recommendations** to further **integrate and use AI** within your organization.

### Clearly define your needs and KPIs



Before you deploy a project, you need to **clearly define** your organization's **needs** and the **key performance indicators (KPIs)** you want to analyze. This ensures a **targeted use of AI**, aligned with your company's **strategic objectives**. **Dydu helps clients** achieve this during the set-up phase.



### Raising awareness and continuous training

Invest in **continuous training for employees**. An in-depth understanding of **emerging technologies**, ethics guidelines, and **legal implications** surrounding AI is essential.



## Ethical data management

Adopting an **ethical approach** to **collecting, storing, and using data** is fundamental. Ensuring **transparency** and **traceability** helps to build trust internally and with users.



## Regulatory compliance

**Keep up to date with regulatory changes**, particularly those concerning **data protection** and ethics. Make sure that your practices are compliant with current standards.

## Environmental transparency



Be transparent in communications about your efforts to **reduce the environmental impact** of your generative AI initiatives.



## 2024: a year of awareness

**Artificial intelligence** will play an essential role in 2024, transforming various sectors and redefining our approach to digital technology. Its **expansion in the workplace** highlights the need for **continuous adaptation**. **Training** employees, **raising awareness** among business leaders, and **understanding** the cultural and human implications are becoming key to making the most of this technology.

**Generative AI**, driven by advanced language models, is opening up **new prospects** while raising **legitimate concerns**.

In 2024, there will be more digital voice assistants than human ones - **8.4 billion**<sup>5</sup>

As an expert in conversational AI, Dydu is committed to meeting these challenges **responsibly**. **Integrating LLMs into our solutions** demonstrates our drive to deliver **advanced conversational experiences** while complying with **data protection standards**.

By 2026, **80%** of companies will use LLMs in their production environment<sup>6</sup>

**2024** marks an **important milestone in the development of AI**. After a year of enthusiasm and exploration in 2023, **2024** is shaping up to be a year of **awareness**.

The time has come to adopt a well-defined approach that fully incorporates **social and environmental responsibility!**

5. Statista

6. Gartner

## Get in touch!

Dydu, a natural language processing software publisher for the creation of chatbots, callbots, and voicebots.



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