



The AI-Powered Enterprise

**BUILDING A DATA-DRIVEN FOUNDATION FOR
INTELLIGENT SERVICES**

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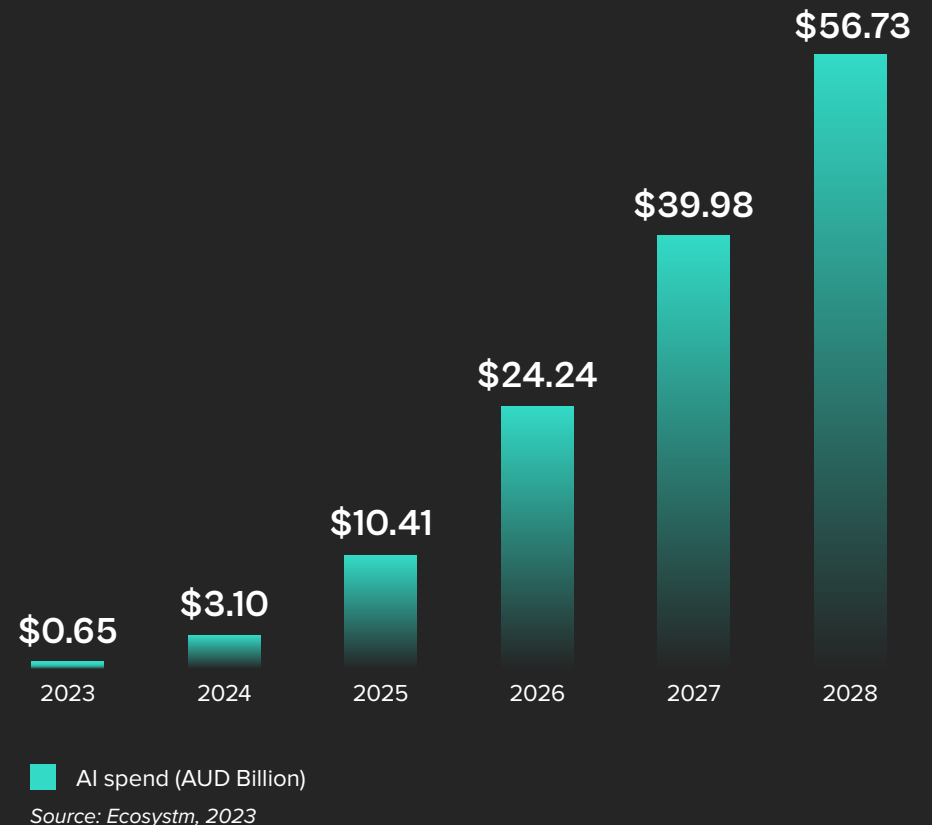
Introduction

AI has become a business necessity today, catalysing innovation, efficiency, and growth by transforming extensive data into actionable insights, automating tasks, improving decision-making, boosting productivity, and enabling the creation of new products and services.

Generative AI has stolen the limelight in 2023 given its remarkable advancements and potential to automate various cognitive processes. However, the real opportunity lies in leveraging this increased focus and attention to shine the AI lens on all business processes and capabilities. As organisations grasp the potential for productivity enhancements, accelerated operations, improved customer outcomes, and enhanced business performance, investment in AI capabilities is expected to surge.

Ecosystem predicts that for most organisations, AI spending will remain below 5% of their total tech expenditure in 2024, but it is likely to exceed 20% within the next 5 years.

AI Spend Will go into Hypergrowth in Australia





Unleashing the Potential of AI Across Industries

Organisations across sectors are seeing significant opportunities for enhancement with AI:



Manufacturing. The industry is using AI to enhance workforce planning, product design and continuous improvement, efficiency, safety, and quality. Predictive maintenance minimises downtime; collaborative robots improve human productivity; AI-driven quality control detects production faults, ensuring product quality.



Transport & Logistics. AI-driven asset management, supply chain management and warehouse management are revolutionising the industry. AI algorithms optimise scheduling, routing, and traffic management, improving safety, efficiency, and last-mile delivery. Self-driving and software-defined vehicles are also being explored.



Banking & Finance. AI speeds processes such as KYC, loan applications, and claims processing; provides customer recommendations through robo-advisors; and personalises customer experience. AI also plays a crucial role in fraud detection.



Retail & eCommerce. The industry uses AI to analyse customer behaviour and optimise warehouse management for safety and efficiency. AI, including video analytics, IoT devices, and logistics software, maximises space utilisation in retail and warehouses.



Public infrastructure providers. They are turning to AI for public safety monitoring. Video analytics and sensors empower safety and security teams to extend public safety beyond conventional human monitoring practices.



AI Use Cases Are Exploding Across Business Functions



72%
Sales &
Marketing



72%
Customer
Experience



63%
Product



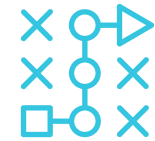
62%
Operations
Reducing carbon
footprint



62%
HR



60%
IT



60%
Strategy
Sustainability goals

POPULAR USE CASES

Lead Generation;
Content Strategy;
Location-based
Targeting

Conversational
AI/Chatbots;
Sentiment
Analysis;
Personalisation

Product Design;
Fraud Detection;
R&D; Product
Lifecycle
Management;
Process
Simulation

Financial Insights;
Logistics &
Supply Chain
Management

Recruiting &
Onboarding;
Resource
Allocation;
Employee
Experience

ITOps; SecOps;
Threat
Intelligence &
Management;
Code Generation;
Automated QC

Operational
Security & Risk
Management;
Business
Planning



From Quick Wins to Enterprise Transformation: Scaling AI Successfully

While organisations will turn to generative and open-source tools for easy victories, it is crucial to establish tailored AI capabilities within the organisation.

This foundation empowers organisations to leverage AI at a larger scale, resulting in a comprehensive transformation into a smart and automated enterprise.

Strategic Success in Scaling AI: Three Critical Elements



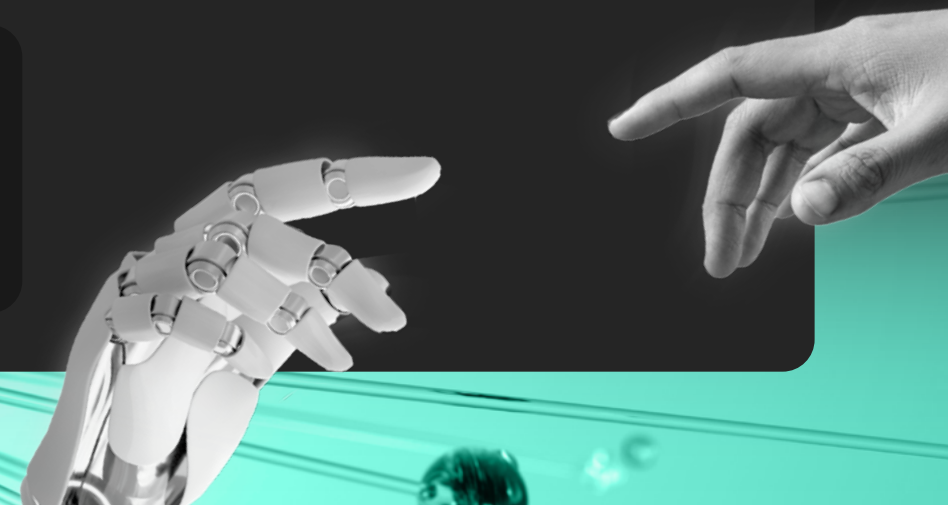
AI Assessment



AI Skills



Data Strategy





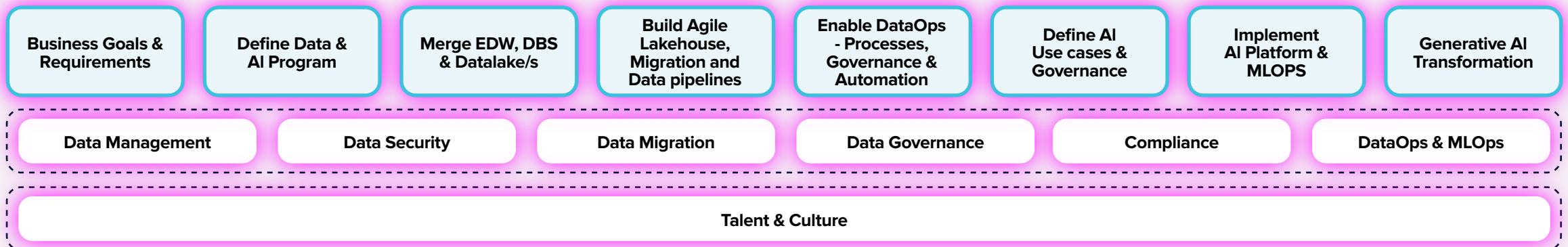
Data and AI Assessment: A Strategic Imperative for Organisations

Creating a data and AI strategy is a dynamic process that requires alignment with business goals, continuous learning, and the ability to adapt to shifting circumstances.

It should be a collaborative effort involving different stakeholders. However, the reality is that organisations have invested in AI solutions without a well-planned approach. The landscape has also grown increasingly complex due to emerging AI technologies that are disrupting the status quo and reshaping priorities regarding what can be achieved through AI.

Organisations should conduct a thorough assessment of their AI strategy and roadmap to ensure that decision-makers have access to accurate, timely, and relevant data to guide their choices. This strategic approach not only enables the refinement of processes based on data insights but also involves continuous alignment and re-alignment with business objectives, ongoing learning, and collaboration with a diverse business stakeholders

Continuous Evaluation: What Organisations Need to Assess



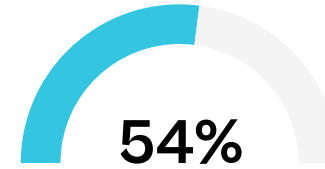


Building the Skills for an AI-Ready Workforce

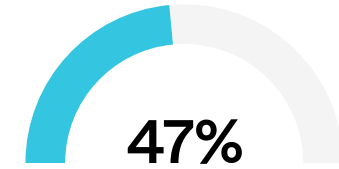
Even with the best intentions and strategies, organisations that exclude their employees from the AI roadmap are prone to failure when attempting to scale AI.

Employees' proficiency in understanding, implementing, and using AI technologies is a competitive edge for organisations, enhancing productivity and decision-making. These AI skills also future proof the workforce, enabling individuals to adapt to the evolving digital landscape and be relevant in the job market. As AI continues to reshape work and society, upskilling becomes a strategic necessity for both individuals and organisations.

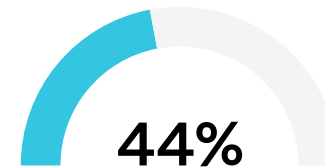
Organisations Face Challenges in Balancing Business and Technical Skills



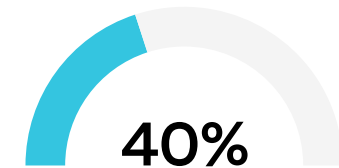
Defining business requirements/KPIs/metrics



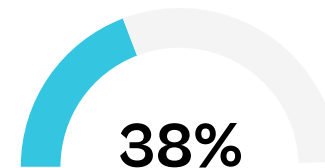
Lack of staff with a combination of business and AI skills



Managing business process changes



Data quality



Lack of sufficiently skilled IT staff

Australia N=65
Source: Ecosystem Digital Enterprise Study, 2023



Key areas of focus for organisations include:



Technical skills

Expertise in data science, machine learning, and AI algorithms for effective AI application development and management, including handling extensive datasets, efficient data management, and infrastructure provisioning.



Ethical and Legal Acumen

Grasping the ethical dimensions of AI and understanding the organisation's legal obligations on data privacy, compliance, and protection.



Business Proficiency

The ability to pinpoint areas where AI/automation align with business priorities and using the right insights for informed decision-making.





Preparing for AI Growth with an Effective Data Strategy

Data serves as the lifeblood of AI.

Slow data access, leading to a lack of parallelisation, translates to costly and delayed decision-making in AI processes. While most workloads have historically demanded enhanced performance during refresh cycles, AI workloads are reshaping data centres. This transformation involves powerful processing capabilities, liquid-cooled servers, direct GPU access, and highly scalable, high-performance storage systems optimised for deep learning and neural networks.

To effectively support AI, data solutions must adapt to the diversity of techniques, algorithms, and models consolidating the fragmented landscape of disparate systems.

THE FRAGMENTED AI LANDSCAPE

AI SUB CATEGORIES

Machine Learning

Deep Learning

Natural Language
Processing

Computer
Vision

Speech
Recognition

Generative AI

Large Language
Model

Knowledge-based
System

AI TECHNIQUES

Predictive Analytics
Deep Learning

Neural Networks
Classifications

Machine Learning
Deep Learning
Rule-based

Deep Learning
Machine Learning

Natural Language
Processing

Natural Language
Processing
Machine Learning

Generative AI
Natural Language
Processing
Deep Learning

Rule-based
Algorithms



Data Strategy Essentials: Key Focus Areas for Success

Analytical and AI applications come with a wide range of demands, including throughput, latency, capacity, I/O, file sizes, data types, and scalability.

An AI-driven data system must focus on:



Performance. To maximise GPU efficiency, storage systems must offer ultra-low latency and high-performance features, such as all-flash and NVMe technologies. AI modelling relies on rapid, random access to small and medium-sized files.



Scalability. AI's large-scale requirements require distributed solutions and non-shared file or object platforms. These facilitate superior performance and scalability, supporting GPU farms for modelling and inferencing.



Reliability. Given the potentially lengthy model training periods, data platforms must be reliable and highly available. Interruptions in data access or loss of checkpoints and logs can have disastrous consequences.



Data Management and Services. AI models require data cleaning, organisation, and preprocessing. Data solutions should support metadata tagging, data versioning, and other services to facilitate these tasks.



Governance and Compliance. Enterprises must adhere to data regulations and privacy laws like GDPR, HIPAA, and CCPA. A robust data strategy defines how data should be collected, stored, and used to ensure compliance, reducing legal risks.



Containers, Orchestration, and Automation Support. As AI workloads are frequently deployed in containers, storage systems should offer orchestration and automation capabilities to scale with workloads efficiently.

HPE Requirements and Data Discovery Workshop

Requirements and Data Discovery Workshop

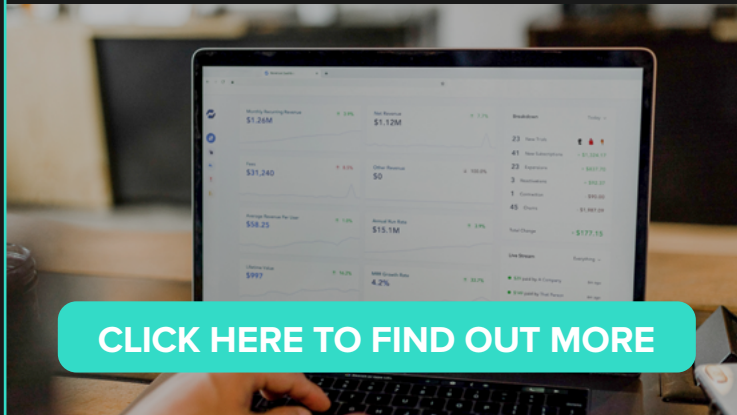
A visual and interactive workshop covering data, data platform and analytics topics, starting from exploration of business needs and drivers.



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Data Transformation Capability Assessment

Evaluates the customer's data platform to determine the readiness of data and analytics services and technologies to satisfy business objectives.



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Data Platform Design and Migration Planning Engagement

A time-bounded, Agile and Enterprise Architecture methodology-based, design and planning service.



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About Ecosystem

Ecosystem is a Digital Research and Advisory Company with its global headquarters in Singapore. We bring together tech buyers, tech vendors and analysts onto one integrated platform to enable the best decision-making in the evolving digital economy. Ecosystem has moved away from the highly inefficient business models of traditional research firms and instead focuses on research democratisation, with an emphasis on accessibility, transparency, and autonomy. Ecosystem's broad portfolio of advisory services is provided by a team of Analysts from a variety of backgrounds that include career analysts, CIOs and business leaders, and domain experts with decades of experience in their field. Visit ecosystem.io

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