

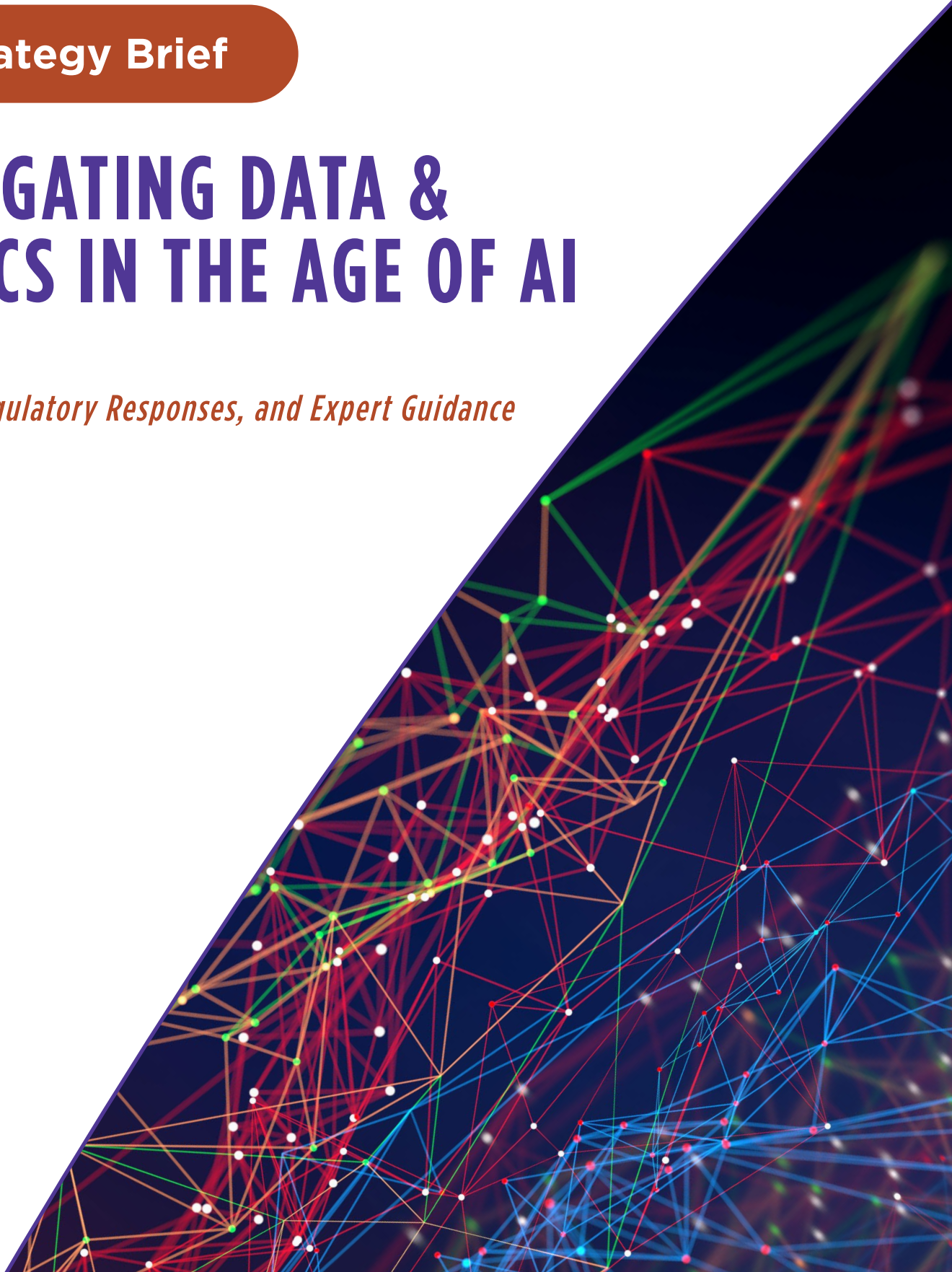
The Positive Way

WAVESTONE

Strategy Brief

# NAVIGATING DATA & ETHICS IN THE AGE OF AI

*Trends, Regulatory Responses, and Expert Guidance*





# EMERGING TRENDS THROUGH THE AI REVOLUTION

---

Modern data capabilities are quickly becoming one of the most popular technology developments, with generative AI gaining widespread attention from venture capitalists, entrepreneurs, executives, and the general public.

Over the past few years, the development and utilization of deep learning models such as Large Language Models (LLM) and Generative Adversarial Networks (GAN) have seen a significant surge in popularity. New solutions such as OpenAI's ChatGPT and Facebook's RoBERTa are highly regarded for their ability to generate human-like text. GANs such as DALL-E and BigGAN are being used to produce unique and original images. With potential for exciting applications, including natural language processing and personalized content creation, it comes as no shock that these technologies are taking the world by storm.

The current state of artificial intelligence (AI) represents just the beginning of what is possible, with the frontiers of the field advancing at an unprecedented rate. Although the capabilities of models such as ChatGPT are impressive, there is so much more to come in terms of what AI can achieve. As organizations continue to explore the potential of AI, it is important to consider the ethical implications and ensure that these technologies are used in responsible and beneficial ways.

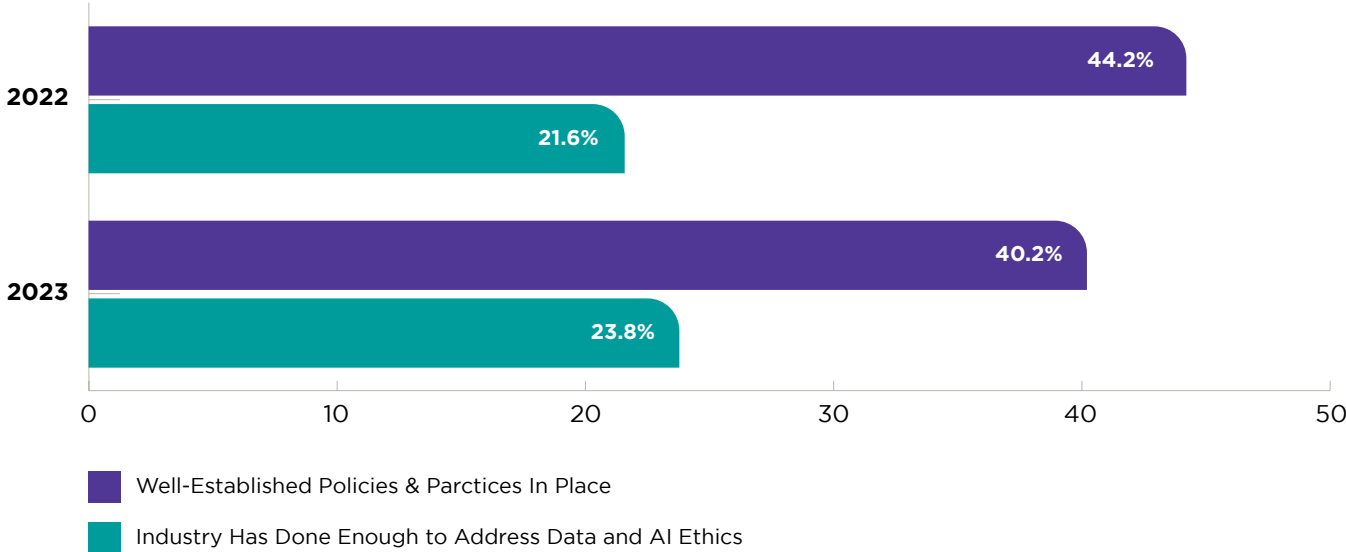


# ORGANIZATIONS STRUGGLE TO DEFINE THE PATH FORWARD WHEN IT COMES TO ETHICS

Data ethics is an increasingly important topic for companies seeking to leverage data and AI to drive business value. However, as our recent [Data and Analytics Leadership Executive Survey 2023](#) found, many organizations are falling short in their attention and commitment to data ethics.

**Less than half of organizations report that they have well-established policies and practices in place governing data and AI ethics, and only 23.8% of data executives believe that the industry has done enough to ensure responsible data and AI ethics and standards.**

The State of Data Responsibility and Data Ethics

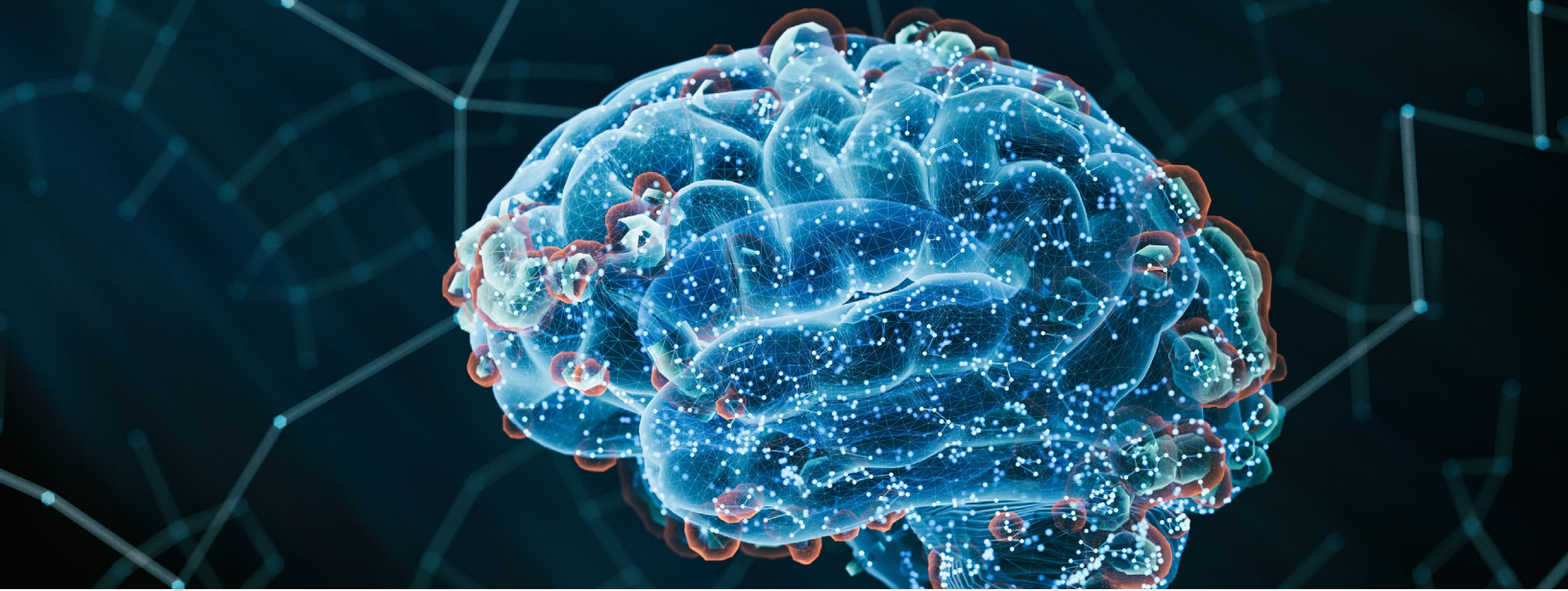


Expectations are growing when it comes to responsible use of data, analytics and AI. For organizations to establish and maintain the trust of their employees, customers, and stakeholders, and to safeguard their brands and reputations, they must establish the necessary policies, guidelines, and practices to ensure the ethical use of data, analytics, and AI.

Leading organizations are yet to prioritize data ethics with several factors contributing to this situation. **This is a rapidly developing technology. Its evolutionary speed can lead to confusion over key questions like:**



The need to meet short-term business goals and generate revenue can also overshadow long-term ethical considerations. Despite these challenges, prioritizing data ethics is becoming increasingly critical for organizations. Internal and external stakeholders must work together to incorporate ethics into their overall business strategy to ensure responsible and safe use of data and AI.



# REGULATORS HAVE YET TO MAKE DATA AND AI ETHICS A PRIORITY

---

Over the years, organizations have become more familiar with the widespread adoption and implementation of data privacy and protection regulations. This is largely due to the increased frequency of data leakage and breach concerns. As a result, there is now a greater emphasis on the protection of sensitive data and putting individuals in control of their personal data.

To this end, various privacy laws and regulations have been enacted in recent years. Following the General Data Protection Regulation (GDPR) in Europe, six states in the US have enacted their own privacy laws, and many more have followed suit with active bills in play. A United States federal privacy law is yet to be enacted.

Despite all the progress being made in the data privacy and protection space, data ethics is a relatively new concept. Regulatory bodies across the globe are yet to take a stance on data and AI ethics, leaving this in the hands of individual organizations.

So, how do we move forward with the dynamic technological landscape and trends while putting a stronger emphasis on data and AI ethics, a field with little regulatory pressure?



# KEY CONSIDERATIONS FOR YOUR ORGANIZATION

## A Conversation with Wavestone's Data Experts



### How can we ensure that the use of AI respects individual privacy and data protection?

Organizations should establish clear policies that lay the boundaries around acceptable use of data and AI, so there is little room for doubt around intent. Such policies should include considerations such as who actually “owns” what data (i.e. is customer data really owned by the customer even if it is housed in the organization’s systems?); what expectations there are around protecting various types of data, regardless of whether it is exposed, masked/unmasked, tokenized, or storage location; what the owners and customers of data would consider reasonable use of the data or inferred data, not just what is acceptable legally; expectations around transparency and control of any AI that is built including accountability for the owner who releases it; and more.

It is also important to establish principle and procedures highlighting the patterns and solutions which should be leveraged for various use cases. Along with that, organizations should ensure that selecting and controlling the data being provided as an input to machine learning is overseen in order to avoid unauthorized disclosures or biases while training models.

For example, an e-commerce company that uses AI to make product recommendations for customers could establish policies and procedures for how customer data is collected and used to make those recommendations, while ensuring that customer data is a) anonymized; b) only used to make recommendations; and c) not shared with third parties without the customer’s explicit consent. They can also provide clear explanations to customers about how their data is being used and give them the option to opt-out of data collection for product recommendations.



## What measures can we take to protect against bias and discrimination in AI?

To ensure that AI systems are developed without inherent biases, organizations should establish diverse teams to work on AI development, and regularly review and test AI models for potential biases. In addition, organizations should prioritize engaging with stakeholders from diverse backgrounds to ensure that AI models take into account different perspectives and needs. This can involve consulting with individuals and communities who may be impacted by the AI models, as well as seeking input from experts in different fields, such as ethics and social sciences. By involving a diverse range of perspectives and prioritizing inclusivity in the development process, organizations can create AI systems that are more likely to be fair and unbiased..

For example, a healthcare company using AI to diagnose diseases could ensure that the training data used to develop the AI model is representative of diverse patient populations.



## How can we ensure that AI systems are transparent and accountable?

AI systems can be complex and difficult to understand, which can make it challenging to assess their performance and hold developers accountable for any negative impacts they may have. To promote accountability and transparency in AI development and usage, organizations should raise employee awareness to explain how AI models make decisions and provide clear documentation of the development process.

For example, a financial institution using AI for fraud detection should provide detailed explanations of the factors considered by the AI model when determining whether a transaction is fraudulent or legitimate.



## How will AI/ML impact my organization's workforce? Will it cause workforce reductions?

AI technologies have the potential to automate and streamline many business processes, which can result in workforce reductions in some industries. While automation can bring significant efficiency gains, it is important for companies to consider the ethical implications of workforce reductions and take steps to mitigate potential impact on employees.

For example, organizations should consider upskilling the workforce by investing in training programs that prepare employees for new roles and ensure that they have the necessary skills to thrive in a changing job market. Additionally, organizations may even augment the human workforce with AI by automating specific tasks within a job function, allowing employees to focus on more complex and value-added tasks.



## How can we ensure we are safe and secure while utilizing AI as part of our organizational operations?

To ensure that AI systems are safe and secure, organizations can establish strict testing and deployment protocols, and regularly monitor and update their AI models for potential safety risks. C-Suite engagement should be utilized through a committee such as a data ethics board to ensure ongoing monitoring of how AI and data ethics are impacting organizational operations.

For example, a transportation company using AI to develop autonomous vehicles should establish rigorous safety testing protocols to prevent accidents and ensure the safety of passengers.



## What methodologies should my organization focus on for ethical development and use of AI?

Industry frameworks can help promote ethical development and use of AI and prevent its use for harmful or unethical purposes, such as deepfakes or automated social media manipulation.

To develop effective AI ethics policies, your organization can start by establishing a framework that emphasizes ethical principles such as transparency, fairness, accountability, and explainability. This can be achieved by involving diverse stakeholders, including legal experts, data scientists, ethicists, and community representatives in the policy development process. Additionally, your organization can ensure that the AI systems it develops undergo regular audits and evaluations to identify and address any potential ethical concerns. By prioritizing ethics in AI development, your organization can not only mitigate the risk of negative impacts but also promote trust and confidence in the technology.

Although there are differentiating opinions on data and AI ethics, guidelines such as the [National Institute of Standards and Technology \[NIST\] Artificial Intelligence Risk Management Framework](#) may be utilized and tailored to your organization to help maximize positive outcomes and minimize potential negative impacts of AI.

NIST is known for its work in developing and promoting measurement standards, cybersecurity, and technology innovation. Their research and standardization work has significantly impacted data privacy and protection, and their implementation of an AI risk management framework further showcases the importance of having safeguards in place while utilizing these technologies.

**While there are more questions than answers when it comes to the ethical use of AI, with little to no regulation in the space, forward-thinking organizations should begin setting the tone, setting boundaries, and experimenting with best practices for ethical use of AI.**

**To discuss how Wavestone can help you create your own guidelines for data privacy, protection, and ethics, visit us at [wavestone.us](https://www.wavestone.us) or call (646) 341-9753 to see what we can do for you.**





## Authors

---



### **Jean-Jacob Dreyfus**

Senior Manager

[jean-jacob.dreyfus@wavestone.com](mailto:jean-jacob.dreyfus@wavestone.com)

Jean-Jacob Dreyfus has more than 10 years of Management Consulting experience focused on Digital Transformation. He has a proven track record leading IT Strategy, Target Operating Model, Data & Analytics, and Risk Management engagements mostly in the Financial Services, Pharma, and Retail industries. Certified CISSP, Jean-Jacob also has demonstrated expertise in cybersecurity, privacy, and data protection. He is an active contributor to the Wavestone's Cybersecurity & Privacy Regulatory Watch and to the development of the NIST Privacy & Cybersecurity Frameworks.



### **Neha Kotha**

Consultant

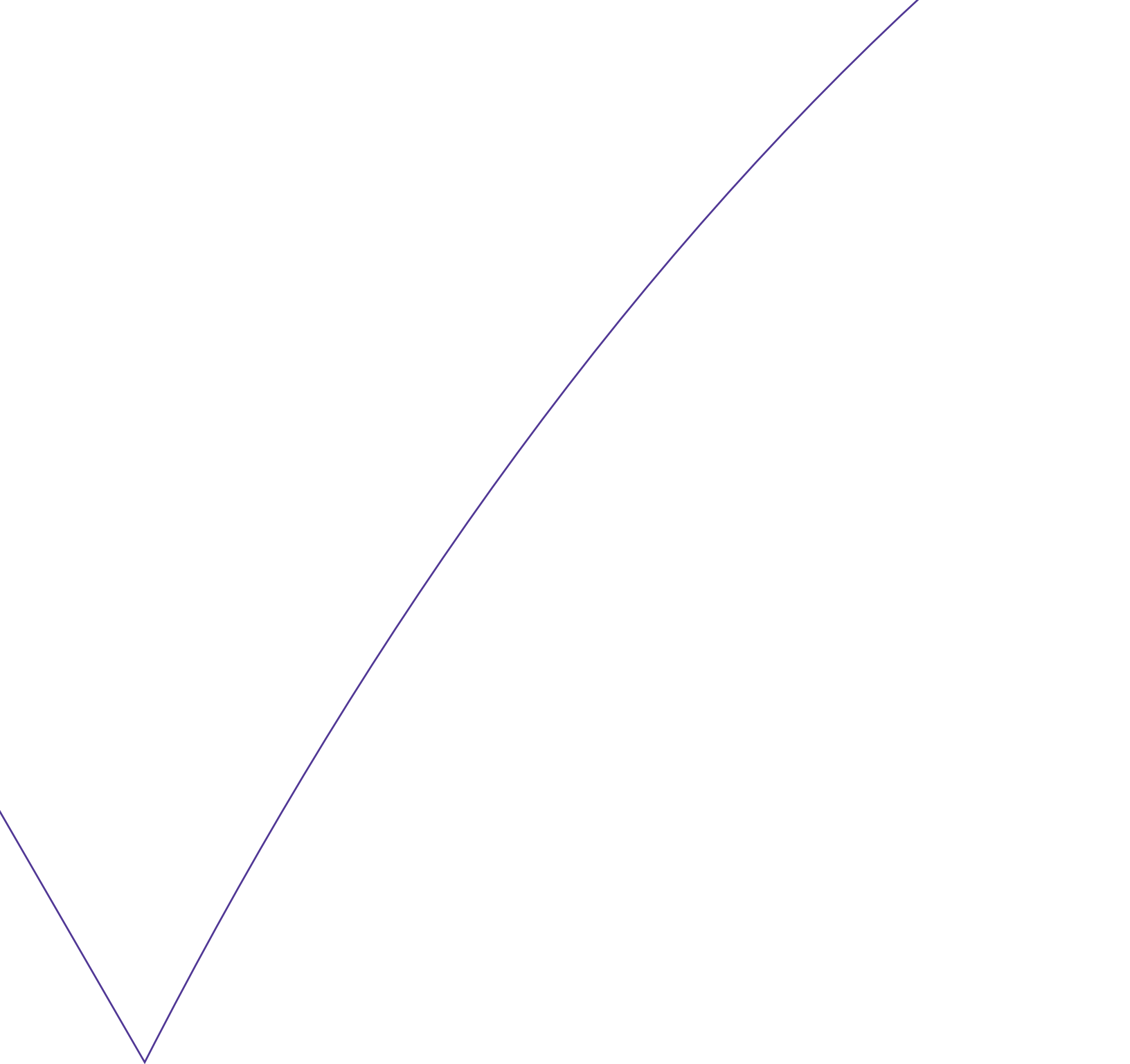
[neha.kotha@wavestone.com](mailto:neha.kotha@wavestone.com)

Neha is a Consultant at Wavestone US, where she supports clients in leading their large Data and Cyber Transformations. Neha is highly skilled in project management and remediation support and can provide her expertise throughout all stages of a project, from strategic planning through implementation. With a blend of technical proficiency and interpersonal skills, she can facilitate collaboration between business and technical teams, ensuring a seamless and successful end-to-end transformation. Neha earned her Masters degree with a focus on Policy and Management from Columbia University.

---

## Wavestone's Data & Analytics Service Offering

Wavestone Data & Analytics is a consulting practice specializing in strategy, data management and governance, architecture and ecosystems, data science & analytics, change management, and the responsible use of data. Our team brings a winning mix of extensive hands-on experience, thought leadership, and best practices expertise to help clients drive their data transformation to better manage, govern, and use data to create business value. As industry experts and trusted advisors, we can help revitalize data strategies, modernize capabilities and practices, and drive transformative change.



---

The Positive Way

**WAVESTONE**

[www.wavestone.com](http://www.wavestone.com)

In a world where knowing how to drive transformation is the key to success, Wavestone's mission is to guide large companies and organizations in their most critical transformation projects, with the ambition of a positive outcome for all stakeholders. That's what we call "The Positive Way".

Wavestone brings together 4,000 employees across 9 countries. It is a leading independent player in the global consulting market.