

WHITE PAPER  
**LUCIDUM'S  
SECRET SAUCE:  
PATENTED  
ML ENGINE**

# INTRODUCTION

In the era of generative AI (GenAI) and large language models (LLMs) like GPT, concerns about misinformation and fabricated data have become increasingly prevalent. This white paper addresses these concerns by highlighting Lucidum's unique approach to machine learning (ML) and artificial intelligence (AI), which ensures data integrity and reliability. Unlike many AI systems that rely on external datasets and generative models, Lucidum's patented ML engines are derived solely from customer-provided data, minimizing the risk of misinformation and AI hallucinations.

The proliferation of AI technologies has brought about significant advancements in data processing and analysis. However, it has also introduced challenges related to misinformation and the generation of fabricated content. Recent studies have shown that AI models, particularly those based on generative techniques, can produce misleading or entirely false information<sup>1</sup>. This white paper explores how Lucidum's approach to AI and ML mitigates these risks, ensuring that the data remains accurate and trustworthy.

Lucidum's patented AI and ML technology is designed with a focus on data integrity and reliability. The key aspects of this approach include:

## **Customer-Centric Data Utilization**

Lucidum's ML engines are built using data provided exclusively by the customer. This ensures that the models are tailored to the specific context and requirements of the customer, removing the likelihood of external biases or inaccuracies.

## **Non-Generative Models**

Unlike many AI systems that utilize generative models like GPT, Lucidum's ML engines do not generate new content. Instead, they focus on consolidating, deduplicating, and enriching existing data. This approach eliminates the risk of AI hallucinations and fabricated data.

## **Manual Review of GenAI Outputs**

While Lucidum does employ GenAI for specific tasks such as field value mapping, these outputs are subject to rigorous manual review. This additional layer of scrutiny ensures that any potential inaccuracies are identified and corrected before the data is utilized.

## **Enhanced Data Integrity**

By relying solely on customer-provided data and avoiding generative models, Lucidum ensures that the data remains accurate and free from external misinformation.

## **Reduced Risk of Misinformation**

The manual review process for GenAI outputs further minimizes the risk of inaccuracies, providing an additional safeguard against misinformation.

## **Tailored Solutions**

Lucidum's customer-centric approach allows for the development of highly tailored solutions that meet the specific needs and contexts of each customer, enhancing the overall effectiveness of the ML models.

In a landscape where misinformation and fabricated data pose significant challenges, Lucidum's patented AI and ML technology offers a robust solution. By focusing on customer-provided data, avoiding generative models, and implementing rigorous manual reviews, Lucidum ensures that its data remains accurate, reliable, and free from the risks associated with AI hallucinations. This approach not only enhances data integrity but also provides customers with tailored, effective solutions that address their unique needs.

## References

1: AI-Driven Misinformation: Challenges and Solutions for Businesses | CBS Insights

By leveraging Lucidum's unique approach, organizations can confidently navigate the complexities of AI and ML, ensuring that their data remains a reliable foundation for decision-making and strategic planning.

## About Us

Lucidum was built by cybersecurity experts on a mission to gain full visibility into their tech ecosystem. We put everything in your sights, giving you the power to understand what it is and what it's doing.

Understand the lay of your tech landscape, lock onto threats, and keep your perimeter secure – all empowering you to defend and dominate your space in an increasingly threatening world.

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