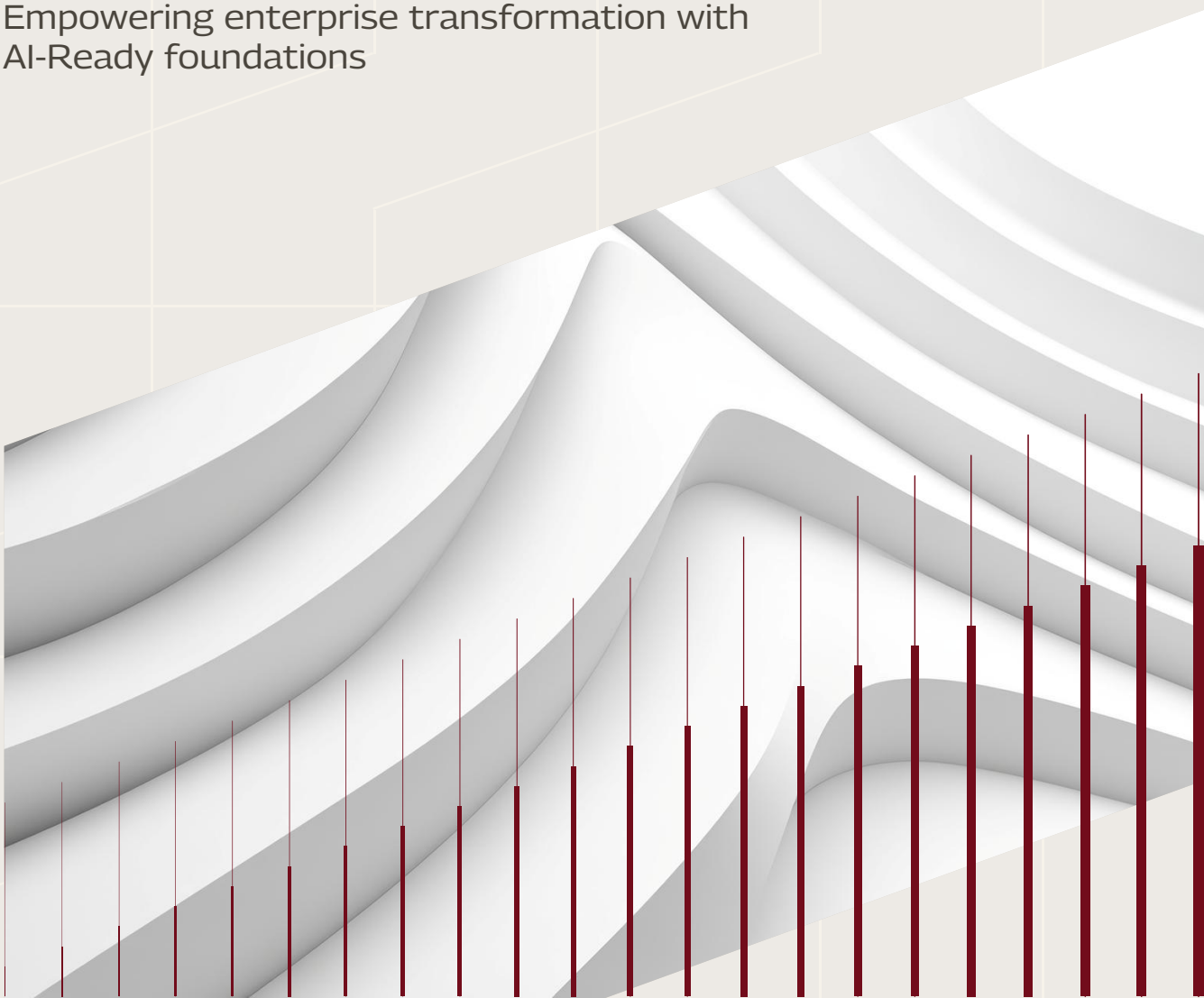
TECH mahindra

DELL Technologies

From Infrastructure to Intelligence

Building AI-Ready Digital Foundations

Empowering enterprise transformation with AI-Ready foundations



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Introduction: When AI Ambition Exceeds Enterprise Readiness

Almost everywhere we look, we see that enterprises are talking about transitioning artificial intelligence from experimental to the production phase. A phase where it can quickly become a critical component of everyday business operations for enterprises.

But away from the headlines, an emerging ground reality seems quite different. According to the *McKinsey AI Global Survey Report 2025*, approximately two-thirds of organizations are still in the piloting phase, while some are yet to begin implementation.[1] *Gartner's CIO Edge newsletter reports* that fewer than **37%** of the technology leaders focus on enterprise-level GenAI initiatives that can drive industry-level transformation.[2]

This clearly indicates that enterprises are not failing with AI models, but rather with foundational readiness. On one hand, enterprises want to become AI-native, where AGI (artificial general intelligence) powers products, operations, and decision-making as a reliable capability. But at a fundamental level, we see a primary challenge in building a solid foundation. That's not all. Transition also presents a major roadblock for many organizations. Most enterprises struggle because they try to scale AI on systems built for stability rather than learning.

Industry research also shows a consistent pattern:

- Although **88%** of organizations claim to use AI in at least one function, only **one-third** of them have begun scaling, and only **39%** of them report enterprise-level EBIT impact
- Nearly **95%** of corporate AI initiatives do not yield meaningful returns
- Only **35%** of respondents are actively implementing GenAI, while **17%** are still in the planning stages

These numbers highlight a key reality: the challenge is not in making AI work once, but in ensuring it operates consistently, responsibly, and cost-effectively at enterprise scale.

A Simple Test

If you needed data from multiple systems right now, could you quickly find it, determine when it was last updated, and verify whether it met quality standards at the time of execution?

If this is unclear, AI systems built on that foundation will also struggle. AI outcomes may appear impressive in pilots but will struggle to earn trust or scale reliably in production.

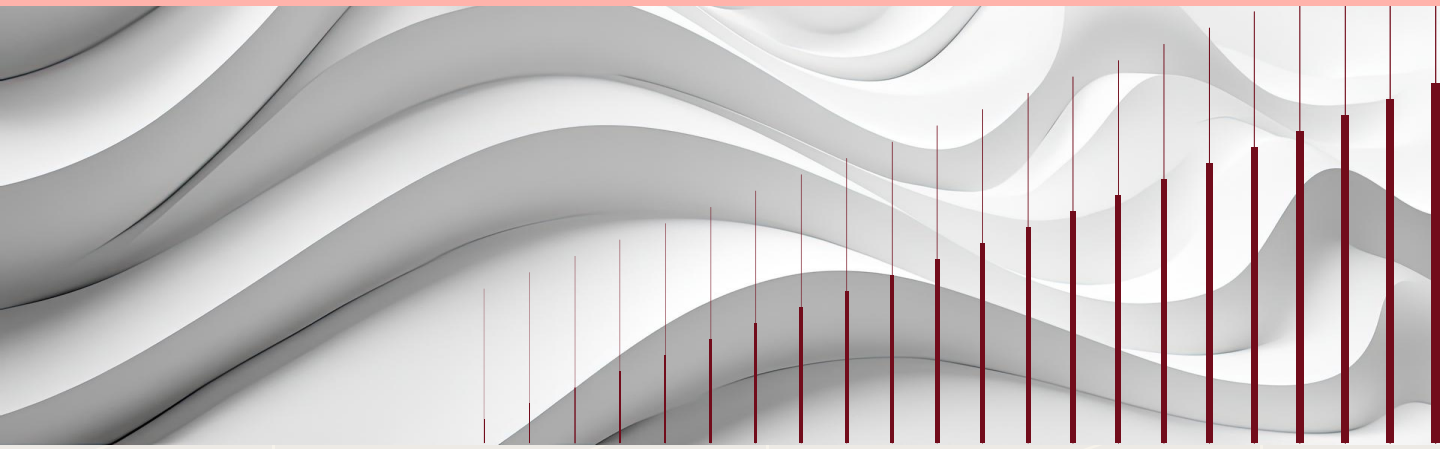
Introduction: When AI Ambition Exceeds Enterprise Readiness

A puzzling fact is that most organizations face similar structural barriers. The gap appears because of fragmented data, unstable environments, unclear ownership, weak guardrails, and a lack of end-to-end visibility throughout the AI process. Consequently, data is not ready, infrastructure cannot support AI workloads, workforce skills require further development, governance and compliance measures are weak, while orchestration platforms are missing or inconsistent.

So, what do we think?

Based on the collective expertise of Tech Mahindra and Dell Technologies, the key to unlocking AI's full potential lies in establishing a strong, integrated foundation rather than relying solely on cutting-edge algorithms. A foundation that accelerates critical business programs with flexible, scalable solutions that adapt to evolving AI requirements and changing business priorities. Alongside this, AI must be engineered, governed, and operated with the same rigor as core business platforms to achieve a lasting impact.

> Simply put, successful organizations need to institutionalize AI as a core capability, grounded in disciplined foundations that align technology, data, governance, and clear accountability.



Turning Opportunity into Impact through Integrated Pillars

Principally, these sorts of situations offer a strategic advantage for industry leaders. The aim is to move beyond AI experimentation to scaled production, where AGI deployments can proceed faster with better tracking of returns on investment and improved accuracy through unified data and controls.

To capitalize on this strategic opportunity, organizations must close the AI readiness gaps by building a solid foundation that stands on the following four (4) key pillars:

- *AI-Ready Infrastructure*
- *AI-Ready Data*
- *AI-Ready Workforce and Governance*
- *Unified AI Framework*

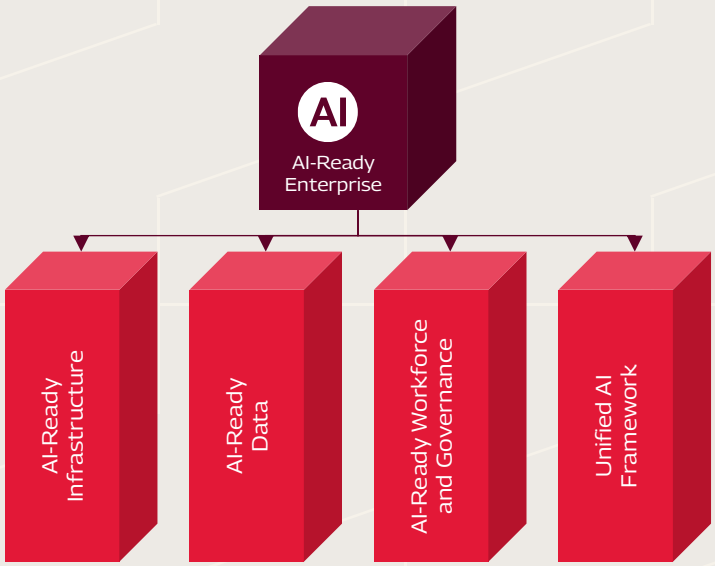


Figure: Four Pillars for AI-Ready Enterprise

To understand the role of foundational elements and their importance in achieving successful AI adoption, the next section provides an overview of the four pillars in three parts: *the trends we see today, challenges, and what will be expected next that leaders can execute.*

Turning Opportunity into Impact through Integrated Pillars

Pillar 1: AI-Ready Infrastructure

Traditional infrastructure was built to optimize stable operations and cost efficiency. However, AI workloads must optimize learning velocity and require specialized computing, continuous data streams, scalable resources, and real-time performance monitoring. The current infrastructure is unstable and cannot support scaling AI workloads. This mismatch is now one of the primary reasons AI initiatives struggle to scale beyond isolated use cases.

Key Trends:

- Shift to AI-ready data centers or modernize the existing ones
- Movement from generic CPUs to specialized GPUs and accelerators
- Adoption of elastic, on-demand provisioning for scalability
- Enablement of full-stack observability for real-time performance insights
- Infrastructure is being redesigned for GPU availability, high-throughput storage, and low-latency networking
- Prioritization of energy efficiency and sustainability in infrastructure design
- Heterogeneous infrastructure across on-premises, public clouds, and AI platforms is the new norm

Challenges and Future Expectations

As businesses race to adopt AI and AGI, traditional IT often lacks the right tools for building and supporting scalable AI infrastructure.

CHALLENGES	FUTURE EXPECTATIONS
• GPU scarcity increases cost pressures	• GPUs and accelerators as standard components
• Network latency slows distributed workloads	• High-bandwidth, low-latency networks for real-time AI
• Complex hybrid infrastructure management	• Distributed architecture reduces latency
• High energy use raises sustainability concerns	• Energy-efficient infrastructure with carbon monitoring
• No standard approach for provisioning and scaling	• AI-powered observability and automated optimization

Table: Challenges and Future Expectations

The key is to begin by assessing current infrastructure, identifying gaps for AI needs, and creating a plan that solves issues without disrupting business.

Turning Opportunity into Impact through Integrated Pillars

Pillar 2: AI-Ready Data

While data remains a critical component for business intelligence, widespread adoption of AI and AGI requires a new approach. As data remains fragmented and isolated, it's clear that it is unable to support the deployment of AI on a broader scale. This not only stalls critical AI initiatives and delivers models with suboptimal results but also prevents the business from fully capitalizing on automation or intelligence opportunities. As a result, enterprises are now focusing on ongoing, reliable data streams, transforming data architecture and governance strategies.

Key Trends:

- AI now relies on both structured and unstructured data, requiring advanced retrieval and knowledge organization
- Fast feedback loops are critical for real-time AI performance because they allow the system to quickly learn from the information, adjust its predictions, and improve its decisions instantly
- AI-native enterprises need continuous, high-quality data streams for real-time models and decisions, replacing periodic warehouse updates for quarterly reports
- Vector databases and embeddings are a vital infrastructure for AI and large language models (LLMs)
- Semantic layers convert raw data into business-oriented concepts, enhancing both accessibility and usability
- Data quality has become a business priority, aided by automated validation pipelines
- Data architecture is shifting from episodic access to continuous flow for real-time AI performance
- Organizations with mature data practices report three to four times faster insights and double the model accuracy compared to those with fragmented data architectures

Turning Opportunity into Impact through Integrated Pillars

Challenges and Future Expectations

Businesses must prove that their data is suitable for AGI applications. This includes measurable data quality, end-to-end traceability, and the ability to manage changes across models, datasets, and downstream decisions. For regulated industries, this also means meeting stricter expectations around privacy, consent management, and auditability.

It's key to note that without provable data quality, traceability, and control, AI outcomes lack credibility among regulators, customers, and even internal stakeholders. In this context, data readiness is no longer a technical concern; it is a business risk and trust issue that directly affects adoption and scale.

CHALLENGES	FUTURE EXPECTATIONS
• Data silos block unified access	• Automated data pipelines for movement and quality checks
• Poor data quality causes model failures	• Federated data governance with central policy enforcement
• Real-time data needs clash with batch systems	• Full data lineage and provenance for compliance and trust
• Privacy and compliance rules limit sharing and usage	• Privacy-preserving analytics using advanced techniques
• No clear data ownership or governance accountability	• Semantic understanding of data and business context

Table: Challenges and Future Expectations

The key is to assess your current data landscape, identify fragmentation and quality issues, and build a prioritized plan that unifies data while maintaining security and compliance.

Pillar 3: AI-Ready Workforce and Governance

Both Tech Mahindra and Dell see governance debt as the most significant hidden risk in the next decade. As AI adoption accelerates, it is often outpacing organizations' ability to govern it responsibly. Weak governance leads to compliance risks, and unclear ROI frameworks limit scale. In many enterprises, ownership of AI outcomes remains fragmented across technology, data, risk, and business teams. This lack of clear accountability slows decisions, weakens control, and ultimately erodes trust. This is one of the primary reasons many organizations continue to struggle with AI compliance. Workforce skills are dispersed, requiring cross-functional training and upskilling to strengthen the capabilities at an organizational level.

Turning Opportunity into Impact through Integrated Pillars

Key Trends:

- AI adoption is outpacing organizations' ability to manage it responsibly
- Roles and accountability are lagging behind rapid tool adoption
- Workforce needs to extend beyond data scientists to include engineers, domain experts, and strategic leaders
- Lack of governance is leading to compliance breaches and reputational risk
- Governance needs to shift from periodic checks to continuous oversight for tracking ROI and performance feedback
- Responsible AI is recognized as a competitive advantage, not just a compliance requirement
- The regulatory landscape is tightening with the **EU AI Act** and emerging global frameworks
- A tight talent market for AI skills is driving compensation and retention challenges
- Organizations with established AI governance are seeing **40%** higher ROI

Challenges and Future Expectations

Leaders must demonstrate responsible use with evidence. This requires clear decision rights, documented controls, repeatable audits, and transparent value measurement, along with a workforce skilled in AI development, output review, and disciplined operation of AI-enabled services.

CHALLENGES	FUTURE EXPECTATIONS
• Shortage of skilled AI and data talent	• Distributed AI expertise across business domains
• Difficulty retaining specialized roles	• Continuous learning culture with upskilling programmes
• No clear governance frameworks for responsible AI	• Clear governance frameworks for responsible AI use
• Regulatory uncertainty and evolving compliance rules	• Audit and compliance tools for bias, performance degradation and compliance
• Bias and fairness issues in high-stakes decisions	• Ethical AI practices embedded from the start
• Model drift and performance degradation in production	• Responsible AI by design with fairness, explainability and bias mitigation
• Inability to measure and demonstrate AI ROI	• ROI measurement frameworks with transparent metrics

Table: Challenges and Future Expectations

Together, we believe that the key is to evaluate your current workforce and governance, identify skill gaps and regulatory risks, and create a targeted plan to develop talent and set up governance frameworks.

Turning Opportunity into Impact through Integrated Pillars

Pillar 4: Unified AI Framework

Many organizations rely on separate tools for data, model development, and monitoring, creating silos and operational inefficiencies that make governance difficult to enforce at scale. This fragmentation leads to many disconnected tools, duplicated model development, inconsistent controls, and unapproved AI use across teams. The result is higher cost, increased risk, and governance that becomes reactive rather than being proactively integrated into everyday operations.

Key Trends:

- Organizations swing between either full decentralization that leads to duplication or full centralization, which slows down delivery
- Separate tools for data, model development, and monitoring are creating silos and operational inefficiencies
- Unified frameworks are increasingly integrating data, model development, monitoring, and deployment, while remaining flexible to domain-specific needs
- Integration of policy enforcement, monitoring, and observability into cohesive systems
- Centralized governance with domain autonomy is emerging as a preferred pattern
- Platforms are enabling business units to deploy AI solutions independently within governance frameworks
- Reusability and interoperability are becoming the default expectations

Organizations using unified AI frameworks report **three times faster model deployment** and **2.5 times higher model productivity** compared to those using fragmented tools.

Turning Opportunity into Impact through Integrated Pillars

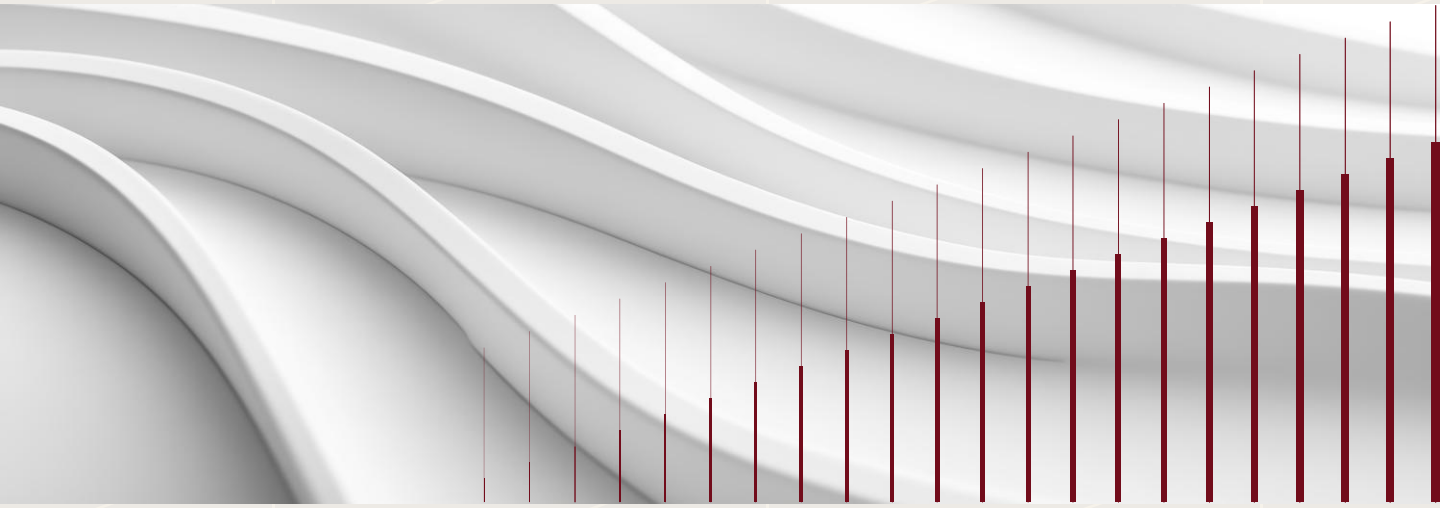
Challenges and Future Expectations

In our assessment, AI-native enterprises will follow a product-style model, where platform capabilities and domain teams will deliver results and drive continuous improvement. Reusability and interoperability will naturally become the default expectation.

CHALLENGES	FUTURE EXPECTATIONS
• Complex integration of multiple point solutions	• Centralized intelligence layer as enterprise backbone
• Inconsistent governance and policy enforcement	• Domain autonomy within governance guardrails
• Limited visibility into models and data quality	• Intelligent automation for routine processes
• Difficulty enforcing policies across business domains	• Continuous learning to improve decisions and outcomes
• Silos between data, AI, and business teams	• Seamless ecosystem integration with apps, data sources and third-party AI services
• Scaling AI development as demand grows	• Responsible AI embedded by default

Table: Challenges and Future Expectations

In our collective view, the key is to assess your current tools, identify fragmentation and gaps, and build a unified platform that balances centralized governance with domain autonomy.

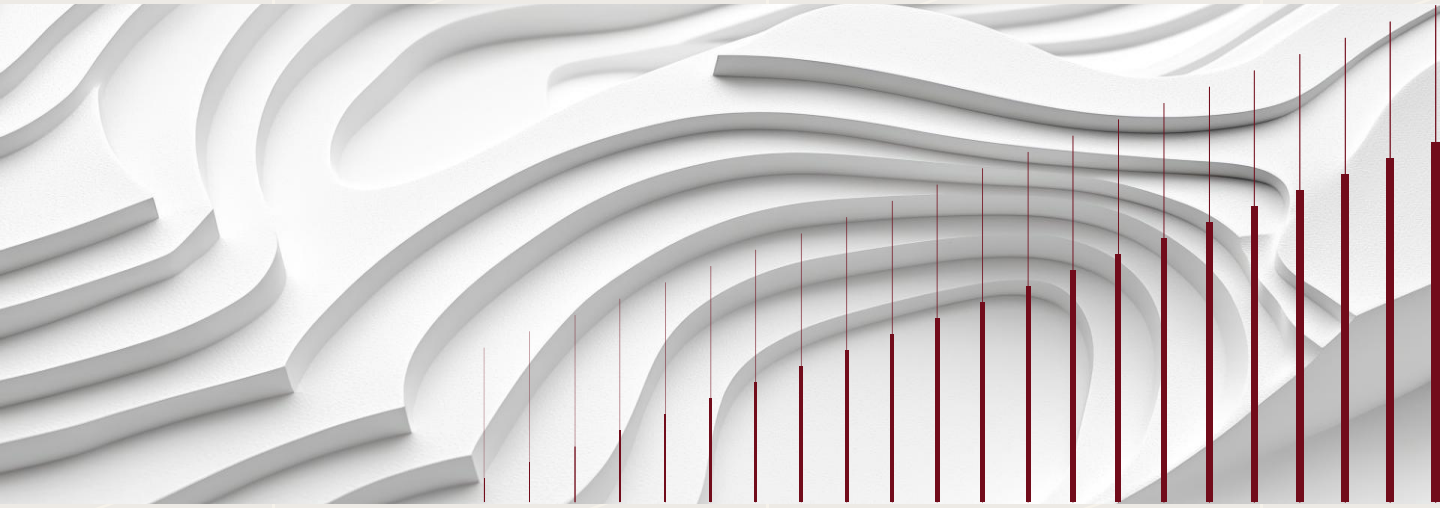


The Integrated Approach

As we see it, the transformation starts with an assessment to understand the current state across all four pillars. This assessment reveals the areas that restrict AI deployment, where quick wins are possible, investments that deliver the highest impact and sequencing of initiatives for maximum momentum.

There is no one-size-fits-all approach. An organization with robust infrastructure and fragmented data needs a different plan than one that possesses advanced data platforms but lacks adequate governance. The assessment phase guides the development of the prioritized roadmap. The transformation is phased and iterative. We believe that organizations should:

- Complete the current state assessment across all four pillars
- Identify high-impact areas where progress will immediately impact business value
- Establish foundational capabilities in all four dimensions
- Build momentum through early wins while expanding capabilities
- Continuously measure progress and adjust the roadmap based on results



The Business Impact

Our key observation is that organizations implementing an AI-ready foundation experience measurable business benefits compounded over time. We have seen multiple financial services firms use AI to detect fraud and assess risks, healthcare providers employ AI to expedite diagnostic processes, and retailers personalize customer experiences on a broad scale.

For example, a leading telecom company deployed a GenAI-powered internal chatbot across all departments, significantly improving customer service and operational efficiency. This success story not just highlights the potential of GenAI; it is a source of confidence, paving the way for more extensive GenAI integration.

Similarly, an oil and gas industry leader used GenAI for data analysis, optimizing resource management, and predictive maintenance. By prioritizing 'high-ROI use cases' or GenAI applications, the company enabled wider organizational adoption.

These examples highlight the importance of identifying and prioritizing high-value applications of AI or GenAI, which serve as catalysts for broader integration and more significant organizational transformation.

The following illustration depicts the key impact of an AI-ready foundation.

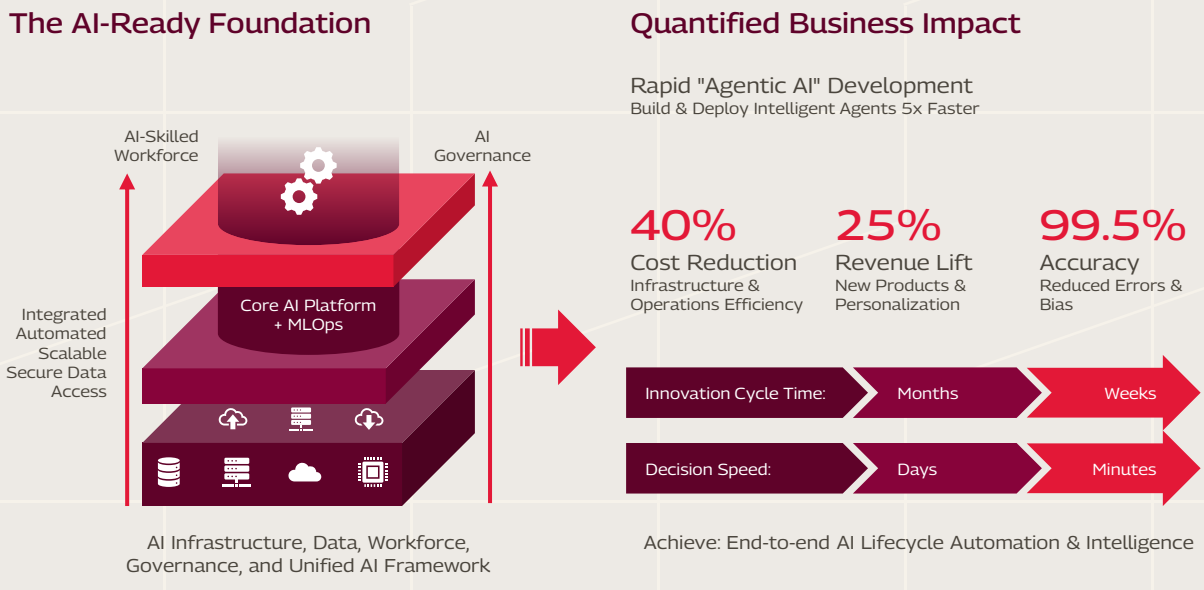


Figure: Measurable Business Impact

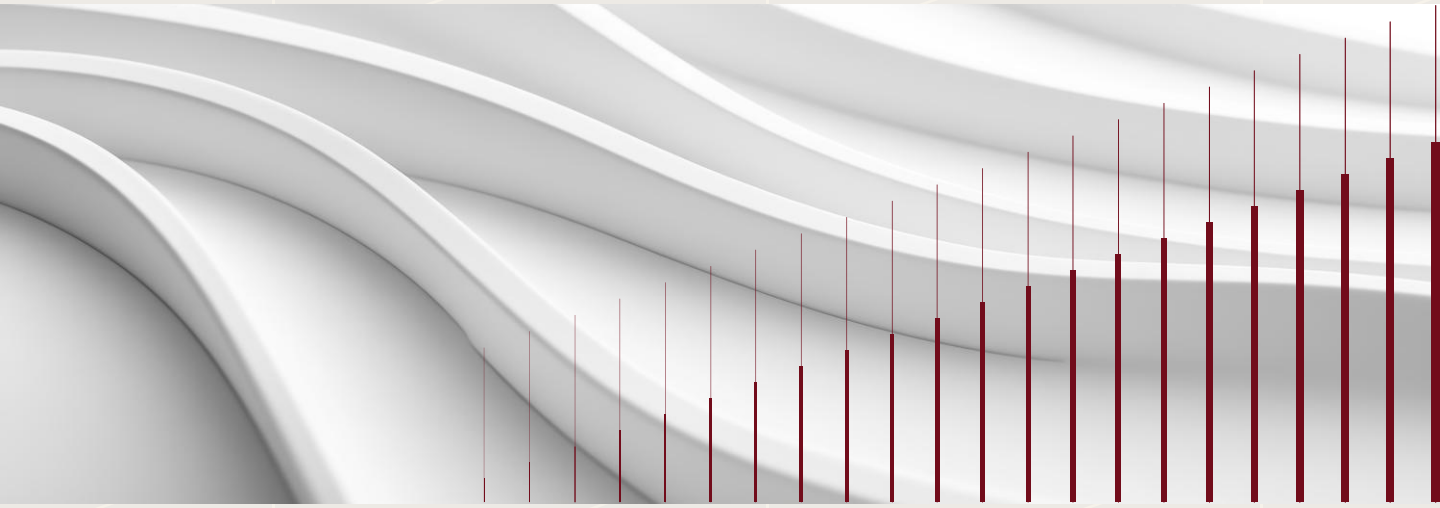
Tech Mahindra & Dell Technologies Synergy: Building the Unified AI Ready Digital Foundation

Many providers address individual components of the AI stack. But fewer can scale, standardize, or integrate AI solutions across infrastructure, data, governance, and operating models in a coordinated way. For instance, some providers focus solely on data management or model development, while only a few offer integrated platforms that manage the entire AI lifecycle from infrastructure to governance.

This is where the combined strengths of Tech Mahindra and Dell Technologies become critical, bridging deep engineering capability with enterprise-scale transformation experience.

Dell Technologies proven infrastructure solutions, together with Tech Mahindra's enterprise transformation frameworks, create a full stack pathway from foundational infrastructure to AI operations.

From our combined perspective, an integrated and scalable approach is a must for deploying enterprise AI systems, ensuring that each layer - from infrastructure to frameworks - is efficiently optimized for AI applications. By focusing on the four pillars, organizations can move from pilot to production with robust security, stability, and scalability while enhancing business value.



Tech Mahindra & Dell Technologies Synergy: Building the Unified AI Ready Digital Foundation

The following diagram illustrates the essential layers required to deploy AI on a large scale. It outlines the responsibilities, showing how infrastructure, data, governance, and orchestration come together to enable enterprise-wide AI.

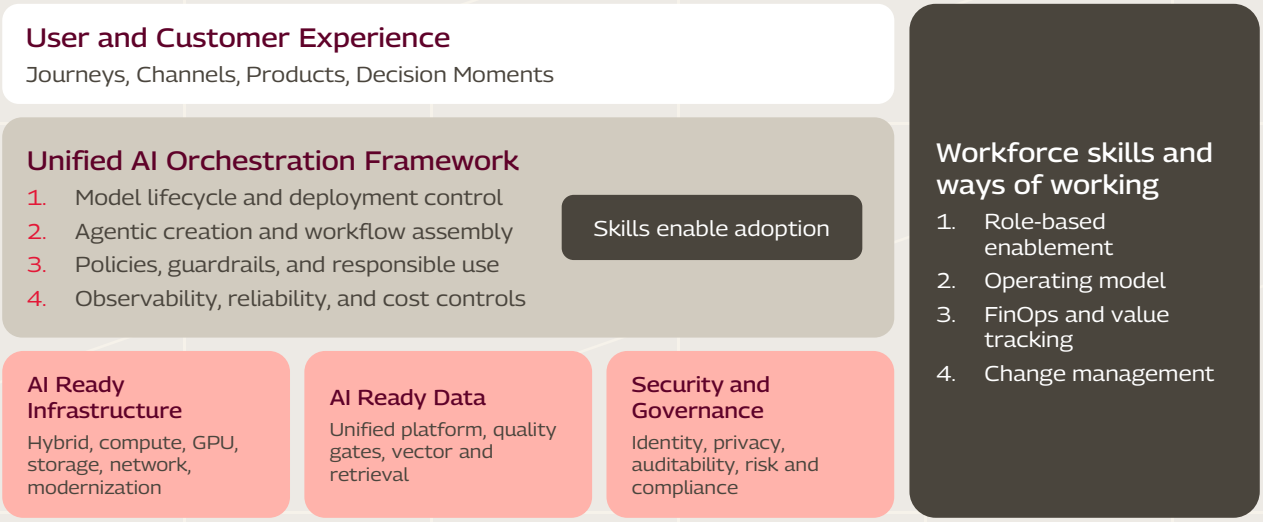


Figure: Practical View of AI Architecture

The Experience Layer sits at the top, supporting customer and employee journeys by serving as the touchpoint for channels and decision-making stages where AI creates value. The middle layer manages models and agentic workflows, enforces policies, maintains observability, and cost controls. AI depends on robust infrastructure, reliable data, and secure, governed systems. The workforce dimension intersects all layers, as successful deployment of AI requires technological and operational changes.

The central point is that organizations must evaluate their AI readiness in all four areas before starting any transformation as every enterprise is at a different stage of maturity. Assessing these gaps forms the foundation for a prioritized roadmap. Rather than addressing all at once, organizations should focus on high-impact areas, deliver early wins, and build momentum while improving core capabilities.

Tech Mahindra & Dell Technologies Synergy: Building the Unified AI Ready Digital Foundation

How We Know This Works

Tech Mahindra and Dell are collaborating to empower enterprises in developing and deploying AI use cases at scale by establishing a robust AI-ready digital foundation. Dell provides its extensive expertise in infrastructure and platform engineering, validated by thousands of enterprises, while Tech Mahindra brings its rich experience in enterprise transformation, guiding organizations through complex technological and organizational changes. Together, we are crafting a comprehensive strategy to build an AI-ready foundation and accelerate the scaling of AI initiatives.

We have worked with enterprises across financial services, telecommunications, healthcare, retail, and other industries. And we are already taking these organizations to the Agentic AI maturity.

Because of our experience collaborating with them, we know what truly matters:

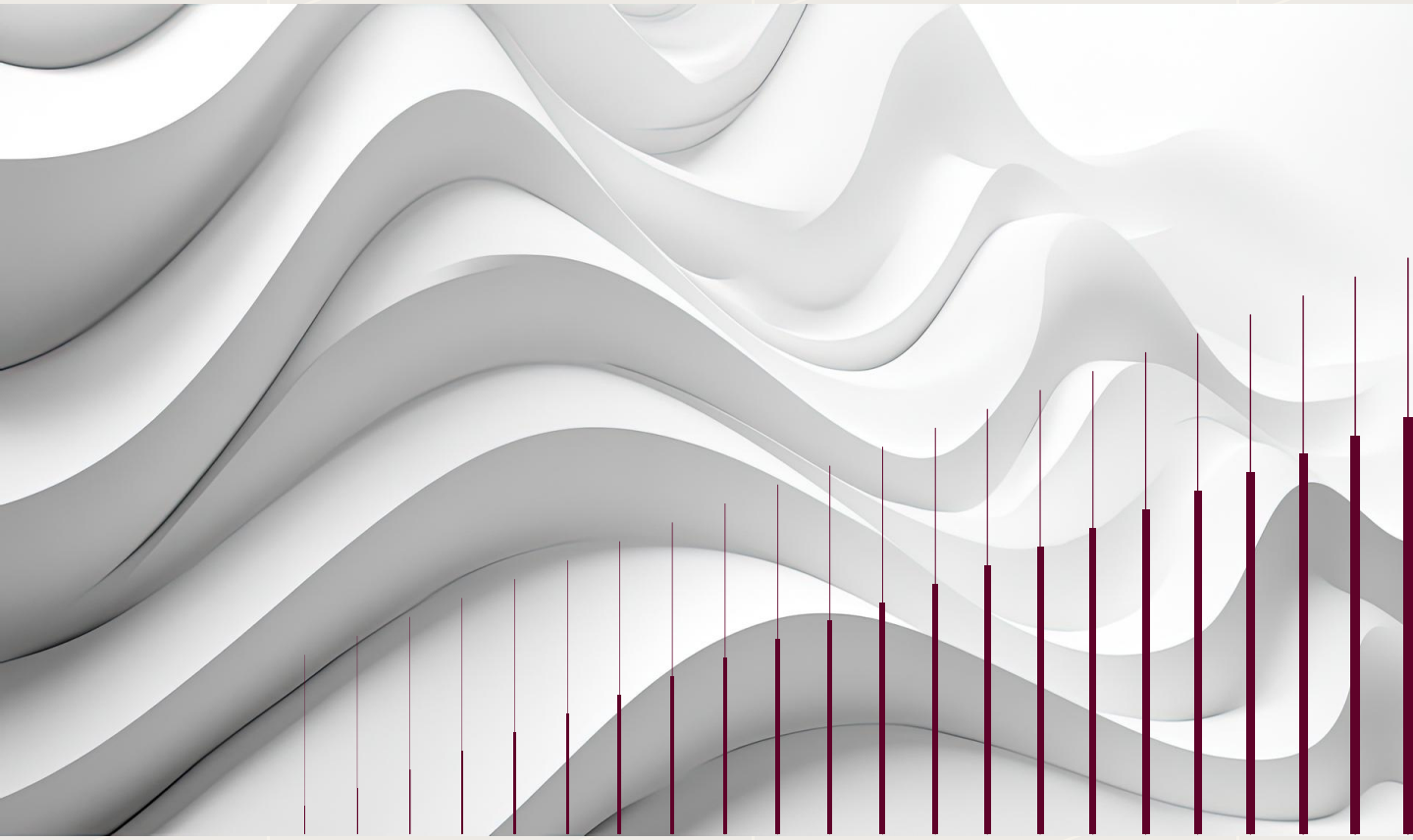
- How this foundation can be built?
- Which sequencing works?
- How to navigate organizational challenges?
- How to measure progress and demonstrate value?

Our combined experience shows that organizations that successfully expand AI are those that effectively address technology infrastructure, data, workforce and governance, and orchestration in a coordinated and holistic manner. We have used such frameworks and best practices in our offering to accelerate this journey.

Getting Started

The bigger picture is that the enterprises that will lead in the next decade will be the ones that build mature, integrated foundations across infrastructure, data, workforce, and governance to operationalize AI at scale. Those who invest early to strengthen these foundations will successfully deploy AI with confidence and deliver measurable business results. And those who do not will continue to pilot, reset, and fall behind.

A comprehensive approach by Tech Mahindra and Dell can help you build this foundation and scale AI at speed by integrating assessment, prioritized roadmaps, and phased implementation across all four pillars tailored to the specific challenges of your organization, industry, and regulatory context. To explore how this approach applies to your organization and the specific solutions that can be designed for your environment, we invite you to engage with our joint team for a deeper conversation.



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