



Strategies for AI Excellence in New Zealand Organisations

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Foreword



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In today's rapidly evolving technological landscape, artificial intelligence (AI) stands out as a transformative force with the potential to reshape industries and redefine possibilities across New Zealand. This eBook arrives at a crucial time to help kiwi organisations understand and leverage AI to stay competitive and innovative.

AI is not new, various forms have been adopted by organisations since its inception to improve efficiency and innovation. The recent introduction of Gen AI has further highlighted the immense potential of AI to reshape the way we conduct business and live our everyday lives. Cognizant has positioned itself as a frontrunner in AI to help clients effectively implement generative AI solutions to enhance productivity, streamline operations, and create new consumer experiences.

However, the journey to AI excellence is not without challenges. Kiwi organisations are quick to embrace AI, but 70% believe they are not advancing quickly enough with Gen AI to keep pace with their industry and its expected impact on their business. Many organisations find it difficult to move beyond pilot projects and scale AI initiatives across operations and deliver tangible business impacts.

Successful AI adoption requires a holistic approach encompassing strategy, talent, technology, data, and governance. Data readiness, employee empowerment, strategic prioritisation, and robust guardrails, are all essential for sustainable AI adoption.

By embracing AI, New Zealand organisations can unlock new levels of growth, efficiency, and innovation, positioning themselves at the forefront of the global AI revolution.



Introduction

Imagine a world where your teams extract insights from vast text volumes in minutes, not hours.

No more sifting through endless reports – AI is here to transform decision-making. Just as calculators automated math, AI is automating text analysis. Tedious tasks like contract compliance checks? With AI, time-consuming burdens vanish.

AI is more than an advancement; it's a game-changer. Gen AI surpasses older technologies like NLP, enhancing sentiment analysis and document comparison based on meaning, not just edits. This leap facilitates data-driven decision-making across industries, from agriculture to transportation, by easily leveraging a wider array of text-based data sources. However, realising AI's potential can be challenging. Many organisations struggle to progress beyond pilot projects. A comprehensive AI strategy that includes architecture, data governance, and emerging trends like Gen AI is essential. It's a complex journey, but the rewards for successful implementation are significant.

This eBook leverages data from a study conducted by Oxford Economics in collaboration with Cognizant*, and Ecosystem research to highlight the key challenges and opportunities in AI adoption within New Zealand organisations. It also features insights from data and technology leaders of leading New Zealand enterprises who participated in a Leaders Roundtable in Auckland.

** While the study primarily focused on Gen AI, Ecosystem research, the roundtable discussions, and this eBook offer a broader perspective on AI.*



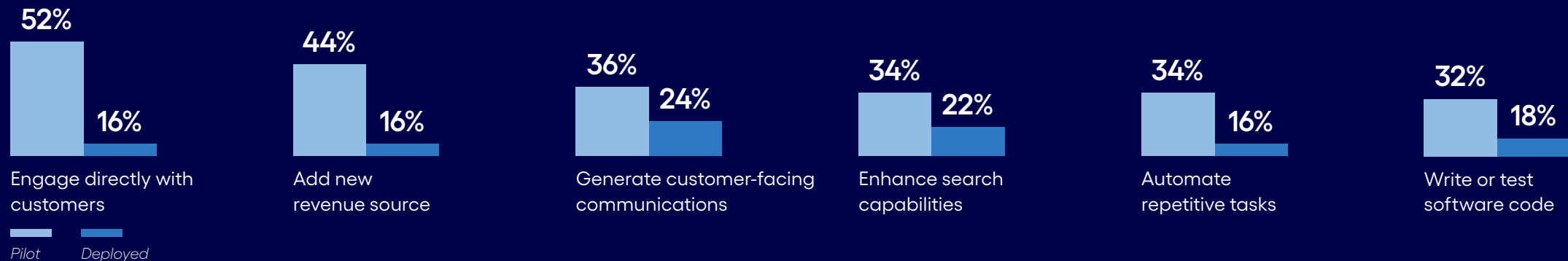


AI Adoption Trends In New Zealand

By 2030, New Zealand aims to become a global leader in responsible AI innovation, leveraging AI to build a prosperous, inclusive and equitable future. The government and industry associations are focusing on six key sectors – agriculture, construction, creative industries, education, environment, and health – that are considered crucial for the country’s long-term success. But the impact will be felt across all industries, as sector-specific frameworks are developed to achieve five-year goals centred on public trust, AI adoption, sustainable infrastructure, cultural integration, and research.

New Zealand organisations are exploring AI to boost growth and efficiency. While AI is being used more for customer communications, search enhancements, and code generation, there’s ongoing interest in direct customer engagement, new revenue streams, and task automation (Figure 1).

Figure 1: New Zealand AI Focus Areas



Despite strong interest in AI for direct customer engagement, organisations often prioritise internal use cases to mitigate risks.

N=50

Question: How would you describe the use of generative AI for the following business tasks and goals across your organisation today?

Source: Cognizant Generative AI Leaders Study (Conducted by Oxford Economics)



Challenges of Scaling AI Beyond Initial Experiments

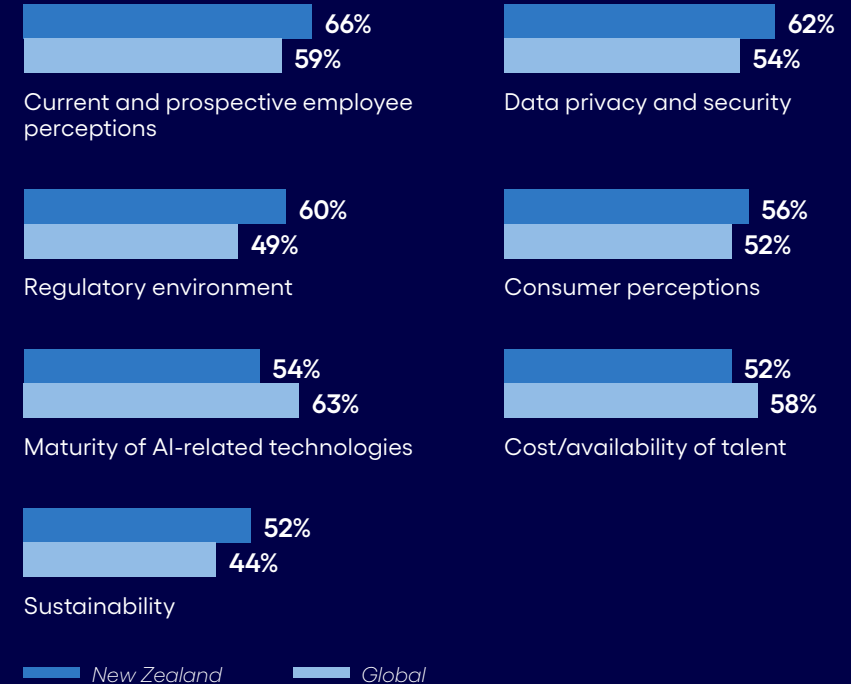
New Zealand businesses are enthusiastic about AI, but realising its full potential presents significant challenges. Navigating business readiness and market concerns is crucial. While initial AI projects might demonstrate potential, scaling AI across the organisation remains a substantial challenge (Figure 2).



70% of New Zealand organisations believe they are not advancing quickly enough with Gen AI to keep pace with their industry and its expected impact on their business.

Source: Cognizant Generative AI Leaders Study (Conducted by Oxford Economics)

Figure 2: AI Scalability Hurdles in New Zealand Organisations



New Zealand organisations express greater concern about employee perceptions of AI, data privacy, and security, the regulatory environment, and sustainable AI. They are less concerned than their global counterparts about the maturity of AI-related technologies, AI talent, market demand for AI-led products, and technology infrastructure.

N=New Zealand: 50; Global: 2150
Question: Please indicate whether the following factors inhibit your organisation's adoption of generative AI.
Source: Cognizant Generative AI Leaders Study (Conducted by Oxford Economics)



Rethinking Strategies for AI Reality: Strategic Success Factors

The most significant challenge lies in bridging the gap between established business models and the rapidly evolving AI landscape. Many organisations struggle to adapt traditional frameworks to accommodate AI's unique requirements, which often differ from those of traditional data science or decision science work. While AI may not necessarily be inherently harder, it presents distinct challenges that require specialised approaches and tools. Given the vast potential of AI applications, identifying the best starting point can be daunting.

Ultimately, successful AI adoption requires a holistic approach encompassing strategy, talent, technology, data, governance, and change management. By aligning these critical elements, New Zealand organisations can establish a strong foundation for long-term AI success.





#1 Organisational Mindset Change

Many organisations struggle to leverage the full potential of their AI investments due to a lack of strategic direction. Often, AI initiatives become isolated projects rather than catalysts for broader business transformation. New Zealand organisations undergoing digital transformation are well-positioned to realise early AI benefits. This requires strong leadership, a culture of experimentation, and robust performance metrics. A forward-looking AI strategy is crucial for maintaining competitiveness in the AI-driven economy.

Leadership commitment to AI is evident in most organisations in New Zealand

86% of organisations say leadership is either committed to an AI-first vision or provide active support and funding

However, only

20% have successfully translated this into a comprehensive, cross-enterprise strategy.

Source: Cognizant Generative AI Leaders Study (Conducted by Oxford Economics)





While creating a nimble culture that encourages AI trials in individual business units will help to drive innovation, there are many benefits to also taking a centralised approach. A centre of excellence (CoE) aligns with strategic goals, prioritises use cases, pools talent, reduces duplication, and manages risk – by embedding AI within the business to prevent disconnected solutions. A hybrid strategy ensures experimentation is distributed across the organisation while guided by a central team that shares expertise and accountability. Being embedded in the business is important so that you don't build disconnected solutions.

Communication is critical when introducing a nascent and consequential innovation like AI. An environment of openness that fosters trust not only gains support of employees but encourages their active contribution. Creating a feedback loop helps to continuously improve AI initiatives and ensure a close fit to the organisation's unique requirements.

“Building cross-functional teams around a common shared problem is a critical enabler to scale. It drives better traction and acceptance of solutions by involving various stakeholders from the beginning.”

ROUNDTABLE PARTICIPANT (PRIMARY INDUSTRY)

“Organisational change is about getting everyone on board with AI, from the leadership to the front-line employees. It involves continuous education and making sure that the value of AI is communicated clearly across all levels.”

ROUNDTABLE PARTICIPANT (HIGHER EDUCATION)



Building an AI-first organisation, where AI is intrinsically woven into and guides organisational strategy, requires broad AI involvement. A company-wide strategy, often spearheaded by leadership, ensures everyone understands their role in achieving the overall AI vision.

Essential Leadership Actions for AI Success

- 01 Creating a Nimble Culture**
Encouraging experimentation, learning from failure, and rapid iteration to bubble up innovative AI solutions.
- 02 Departmental Empowerment**
Allowing business units to initiate and experiment, with central control and guidance. Targeted AI use cases are often function-specific.
- 03 Leadership Support**
Being AI advocates, allocating resources to emerging initiatives, and showcasing successful projects.

Bringing Employees Along on the AI Journey

- 01 Trust**
Addressing uncertainty and fear of displacement in employees by focusing on effective and ethical AI, designed to improve employee and customer experience.
- 02 Data Literacy**
Building an understanding of the data, giving employees confidence, a deeper awareness of their limitations, and an eye for ways to enhance them.
- 03 Change Management**
Monitoring adoption and effectiveness to develop change management strategies for hesitant employees or business units.



#2 Impact Over Innovation

Whether they're business leaders seeking a competitive edge or IT executives exploring new technologies, New Zealand executives recognise AI's transformative potential. Many organisations have experimented with AI tools or integrated AI into their operations – those achieving early success have prioritised use cases delivering tangible business value.

“One of the challenges is maintaining momentum after the initial excitement. Many AI projects lose steam because the real-world application isn't as glamorous as the pilot, requiring sustained effort and resources to see tangible benefits.”

ROUNDTABLE PARTICIPANT (MEDIA & TELECOM)





Balancing the Near and the Long Term

The expected impact of AI can be gauged by examining investment motives. Organisations in New Zealand mainly invest in AI for cost reduction, process efficiency, and growth opportunities (Figure 3). However, for long-term success, they should also emphasise areas such as improved customer experience and innovation. While immediate productivity gains are often prioritised, this approach is simplistic. AI initiatives should follow a phased approach, focusing on short-term results while setting the stage for long-term growth and impact.

Figure 3: Metrics for Justifying AI Business Case in New Zealand Organisations



A common strategy is to start with a pilot project focused on immediate productivity gains, allowing organisations to quickly demonstrate the value of AI and build momentum. However, the long-term goal is to leverage AI to drive innovation and create new opportunities for growth.

N=50

Question: Which of the following metrics are most important in terms of justifying your organisation's generative AI business cases?

Source: Cognizant Generative AI Leaders Study (Conducted by Oxford Economics)



Prioritising impactful AI use cases requires a structured approach:

- **Business Objective.** Align AI initiatives with the organisation's priorities for a greater chance of shifting them beyond the PoC stage.
- **Measure Impact.** Use clear, measurable KPIs linked to business outcomes to track AI progress and ROI.
- **Data Sources.** Ensure the availability of high-quality data sources or the possibility of generating synthetic data.
- **Feasibility & Scalability Assessment.** Evaluate technical feasibility and identify readymade models that could be fine-tuned for a quick start.
- **Process Mining.** Identify inefficiencies that could be improved through AI by using tools like process mining or workstyle analytics.
- **Risk Evaluation & Mitigation.** Identify risks like data breaches and bias early, and develop mitigation strategies and ethical guidelines.





#3 The Right Digital Foundation

Embarking on an AI journey is a marathon, not a sprint, built upon years of digital foundation. Organisations must assess their AI readiness by evaluating data infrastructure, architecture, past digital investments, and data quality and accessibility. This comprehensive evaluation is crucial for successful AI implementation. Understanding the digital landscape and taking stock of all the data interventions required for AI are crucial steps. By addressing data-related bottlenecks, organisations can unlock the full potential of AI, starting with immediate productivity gains and gradually progressing to more complex applications.

Most New Zealand organisations have made the first steps towards evolving their infrastructure, data, and governance to prepare for AI, but few are completely ready yet (Figure 4).

Figure 4: The AI Foundation Gap in New Zealand



30%

Not evolved tech infrastructure & data to accommodate AI needs



52%

Work done to evolve governance, data, & infrastructure



16%

Data & technology are AI-ready



2%

Evolved data & infrastructure to be cutting-edge

This transitional period will reveal many challenges that may require advice from experienced practitioners who have navigated the journey from PoCs to deploying AI at scale.

N=50

Question: Which of the following statements most accurately represents your organisation's operations in relation to generative AI?
Source: Cognizant Generative AI Leaders Study (Conducted by Oxford Economics)



The Power of Process Re-Engineering

Simply overlaying technology on existing processes is ineffective. True digital transformation demands a fundamental rethinking of workflows. By categorising processes as tactical, transformational, or decision-making, organisations can tailor their digital interventions for maximum impact. This approach ensures technology enhances productivity, agility, and strategic decision-making.

“Defining the process and ensuring it fits into the existing workflow is key to successful AI implementation.”

ROUNDTABLE PARTICIPANT (MEDIA & TELECOM)





Organisations must prioritise data readiness. This requires a pragmatic approach, focusing on use cases that align with the availability of accurate and accessible data. Organisations should simultaneously focus on building a future-proof data foundation that involves:

01

Data Infrastructure

Evaluating data storage, processing, and management for scalability, security, and performance to support AI training and deployment.

02

Digital Investments

Assessing the maturity of past digital investments like CRM, core modernisation, and digital platforms, which impact AI readiness and integration.

03

Data Architecture

Examining data structure and lineage across systems to facilitate discovery, access, and utilisation for AI.

04

Data Quality

Collecting data from reliable sources and complementing with synthetic data; increasing use of automation in annotation and cleaning to accelerate preparation.

“Data quality is a limitation in rolling out AI. Having great data stored doesn’t necessarily make it useful. It’s crucial to manage the data and think about ways that make it better align with the AI applications.”

ROUNDTABLE PARTICIPANT (FINANCIAL SERVICES)

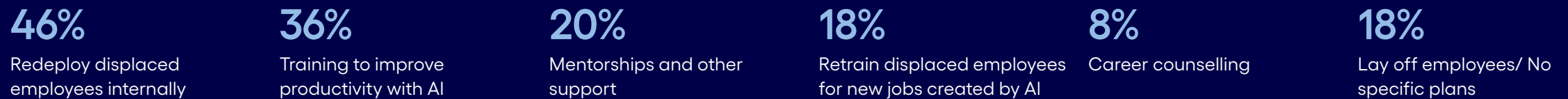


#4 Employee Empowerment

The scarcity of AI/ML talent in New Zealand is exacerbated by lucrative international wages. While some organisations have established dedicated data science teams, recruitment, and retention challenges hinder innovation. Building internal AI/ML expertise is crucial for long-term autonomy and adaptation. AI impacts traditional roles like infrastructure, cybersecurity, and development. Organisations must integrate AI fluency with existing expertise to bridge the gap between traditional practices and new AI opportunities.

Of course, employee empowerment extends beyond technology teams to every employee within the organisation. Although societal concerns about AI displacing employees are valid, many promising use cases aim to augment employees rather than replace them (Figure 5).

Figure 5. Impact of AI on Employees in New Zealand



Considering the tight labour market in New Zealand, most organisations do not intend to use AI as a tool to displace employees. Instead, they will seek to redeploy workers into other areas or provide training on AI tools to boost their productivity.

N = 50
Question: How do you plan to handle employees displaced by generative AI?
Source: Cognizant Generative AI Leaders Study (Conducted by Oxford Economics)



AI can boost productivity by handling routine tasks, allowing skilled employees to focus on aspects of their roles that require judgment, creativity, and other soft skills. Similar to the early period of corporate Internet adoption, employees will need continuous training to understand the appropriate use of AI and its limitations. While many AI productivity tools are designed to be intuitive, best practice education will ensure employees gain maximum benefit. However, for custom AI solutions built into specific processes, tailored training may be necessary to fully leverage their capabilities.

“A successful AI strategy includes embedding AI into the organisational culture. This means creating a mindset where employees see AI as a tool that can augment their capabilities rather than replace them.”

ROUNDTABLE PARTICIPANT (FINANCIAL SERVICES)





Cultivating an AI-savvy workforce goes beyond data science teams. AI initiatives often involve programming aspects that may require additional expertise. A successful AI strategy demands broad technology and business understanding:

AI-Augmented Workforce

Clearly communicate that AI is a tool to support employees in their roles to gain buy-in from workers.

Knowledge Sharing

Foster a culture of open knowledge exchange to drive innovation and problem-solving.

Seamless Integration

Begin with smaller PoCs then analyse productivity, adoption, and experience changes to minimise challenges during scaling up.

AI Centre of Excellence

Build an AI CoE to gain experience and share best practices across the organisation.

Employee Experience

Monitor employee experience with AI tools and adjust to ensure interactions remain positive beyond the early excitement during initial adoption.

Behavioural Analytics

Take a data-driven approach to assessing employee engagement with AI, training effectiveness, and productivity improvements.



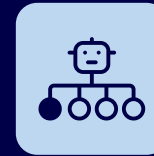
#5 A Robust Governance Framework

Many New Zealand firms are early adopters of AI, many deploying cutting-edge solutions before comprehensive regulatory and responsible AI frameworks are established. Proactive identification of potential compliance issues and development of mitigation strategies are crucial. Effective AI governance is essential for managing risks. However, fragmented responsibilities, unclear ownership, and inadequate monitoring tools often hinder organisations.

A centralised governance structure with well-defined roles and responsibilities is essential for effective AI management. This approach fosters consistency, accountability, and adaptability to emerging challenges such as multimodal AI, which combines data from multiple modalities (e.g., text, images, audio) to create more comprehensive and accurate models. Investing in tools and processes to track AI model performance and explainability is essential for maintaining trust, compliance, and ethical AI practices.

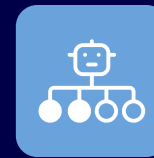
New Zealand organisations have been proactive in developing formal policies and guidelines for responsible AI practices. However, while they may have established guidelines for data use and security, their perceived compliance readiness may exceed their actual level. (Figure 6).

Figure 6: New Zealand Organisations are Developing AI Policies



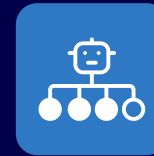
8%

Have not yet considered ethical concerns about AI



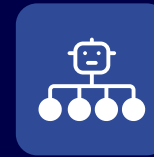
38%

Have started developing policies and guidelines to address ethical concerns around AI



40%

Have formal policies and guidelines in place



14%

Have an established governance model with ethics considerations in place

Organisations must conduct a comprehensive evaluation across various responsible AI components to determine if their AI compliance and policies will remain effective as responsible AI becomes a legal requirement and customers demand greater transparency regarding data usage.

N=50

Question: How does your organisation approach generative AI ethics and responsible generative AI deployment?

Source: Cognizant Generative AI Leaders Study (Conducted by Oxford Economics)



While traditional ML models often provide a degree of transparency, newer AI models, particularly Gen AI, are increasingly becoming black boxes. This means that it is difficult to trace the model's internal processes and understand how it arrives at its conclusions. Establishing guardrails and measuring performance can reduce the risk of aberrant AI behaviour.

- **Human-in-the-Loop.** AI should complement trained human operators, with the required human intervention whenever needed.
- **Data Protection.** To prevent proprietary or sensitive data from being leaked by public AI models, organisations should enforce correct usage policies, training, and data loss prevention.
- **Anonymisation.** Organisations must implement de-identification and masking techniques to protect privacy and address legal and ethical concerns. While key during AI training, it is also crucial to assess re-identification risks for results containing PII.
- **Transparency.** Defining an appropriate degree of transparency for each AI model ensures data sources can be identified, results explained, and confidence levels assessed.
- **Bias Minimisation.** Incorporating diverse data sources in Gen AI solutions and model training, along with considering multiple perspectives during testing, helps avoid perpetuating social inequalities in areas like recruitment, financial services, and healthcare.

“You have to know – and prove that you know – the provenance and the ownership of the data, that you are using for training AI models. That’s what you’re required to do in any regulated area.”

ROUNDTABLE PARTICIPANT (MANUFACTURING)



Spotlight: Sustainable AI

Sustainability in New Zealand is crucial to preserving its unique ecosystems, biodiversity, and natural beauty, which are vital for the nation's cultural identity.

The compute-intensive nature of Gen AI has the potential to inhibit an organisation's sustainability goals as it scales up. Elevated power and water consumption associated with training and inferencing will accelerate quickly without forethought. Efficient use of resources can be attained by considering:

- **Foundational Model Size.** Rather than using LLMs for all applications, small language models (SLMs) trained on more limited datasets can be suitable and efficient in more restricted use cases.
- **Sustainable Cloud.** Many cloud data centres in New Zealand are powered by renewable energy. Auditing the sustainable credentials of a cloud provider grows in importance as AI deployments scale up.
- **Sustainability Metrics.** Early model training might be less carbon-intensive than large-scale inference, but the overall carbon footprint must be assessed across the AI lifecycle. As AI usage grows, inference-related emissions can far surpass initial training costs, particularly with serial model applications.





Conclusion

Key Points for a Successful AI Journey:

01

A **fundamental shift in mindset** to recognise that traditional approaches may not be right for AI, requiring a more holistic, yet agile approach.

02

A **comprehensive assessment** of the organisation's current capabilities, strengths, and weaknesses in AI to identify areas for improvement and investment.

03

A **clear understanding of the need for flexibility and adaptability** to navigate the evolving AI landscape, breaking down complex initiatives into smaller, manageable projects.

04

A **strategic focus on human-AI collaboration and ethical AI practices**, to foster the right culture of experimentation and co-creation.

05

A **pragmatic approach** that prioritises achievable, high-impact AI initiatives while aligning with long-term goals.



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