



Arabia Center of Excellence Whitepaper



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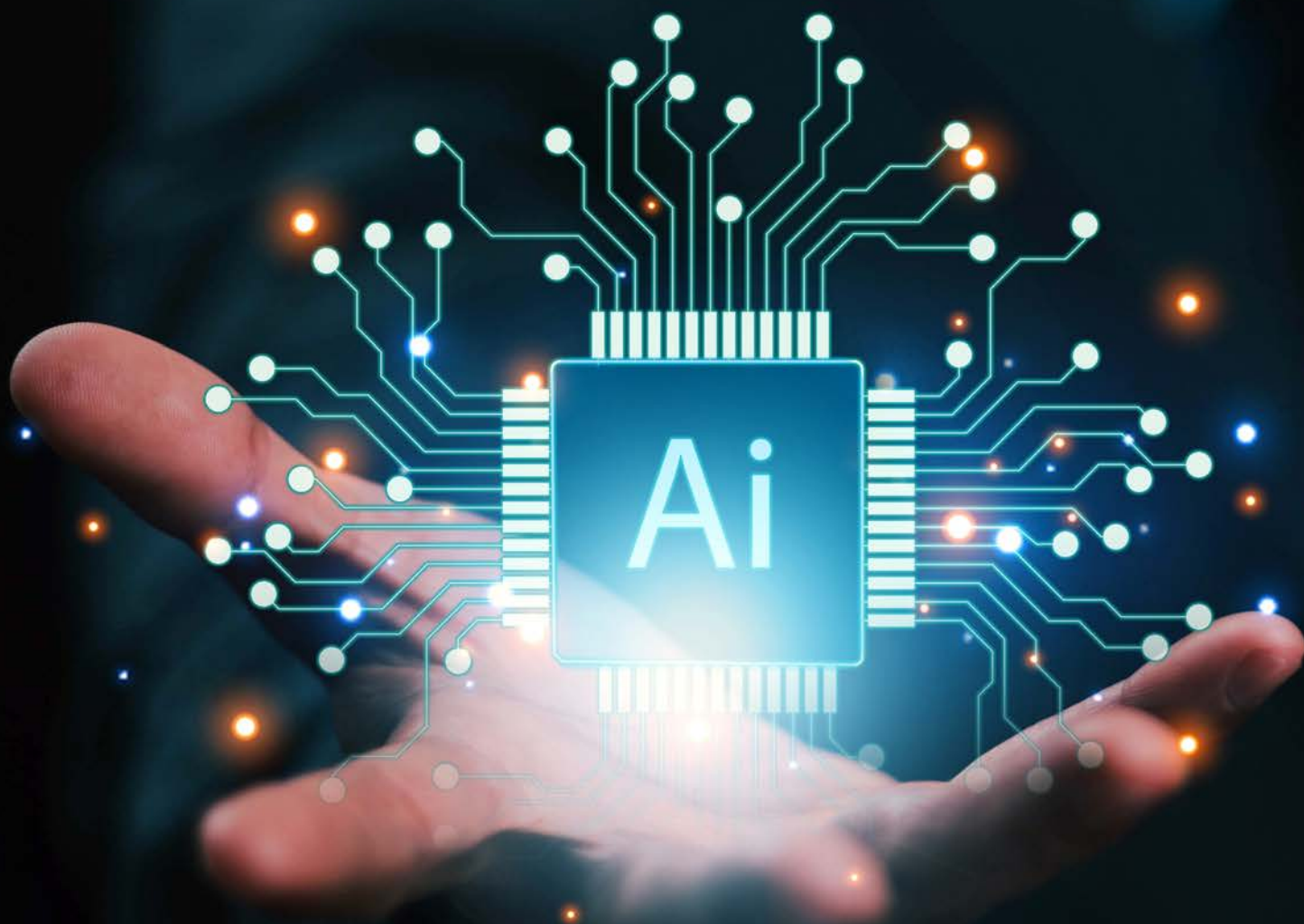
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المجالس القطاعية للمهارات
Sector Skills Councils

S&P Global

“Bridging the Critical Gap Between AI Strategy & Execution”



FOREWORD

From AI Ambition to AI Leadership: Building the Foundations for Sustainable Economic Transformation

Artificial intelligence represents one of the defining opportunities of our generation. Governments and businesses worldwide are investing heavily in digital infrastructure, advanced computing and intelligent technologies. Yet success will not be measured by investment alone, but by how effectively nations and enterprises convert technological capability into economic growth, innovation and societal value.

Saudi Arabia has embraced this opportunity with a clear national vision. Under Vision 2030, AI is positioned not simply as a technology initiative, but as a catalyst for economic diversification, productivity and global competitiveness. Realising that ambition requires more than world-class infrastructure. It demands an integrated ecosystem where technology, talent, innovation, governance and collaboration advance together.

The insights presented in this white paper culminate an expert engagement programme undertaken by the AI Arabia Center of Excellence. They were synthesised from six executive podcasts and a six-session Advisory Board Roundtable involving more than 50 international thought leaders, policymakers, executives, researchers and technology innovators. Together, they developed practical recommendations to help organisations move from pilot to profit—transforming experimentation into measurable business value and sustainable economic impact.

The *Sector Skills Councils* have engaged as a key stakeholder, helping to align the white paper's findings with sector-specific skills needs, evolving industry demand and the workforce priorities identified by Council members.

A consistent message emerged: infrastructure provides the foundation for AI, but it is not the destination. Secure cloud platforms, resilient digital infrastructure and advanced capabilities create the conditions for transformation, yet

their value is realised only when organisations possess the leadership, talent and governance to deploy them effectively. Human capability remains essential to transforming technology into innovation and measurable outcomes.

Innovation also depends on vibrant ecosystems. Governments, start-ups, universities, technology providers and enterprises each have a role in accelerating AI adoption. Public-private partnerships enable ideas to become commercial solutions and technologies to mature into enterprise capabilities. With trusted governance and responsible leadership, these collaborations can drive national competitiveness.

The AI Arabia Center of Excellence was established to accelerate this journey. By convening experts from government, industry and academia, it provides evidence-based dialogue, collaboration and practical recommendations that bridge the gap between AI ambition and enterprise execution. Its objective is to shape AI's future through actionable insights organisations can adopt today.

One conclusion remained constant: the organisations and nations that lead the AI economy will not necessarily have the most advanced technology. They will most effectively combine infrastructure, talent, governance, innovation and strategic leadership to create enduring economic value.

AI is ultimately an enabler—not an end in itself. The greatest opportunity lies in matching investment in technology with investment in people, supporting innovation through collaboration and ensuring that every AI initiative contributes to sustainable growth, competitive advantage and long-term prosperity. This shared ambition underpins the recommendations presented throughout this white paper. ■

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The **AI Arabia Center of Excellence** is a Saudi-based platform, that brings together government, industry, and technology stakeholders to support the Kingdom's transition from AI ambition to real-world execution. The Center of Excellence, which is curated by the region's leading think tank consultancy -- Gulf Intelligence, provides a structured environment in which policymakers, technology leaders, and industry stakeholders can collaborate on translating national AI strategy into measurable economic and societal outcomes. Its mission is to accelerate responsible AI deployment across priority sectors and strengthen Saudi Arabia's position in the global AI economy.

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CHAPTER 1

AI as the Engine of Economic Diversification

How AI Creates New Industries, Productivity and National Competitiveness

AI Is Not the Strategy – Profitable Business Transformation Is

Artificial intelligence has reached a defining moment. Across industries, organizations have invested heavily in AI pilots, proof-of-concepts and experimentation, yet relatively few have translated these initiatives into sustainable commercial value. The challenge is no longer whether AI works. The challenge is how to transform AI from isolated innovation projects into a scalable driver of profitability, competitiveness and long-term growth.

The organizations that will lead the next decade will not necessarily be those with the largest AI budgets or the most sophisticated models. They will be those that use AI as a strategic business capability to create new revenue streams, improve operational performance and build entirely new sources of competitive advantage. AI should therefore be viewed not as a technology strategy, but as a business transformation strategy.

This requires a fundamental shift in mindset. Too often, AI success is measured by the number of pilots completed, models deployed or technologies implemented. While these metrics demonstrate activity, they rarely demonstrate business impact. The true measure of AI maturity is its ability to increase productivity, improve profitability, accelerate innovation and create measurable economic value.

Start With Commercial Outcomes, Not Technology

The most successful AI strategies begin by solving commercially important business problems rather than pursuing technology for its own sake. Organizations should prioritize use cases that deliver measurable financial outcomes, including productivity improvements,

operational efficiency, cost reduction, asset optimization and enhanced customer value.

High-impact applications in predictive maintenance, intelligent operations, supply chain optimization, energy management, customer experience and decision intelligence often produce rapid returns while establishing confidence across the organization. Early success creates momentum, encourages wider adoption and provides leadership teams with tangible evidence that AI can deliver sustainable business value.

Equally important, these financial gains should not simply improve short-term performance. They should become the investment engine for future growth. Organizations that systematically reinvest AI-generated productivity gains into innovation, digital capabilities, workforce development and new business models create a virtuous cycle of continuous transformation. Every successful deployment generates additional resources for the next wave of innovation.

This disciplined investment model also reduces implementation risk. Rather than attempting enterprise-wide transformation from the outset, organizations can build scalable capability through a portfolio of high-value initiatives that collectively reshape the business over time. AI moves from being an experimental technology to becoming an operating model for sustainable growth.

However, profitable transformation requires organizations to look beyond improving existing business models. AI creates its greatest strategic value when it enables entirely new products, services, markets and revenue opportunities. Companies that use AI solely to automate current operations may improve efficiency, but organizations that leverage AI to create new value propositions will define future markets.

Competitive advantage will belong to those that integrate AI into the core of their business strategy, align investment with measurable commercial outcomes and continuously reinvest the value created into future growth.

Build an AI Operating Model for Long-Term Competitive Advantage

Technology alone will never determine competitive advantage. Sustainable success depends on building organizational capability that combines people, processes, governance and innovation into a single transformation agenda.

Human capital remains the most valuable AI investment any organization can make. Developing AI-literate leaders, multidisciplinary teams and digitally skilled employees ensures that technology adoption is matched by organizational readiness. Upskilling should extend beyond technical specialists to include executives, operational managers and frontline employees responsible for embedding AI into everyday decision-making.

Leadership commitment is equally critical. AI initiatives must be owned by business leaders with accountability for commercial outcomes rather than being confined to technology departments. When AI is aligned with corporate strategy and measured through profitability, productivity and customer value, investment decisions become clearer and adoption accelerates across the enterprise.

Long-term success also depends on integrating sustainability into AI strategy. Intelligent resource management, energy optimization, circular business models and data-driven operational efficiency enable

organizations to reduce costs while strengthening environmental performance. Increasingly, investors, customers and regulators expect profitability and sustainability to reinforce rather than compete with one another. AI provides the capability to achieve both simultaneously.

Perhaps the greatest competitive opportunity lies in treating AI not as a collection of individual projects but as the foundation of a continuously evolving business model. Organizations should build integrated innovation ecosystems that connect operational excellence, workforce capability, digital infrastructure and commercial innovation into a unified enterprise strategy. This creates resilience, accelerates market responsiveness and positions businesses to capitalize on emerging opportunities as technologies continue to evolve.

The competitive landscape is shifting rapidly. AI will not differentiate organizations simply because they adopt it. Competitive advantage will belong to those that integrate AI into the core of their business strategy, align investment with measurable commercial outcomes and continuously reinvest the value created into future growth.

The organizations that outperform in the AI economy will not be those running the most pilots. They will be those that consistently convert intelligence into profitability, productivity into innovation, and technology into long-term enterprise value. ■

Unlock New High-Value Industries Through AI



Rana Zama
Chairwoman, Women Mining Association – Kingdom of Saudi Arabia

Artificial intelligence should be viewed not simply as a tool for improving existing industries but as the foundation for creating entirely new economic sectors. While resource-rich economies have traditionally relied on hydrocarbons, mining, and heavy industry, AI presents an opportunity to expand into advanced manufacturing, biotechnology, digital health, intelligent tourism, robotics, and knowledge-intensive services.

The greatest economic value lies in applying AI across the full industrial value chain—from exploration and predictive maintenance to autonomous operations and advanced manufacturing. Smart factories, AI-enabled mineral exploration, digital financial ecosystems, and precision healthcare demonstrate how emerging technologies can create industries that generate higher-value employment while strengthening national competitiveness.

Rather than replacing traditional sectors, AI enables them to become innovation platforms that stimulate wider economic diversification. Improvements in productivity lower operating costs, increase efficiency, and free investment capital for new industries capable of competing globally.

Countries that successfully integrate AI into both established and emerging sectors will build more resilient economies that are less dependent on commodity cycles. Economic diversification therefore becomes a process of creating entirely new sources of national value rather than merely improving existing production. AI provides the technological catalyst to transform resource wealth into diversified, innovation-led growth capable of sustaining long-term prosperity. ■

Prioritise High-ROI AI Use Cases That Fund Future Innovation



Thanakarthik Kumar
Founder & CEO, Sustainabyte Technologies Private Limited

Economic diversification succeeds when AI investments generate measurable business value before expanding into broader transformation initiatives. Rather than pursuing technology for its own sake, organisations should first identify practical applications that deliver immediate operational improvements, clear financial returns, and demonstrable productivity gains.

Energy efficiency, industrial optimisation, predictive maintenance, and intelligent resource management represent ideal starting points because they reduce costs while improving environmental performance. Early successes build confidence among investors, encourage wider adoption across industry, and establish evidence that AI creates tangible economic outcomes rather than speculative promise.

This approach also creates a sustainable investment cycle. Savings generated from high-performing AI deployments

can be reinvested into workforce development, research, advanced digital infrastructure, and emerging industries. Diversification therefore becomes self-financing, with each successful implementation creating additional capacity for innovation.

Equally important is focusing on existing operational challenges before introducing entirely new technologies. Enhancing proven systems with AI often delivers greater economic impact than replacing them outright. Incremental improvements reduce implementation risk while accelerating adoption across both public and private sectors.

Economic transformation is therefore driven by disciplined investment, measurable outcomes, and continuous reinvestment. AI delivers its greatest national impact when productivity gains today become the funding mechanism for tomorrow's innovation economy. ■

Build the Talent That Will Build the Future Economy



Abdullah AlSalmani
TEDx Speaker, Co-Founder & CEO, SpacePoint

No nation can achieve sustainable AI-driven economic diversification without first developing the people capable of creating, deploying, and continually improving advanced technologies. Infrastructure, investment, and digital platforms are important, but human capability remains the decisive competitive advantage.

Preparing the future workforce requires education systems that move beyond theory towards practical experience in engineering, artificial intelligence, robotics, data science, and emerging technologies. Students should be exposed to real-world projects from an early age, developing the technical confidence needed to solve complex industrial challenges and build entirely new enterprises.

Economic diversification depends not only on adopting imported technologies but also on creating domestic innovation capacity. Developing engineers, entrepreneurs,

researchers, and technology leaders ensures that future industries are designed, owned, and scaled locally rather than remaining dependent on external expertise.

Strong partnerships between education providers, government, and industry accelerate this process by aligning skills development with emerging economic priorities. Practical learning environments also encourage entrepreneurship, enabling young innovators to transform technical knowledge into commercially viable businesses.

AI ultimately creates opportunities at the intersection of multiple disciplines, combining engineering, sustainability, space technology, digital services, manufacturing, and scientific research. Building multidisciplinary talent today establishes the foundation for resilient knowledge economies capable of sustaining long-term innovation, attracting investment, and generating globally competitive industries for decades to come. ■

Align AI With Sustainable Economic Transformation



Dr. Mohammed Al-Surf
Managing Director, Tilad Sustainability Co. & Tilad Institute;
Founder & CEO, Saudi Green Building Alliance

Economic diversification should pursue long-term resilience rather than short-term technological adoption. Artificial intelligence provides an opportunity to improve productivity while simultaneously advancing sustainability, resource efficiency, and environmental performance across both existing and emerging industries.

The greatest value emerges when AI supports national sustainability objectives through smarter buildings, intelligent infrastructure, efficient energy systems, water optimisation, circular economy initiatives, and low-carbon industrial development. These applications strengthen economic competitiveness while reducing resource intensity and improving environmental outcomes.

Resource-rich economies possess a unique opportunity to become global leaders in sustainable industrial transformation by combining natural resource advantages with advanced digital capabilities. AI enables industries

to optimise operations, reduce waste, improve asset performance, and make better long-term investment decisions based on predictive insights rather than reactive management.

Diversification should therefore be evaluated not only by the number of new industries created but also by the quality, resilience, and sustainability of future economic growth. Technology investments that deliver commercial value while strengthening environmental performance generate broader benefits for governments, businesses, and society.

Successful AI strategies will integrate economic development with sustainability rather than treating them as separate priorities. By embedding intelligence across infrastructure, industry, and urban development, countries can create diversified economies that are simultaneously more competitive, more resilient, and better prepared for future environmental and economic challenges. ■

CHAPTER 2

From AI Innovation to Enterprise Scale

Building the Operating Model for AI Execution

The organizations that will lead the AI economy will not be those that innovate the fastest, but those that execute the best. Enterprise AI success depends on shifting the conversation from experimentation to business outcomes through governance, accountability, commercial ownership and disciplined execution.

Artificial intelligence has entered a new phase of maturity. The technology has moved beyond experimentation, and most organizations no longer question whether AI has strategic value. Instead, the defining challenge has become execution. Across industries, countless organizations have launched AI pilots, innovation labs and proof-of-concepts, yet relatively few have successfully embedded AI into the operating model of the enterprise or generated sustained commercial returns.

The next generation of AI leaders will not be defined by how many models they build or how quickly they adopt new technologies. They will be distinguished by their ability to translate innovation into measurable business outcomes at scale. The competitive advantage of the AI era will belong to organizations that transform AI from isolated technical initiatives into enterprise capabilities that improve productivity, profitability, customer value and long-term competitiveness.

This requires moving beyond technology-first thinking. Innovation alone is not a business strategy. AI only becomes strategically valuable when it solves meaningful business problems, aligns with commercial priorities and delivers measurable operational impact. Every AI initiative should therefore begin with a simple question: what business outcome is this intended to improve?

Measure Business Value, Not Technical Activity

Many organizations continue to evaluate AI success through technical metrics such as the number of pilots completed, models deployed or use cases developed. While these indicators demonstrate progress, they

rarely demonstrate value. Executive leadership requires a different language—one based on revenue growth, productivity improvements, cost efficiency, customer experience, operational resilience and profitability.

Starting with business outcomes fundamentally changes how AI is deployed. High-value commercial objectives naturally determine where data investments should be made, which technology foundations require modernization and where executive accountability should reside. Governance also becomes more practical because risk management can be embedded around real business processes rather than theoretical technology frameworks. Execution begins by aligning innovation with enterprise demand. AI should address clearly defined operational pain points or strategic growth opportunities rather than being developed in isolation. Organizations that innovate without business demand often create technically impressive solutions that struggle to achieve enterprise adoption. Conversely, when innovation is directly linked to commercial priorities, AI becomes an accelerator of business transformation rather than an experimental technology program.

Scaling AI also requires strong operational discipline. Every major initiative should have an executive owner responsible for both implementation and measurable business performance. Accountability cannot remain within technology teams alone. Business leaders must own AI outcomes with the same responsibility they hold for financial performance, operational excellence and customer satisfaction. This alignment ensures that investment decisions remain focused on enterprise value rather than technological novelty.

Build an Enterprise Operating Model for AI Scale

Sustainable AI adoption depends on building the organizational foundations that allow innovation to scale repeatedly across the enterprise. Modern data



Every major initiative should have an executive owner responsible for both implementation and measurable business performance. Accountability cannot remain within technology teams alone.

architectures, deployment-ready technology platforms and interoperable digital ecosystems are no longer optional—they are prerequisites for enterprise AI. Organizations cannot expect intelligent systems to perform effectively when data remains fragmented, inconsistent or inaccessible across business functions. Equally important is embedding governance from the outset rather than treating it as a compliance exercise after deployment. Security, transparency, accountability and resilience should be integrated into every stage of the AI lifecycle. Governance should accelerate adoption by increasing trust, improving decision quality and reducing operational risk rather than slowing innovation.

Enterprise AI also requires continuous workforce readiness. Employees need practical guidance on how AI should be applied, where human oversight remains essential and how intelligent systems fit within existing business processes. AI should become an integrated business capability rather than a collection of disconnected experiments pursued by individual teams.

Perhaps the most significant strategic lesson is that AI scaling is not a technology challenge—it is an

operating model challenge. Organizations must integrate commercial strategy, executive ownership, governance, data, technology and workforce capability into a single transformation framework. When these components operate independently, AI remains trapped in pilot mode. When they operate together, AI becomes embedded within the core business and begins delivering repeatable competitive advantage.

The organizations that dominate the next decade will not necessarily invent the most advanced AI technologies. They will be those that consistently execute better than their competitors—aligning innovation with business demand, measuring success through commercial outcomes, assigning clear ownership, strengthening governance and building enterprise capabilities that can scale with confidence.

Artificial intelligence has already proven its technical potential. The competitive question now is no longer whether organizations can innovate. It is whether they can execute with enough discipline to transform innovation into profitability, operational excellence and sustainable enterprise growth. ■

Measure AI Through Business Outcomes



Maha Albrahim
Vice President, Enterprise Partner Solutions, Microsoft Saudi Arabia

Artificial intelligence has reached a stage where technical innovation alone is no longer enough. The real challenge facing organizations is translating AI into measurable enterprise value. Too many AI initiatives continue to be evaluated by the number of pilots launched, models deployed or technical capabilities demonstrated. While these indicators reflect progress, they do not explain whether AI is improving business performance.

Organizations should instead begin with clearly defined business outcomes. Productivity improvements, revenue growth, cost efficiency, customer experience and operational performance provide a common language that aligns business leaders with technology teams. When commercial objectives become the starting point, every subsequent decision—including investment priorities, governance, ownership and technology architecture—

naturally aligns with creating enterprise value.

An outcome-led approach also improves innovation itself. Startups, research institutions and technology providers become focused on solving real business problems with proven demand rather than developing solutions without a commercial pathway. Governance becomes more practical because controls are embedded within operational deployment rather than added retrospectively. Executive accountability also becomes clearer because every business outcome has a responsible sponsor.

Enterprise AI will scale only when organizations shift their focus from experimentation to measurable impact. Success belongs to organizations that make business value—not technology deployment—the defining metric of AI transformation. ■

Business Economics Must Drive AI Adoption



Junaid Aziz
Founder & Principal Advisor, Cognitive Commerce (Cogmerce)

Scaling artificial intelligence requires organizations to treat AI as a commercial investment rather than a technology initiative. Every deployment should be evaluated through a business lens, balancing implementation costs against measurable returns. AI models, infrastructure and compute continue to evolve rapidly, but commercial discipline remains the constant factor that determines long-term success.

Business outcomes should therefore define the AI roadmap. Organizations must understand where AI creates value, where premium capabilities justify higher costs and where simpler solutions generate better returns. AI becomes another component of the enterprise talent model, deployed where it creates the greatest commercial advantage while maintaining economic sustainability.

Strong business economics must also be supported by modern data

foundations. Many organizations continue to struggle with fragmented data, legacy spreadsheets and inconsistent governance. Today's AI technologies provide an opportunity to modernize these environments by transforming unstructured information into enterprise-ready assets capable of supporting intelligent decision-making.

Equally important is organizational accountability. AI cannot remain a collection of disconnected experiments owned by individual departments. Executive ownership, governance frameworks and workforce readiness are essential for scaling deployment responsibly. Every AI initiative should operate like any other business function, with clear leadership, defined objectives and measurable commercial outcomes. Enterprise AI succeeds when disciplined execution replaces isolated experimentation. ■

Ownership & Accountability Turn Innovation into Scale



Dr. Antonio Feraco
Founder & CEO, Machina Mentis

Artificial intelligence only creates enterprise value when organizations establish clear ownership for deployment. Innovation without accountability rarely scales because responsibility becomes fragmented across technology teams, business units and leadership. Successful enterprise AI requires defined ownership at every stage of implementation.

AI initiatives should always begin with clearly identified business challenges or market opportunities. Organizations should avoid pursuing innovation simply because new technologies are available. Enterprise deployment succeeds when AI addresses specific operational pain points supported by well-defined business cases and measurable objectives.

Clear ownership also strengthens governance, accelerates decision-making and improves organizational alignment. Executive sponsors become responsible for delivering business value rather than simply overseeing

technology implementation. Accountability ensures that AI investments remain connected to strategic priorities and measurable enterprise outcomes throughout the deployment lifecycle.

Strong technology foundations remain equally important. High-quality data, modern architectures and scalable platforms provide the infrastructure upon which enterprise AI depends. Without these foundations, even the most sophisticated models struggle to deliver consistent business value.

Enterprise AI should therefore be viewed as an organizational capability rather than a technology project. Commercial demand, executive ownership, deployment readiness and scalable technology together create the conditions for sustainable AI adoption. Organizations that combine these elements effectively will move beyond innovation toward repeatable enterprise transformation. ■



Governance must Enable Enterprise AI at Scale



Jay Sadiq
Founder & CEO, FortyGuard

As artificial intelligence becomes embedded across enterprise operations, governance can no longer be viewed as a compliance exercise that follows deployment. Governance must be designed into AI systems from the outset to establish trust, reduce operational risk and enable confident enterprise adoption.

Organizations increasingly depend on intelligent systems to support strategic decisions, automate business processes and improve customer outcomes. Without robust governance frameworks, transparency, security and resilience, AI adoption becomes difficult to scale across complex enterprise environments. Trust becomes the foundation upon which innovation succeeds.

Effective governance extends beyond regulatory compliance. It defines accountability, establishes risk management processes and creates clear

operating principles for responsible AI deployment. Embedding these controls early allows organizations to innovate with greater confidence while protecting customers, employees and enterprise data.

Governance also strengthens collaboration between business leaders, technology teams and operational functions by providing consistent standards for decision-making. Rather than slowing innovation, it reduces uncertainty and enables faster deployment of AI capabilities across the organization.

The organizations that achieve enterprise-scale AI will not simply develop more sophisticated models. They will create trusted operating environments where innovation, security and accountability work together to support continuous growth. Responsible governance is therefore not a barrier to AI adoption—it is one of its most important strategic enablers. ■

Align Innovation with Enterprise Demand



Farid Urbano
Head of Strategy Management Office, Tamkeen Technologies

Artificial intelligence creates value only when innovation is closely aligned with genuine business demand. Too often, organizations develop promising AI solutions that fail to achieve enterprise adoption because they address technology opportunities rather than operational priorities.

Successful AI deployment begins with understanding the strategic objectives of the organization. Every innovation initiative should be linked to clearly defined business challenges, customer needs or opportunities for operational improvement. This alignment ensures that AI investments generate measurable commercial returns while increasing organizational confidence in enterprise-wide adoption.

Innovation ecosystems also depend on stronger collaboration between business leaders, technology providers, research institutions and

implementation teams. AI development should be driven by real market demand rather than isolated experimentation. When innovation responds directly to enterprise priorities, organizations shorten deployment cycles, reduce implementation risk and accelerate value creation.

Commercial alignment also improves investment decisions. Organizations can prioritize projects that deliver the greatest strategic impact while avoiding fragmented initiatives that consume resources without producing sustainable outcomes.

Enterprise AI is ultimately an execution challenge rather than an innovation challenge. Organizations that continuously align emerging technologies with evolving business priorities will build scalable AI capabilities capable of improving competitiveness, productivity and long-term enterprise performance. ■

CHAPTER 3

Talent is the Real Infrastructure of the AI Economy

Developing the Skills, Leadership and Workforce for an Intelligent Future



Talent Is the Real Infrastructure of the AI Economy

Artificial intelligence is transforming every industry at extraordinary speed. Organizations and governments continue to invest billions in cloud infrastructure, advanced computing, foundation models and digital platforms in pursuit of competitive advantage. Yet despite this unprecedented investment, one critical reality is becoming increasingly clear: technology alone will not determine who succeeds in the AI economy.

The greatest differentiator will not be access to compute, data or algorithms. It will be the quality of the people who can build, govern, deploy and continuously adapt these technologies as they evolve. AI is often described as a technology revolution, but its long-term success depends on something far more fundamental—a workforce capable of turning technological capability into sustainable economic value.

As artificial intelligence becomes embedded across every function of the enterprise, organizations face a growing paradox. While AI systems are becoming increasingly intelligent, many organizations remain constrained by outdated approaches to education, workforce development and leadership. The result is a widening gap between technological capability and organizational readiness. Closing that gap will define the next generation of AI leaders.

Technology Can Be Purchased. Human Capability Must Be Built.

Every major technology transformation ultimately succeeds or fails because of people. Infrastructure can be financed. Software can be licensed. Models can be deployed. But none of these investments create lasting competitive advantage unless organizations possess the talent required to apply them effectively.

For too long, AI investment has been viewed primarily through the lens of technology acquisition. Organizations

proudly announce investments in data platforms, cloud migration and AI pilots while investing comparatively little in developing AI-ready leaders, multidisciplinary teams and digitally confident workforces. This imbalance creates an increasingly common problem: organizations own advanced technology but lack the organizational capability to scale it successfully.

Preparing for the AI economy requires a fundamental rethinking of workforce development. Education can no longer end at graduation or consist of occasional corporate training programmes. As AI technologies evolve continuously, learning must become continuous as well. Lifelong learning should become an organizational capability embedded within business strategy rather than an isolated human resources initiative.

This transformation extends beyond technical skills. AI professionals require expertise in engineering, data science and machine learning, but future competitiveness will depend equally on critical thinking, creativity, ethical judgment, systems thinking and interdisciplinary collaboration. The organizations that outperform will cultivate workforces capable not only of using AI, but of questioning it, governing it and improving it.

Equally important is leadership capability. Executive teams must understand AI not simply as a technology investment but as a strategic business capability that influences operating models, customer engagement, workforce productivity and long-term competitiveness. AI transformation requires leaders capable of making informed decisions about risk, governance, investment priorities and organizational change.

Build Talent Ecosystems, Not Training Programmes

Developing AI capability cannot become the responsibility of education institutions alone. The pace of technological change now exceeds the ability of traditional education systems to adapt independently. Closing this gap requires closer collaboration between governments, universities, technology providers and industry to create talent

Organizations that invest in talent with the same urgency that they invest in technology will build the resilience, adaptability and innovation capacity needed to thrive in an increasingly intelligent world.



ecosystems that continuously evolve alongside market demand.

Organizations should play a far more active role in shaping future workforce capability by partnering with academic institutions, supporting applied research, creating practical learning opportunities and helping define emerging skills requirements. This collaborative approach shortens the gap between education and employment while ensuring graduates develop capabilities aligned with real business needs rather than historical curricula.

Equally significant is the need to redefine how AI success is measured. Most organizations evaluate AI through technology metrics such as infrastructure investment, model performance, deployment rates or the number of completed use cases. While these indicators remain important, they overlook the factor that ultimately determines whether AI creates enterprise value—human capability.

Organizations should begin measuring workforce readiness with the same discipline they apply to measuring financial performance. AI literacy, leadership capability, workforce confidence, critical thinking, governance maturity and responsible decision-making should become strategic performance indicators. What organizations choose to measure ultimately shapes where they invest, and where they invest determines their future competitiveness.

As AI assumes responsibility for increasingly routine analytical tasks, uniquely human capabilities become even more valuable. Critical thinking, ethical judgment, creativity, collaboration and contextual decision-making represent enduring competitive advantages that intelligent systems cannot easily replicate. AI should therefore be

viewed as a force for augmenting human capability rather than replacing it.

The organizations that succeed will be those that deliberately design work so that artificial intelligence enhances human intelligence. Intelligent systems should automate repetitive processes, improve decision quality and free employees to focus on innovation, relationship building and strategic thinking. This creates a workforce that becomes more productive without becoming less human.

The future of AI will not be determined solely by advances in algorithms or computing power. Those technologies will continue to improve regardless. The defining question is whether organizations can develop people capable of applying those technologies responsibly, creatively and at enterprise scale.

The next generation of market leaders will not simply possess better technology. They will build stronger learning cultures, develop more capable leaders, create deeper partnerships between education and industry and invest continuously in workforce transformation. They will recognise that AI is not replacing human capability—it is increasing its importance.

Ultimately, the most valuable infrastructure in the AI economy will not be found in data centres or cloud platforms. It will be found in people. Organizations that invest in talent with the same urgency that they invest in technology will build the resilience, adaptability and innovation capacity needed to thrive in an increasingly intelligent world. In the AI era, human capability is no longer a supporting function—it is the foundation of sustainable competitive advantage. ■

Make Lifelong Learning a National Imperative



Zainab Al Amin
Vice President, National Digital Transformation, Microsoft Saudi Arabia

Artificial intelligence is evolving faster than any previous technological revolution, making continuous learning an essential capability for every organization. Traditional education and periodic professional training are no longer sufficient to prepare workforces for technologies that transform business models, industries and job roles at unprecedented speed. Organizations must embed lifelong learning into their operating strategy rather than treating it as an occasional workforce initiative. Employees at every level—from executives to frontline teams—require opportunities to continuously develop AI literacy, digital capability and strategic thinking as new technologies emerge.

Learning should extend beyond technical proficiency. Successful AI adoption depends equally on leadership capability, adaptability, ethical

decision-making and the confidence to work alongside intelligent systems. Organizations that cultivate curiosity and continuous development will adapt more quickly as AI reshapes markets and competitive landscapes.

Lifelong learning also creates organizational resilience. As technologies evolve, employees equipped with strong learning capabilities can continuously acquire new skills without requiring wholesale workforce replacement. This approach improves productivity, strengthens innovation and enables organizations to respond more effectively to changing customer and market demands.

In the AI economy, learning is no longer a support function. It is a strategic capability that determines whether organizations can sustain innovation, remain competitive and create long-term economic value. ■

Strengthen Public–Private Talent Partnerships



Joseph Alenchery
Senior Vice President & Business Head, EnergyNext, Infosys

The AI economy requires a fundamentally different approach to workforce development. No single organization, university or government can independently produce the volume and diversity of talent needed to sustain rapid technological transformation. Success depends on building collaborative talent ecosystems where education and industry evolve together.

Closer partnerships between universities, governments and private enterprise enable education providers to align curricula with real-world business requirements while giving students practical exposure to emerging technologies. Organizations benefit from graduates who possess immediately applicable skills, while education institutions remain responsive to changing industry demands.

Partnerships should extend beyond curriculum design to include applied research, internships, innovation laboratories, joint development

programmes and continuous professional education. This integrated model accelerates knowledge transfer while creating stronger pathways between education and employment.

AI innovation increasingly depends on multidisciplinary collaboration, bringing together expertise from engineering, business, sustainability, cybersecurity and data science. Public-private partnerships provide the environment where these disciplines can converge around practical challenges with measurable commercial and societal impact.

The organizations and economies that invest in collaborative talent ecosystems today will build stronger innovation capacity tomorrow. Sustainable AI leadership depends not only on developing technology but on creating enduring partnerships capable of continuously producing the people who will shape the future economy. ■

Modernize Education for the AI Economy



Rujuta Singh
AI Transformation & Innovation Partner, Solved Together

Preparing future generations for the AI economy requires more than introducing artificial intelligence into existing curricula. Education itself must evolve to reflect the changing nature of work, innovation and problem solving in an increasingly intelligent world.

Future learning should combine technical capability with creativity, collaboration, critical thinking and practical business application. Students must develop the confidence to work alongside intelligent systems while understanding how AI can solve complex societal and commercial challenges.

Experiential learning should become a defining feature of modern education. Industry partnerships, project-based learning, entrepreneurship programmes and multidisciplinary collaboration provide students with

practical experience that cannot be replicated through traditional classroom instruction alone. This approach produces graduates capable of contributing immediately to AI-enabled organizations.

Modern education must also prepare learners for careers that will evolve continuously throughout their working lives. Adaptability, curiosity and lifelong learning become core competencies rather than supplementary skills. Education should therefore equip individuals with the capability to learn continuously rather than preparing them for a single profession.

The AI economy will reward organizations and nations that cultivate adaptable, innovative and multidisciplinary talent. Education is no longer simply about preparing students for employment—it is about preparing society for continuous technological transformation. ■



Measure Human Capability, Not Just Technology



Kanwal Shahzad
Founder & CEO, AI Policing AI · AISFY · Digidot

Organizations have become highly effective at measuring technology investment, infrastructure deployment and AI implementation. Far less attention has been given to measuring the people responsible for governing these increasingly intelligent systems. Yet human capability remains the most important determinant of successful AI adoption.

As organizations automate more decisions, uniquely human capabilities become increasingly valuable. Critical thinking, judgment, oversight, ethical reasoning and responsible governance determine whether AI enhances organizational performance or introduces new forms of risk. These capabilities should therefore become measurable business assets.

Organizations should evaluate workforce readiness through indicators such as AI literacy, governance maturity, decision quality, human oversight, critical thinking and leadership capability. Measuring these factors provides

a clearer understanding of organizational preparedness while guiding future investment in workforce development.

Artificial intelligence should strengthen human intelligence rather than gradually replacing it. Employees must remain active decision-makers capable of questioning AI recommendations, identifying unintended consequences and maintaining accountability for business outcomes. This requires continuous investment in human capability alongside technological advancement.

The organizations that achieve sustainable AI leadership will not simply possess the most advanced technology. They will develop the strongest human capability to govern, challenge and continuously improve intelligent systems. Measuring people with the same discipline applied to technology investment creates the foundation for long-term competitive advantage. ■

Balance Global Talent Attraction with Local Capability Building



Dr. Chris Cooper
Board Director & Advisor, AI & Technology Companies

Global competition for AI talent continues to intensify as organizations seek experienced leaders, researchers and technical specialists capable of accelerating digital transformation. While attracting international expertise remains essential, sustainable AI leadership ultimately depends on building strong domestic capability.

Organizations should adopt a balanced talent strategy that combines access to world-class expertise with long-term investment in developing local professionals, graduates and emerging leaders. Imported capability accelerates transformation in the short term, while domestic capability creates resilience, continuity and sustainable competitive advantage.

Knowledge transfer should become a strategic objective of every talent acquisition programme. International experts should contribute not only

through technical delivery but through mentoring, capability development and organizational learning that strengthens local expertise over time.

This balanced approach also reduces dependence on increasingly competitive global labour markets while fostering innovation ecosystems rooted in local knowledge, cultural understanding and national priorities. Organizations capable of continuously developing internal talent will adapt more effectively as technologies evolve and workforce requirements change.

Long-term AI success will not be determined solely by the ability to recruit exceptional people. It will depend on creating organizations where global expertise and local capability reinforce one another to build enduring innovation capacity, organizational resilience and sustainable economic growth. ■

CHAPTER 4

Trust is the Currency of the AI Economy

Building Responsible, Secure and Governed AI

Trust is the Currency of the AI Economy

Artificial intelligence is transforming business at an unprecedented pace. Organizations are rapidly deploying intelligent systems to automate decisions, optimize operations, improve customer experiences and unlock entirely new business models. Yet as AI becomes increasingly embedded in critical enterprise functions, one reality is becoming impossible to ignore: technological capability alone is no longer enough.

The organizations that will lead the AI economy will not necessarily be those deploying AI the fastest. They will be those that earn the greatest trust from customers, employees, regulators and investors by embedding governance, security and accountability into every stage of AI adoption.

For many organizations, governance remains an afterthought—a framework introduced once technology has already been deployed. This reactive approach creates unnecessary risk, slows adoption and undermines confidence in AI-enabled decision-making. As intelligent systems assume greater responsibility for business-critical processes, governance must evolve from a compliance function into a strategic enabler of innovation.

The future of AI will therefore be defined not simply by how intelligent systems become, but by how confidently organizations can deploy them at enterprise scale. Trust is rapidly emerging as one of the most valuable competitive assets in the digital economy.

Governance Must Become a Business Capability, Not a Compliance Exercise

Artificial intelligence introduces a level of complexity that traditional governance models were never designed to address. Intelligent systems continuously learn, adapt and generate outputs that directly influence operational decisions, customer interactions and strategic outcomes. Managing this complexity requires governance that is

proactive, integrated and embedded throughout the AI lifecycle.

Organizations should move beyond viewing governance as a collection of policies or regulatory obligations. Instead, governance should function as an enterprise capability that enables innovation by creating confidence in how AI systems are designed, deployed and monitored. Clear accountability, transparent decision-making, explainable AI, robust cybersecurity and responsible data management should become foundational elements of every AI strategy rather than optional safeguards.

Executive ownership is equally important. AI governance cannot remain the exclusive responsibility of technology or compliance teams. Boards, executive leadership and business units must share accountability for ensuring that AI aligns with organizational values, commercial objectives and stakeholder expectations. When governance becomes part of strategic leadership, organizations make better investment decisions, reduce operational risk and accelerate responsible innovation.

Data quality also sits at the heart of trusted AI. Intelligent systems can only produce reliable outcomes when they are built upon accurate, secure and well-governed data. Organizations should therefore invest as heavily in data stewardship, interoperability and cybersecurity as they do in algorithms and computing infrastructure. Trust begins long before an AI model is deployed; it begins with the integrity of the information that powers it.

Responsible AI Creates Sustainable Competitive Advantage

Trust is not simply about avoiding risk. It is increasingly becoming a source of commercial differentiation. Customers are more likely to engage with organizations that demonstrate transparency, fairness and accountability in their use of AI. Investors favour businesses that manage emerging technologies responsibly, while regulators



Organizations that embed governance into the fabric of their business will move beyond responsible AI to achieve something even more valuable – sustainable competitive advantage built on confidence, transparency and long-term resilience.

increasingly expect organizations to prove that AI systems are secure, explainable and aligned with ethical standards.

Organizations that embed responsible AI into their operating model therefore gain advantages that extend beyond regulatory compliance. They build stronger customer relationships, improve employee confidence, accelerate technology adoption and create greater resilience in rapidly changing markets.

Responsible AI also depends on maintaining meaningful human oversight. While intelligent systems excel at analysing data and identifying patterns, accountability for important decisions must remain with people. Human judgment, contextual understanding and ethical reasoning provide safeguards that technology alone cannot replicate. Organizations should design AI to augment human decision-making rather than replacing it entirely.

As AI becomes more autonomous, transparency will become increasingly important. Employees and customers alike need confidence that AI-generated decisions can be understood, challenged and improved. Explainability should therefore become a design principle rather than a technical afterthought. Organizations that can clearly demonstrate how AI reaches decisions will strengthen trust while reducing resistance to adoption.

Equally important is recognizing that governance should evolve continuously alongside technology. AI capabilities are advancing rapidly, and governance frameworks must remain flexible enough to adapt to new risks, regulations and business opportunities. Continuous monitoring,

regular review and cross-functional collaboration should become standard practice for every organization deploying intelligent systems.

The future of AI will not be defined by technology alone. It will be shaped by the confidence organizations inspire through responsible leadership, transparent governance and trusted innovation. Competitive advantage will increasingly belong to organizations that recognize trust as a strategic asset rather than a regulatory obligation.

Artificial intelligence has already demonstrated its ability to improve productivity, automate complex tasks and accelerate innovation. The next phase of AI maturity, however, will be determined by something less technical but far more enduring. Organizations must build environments where employees trust intelligent systems, customers trust AI-enabled services, investors trust governance frameworks and regulators trust organizational accountability.

In the emerging AI economy, trust will become as valuable as data, compute and algorithms. Organizations that embed governance into the fabric of their business will move beyond responsible AI to achieve something even more valuable—sustainable competitive advantage built on confidence, transparency and long-term resilience.

Ultimately, the winners of the AI era will not simply be those with the smartest technology. They will be those that become the most trusted organizations in an increasingly intelligent world. ■

Build AI on Strong Digital Infrastructure



Shayma Kurz
CEO & Founder, Digital Advice Consulting

Artificial intelligence cannot deliver enterprise-wide value without the right digital foundations. While many organizations are eager to deploy AI tools, they often overlook the infrastructure required to support them at scale. Secure connectivity, scalable cloud environments, modern data platforms and robust cybersecurity are no longer optional technology investments—they are prerequisites for successful AI adoption.

Too many organizations attempt to implement AI before establishing the underlying architecture needed to support intelligent systems. This frequently results in pilot projects that fail to progress into enterprise-wide deployment. Infrastructure remains one of the strongest predictors of AI success because it enables organizations to securely process data, scale computing resources and integrate AI into everyday operations.

Cloud transformation is a critical part of this journey. Although migrating from on-premise systems requires significant upfront investment, the long-term benefits include greater flexibility, resilience and operational efficiency. As organizations mature, these investments create a platform capable of supporting continuous innovation while reducing long-term costs.

Infrastructure alone, however, is not enough. Once strong digital foundations are established, organizations must also create trusted data-sharing ecosystems that provide access to high-quality, secure and standardized information across business functions. AI can only generate reliable insights when it is powered by trusted data.

The organizations that will lead the AI economy will not simply adopt the latest AI models—they will first invest in the resilient digital infrastructure that allows innovation to scale with confidence, security and measurable business value. ■

Open Standards will Accelerate the AI Economy



James McCallum, Executive Chairman of Xergy,
Professor of Energy at Strathclyde University

The future of artificial intelligence will not be determined by individual technologies alone, but by how effectively they work together. As organizations deploy increasingly sophisticated AI systems, interoperability and open standards are becoming essential enablers of innovation, performance and global competitiveness.

Digital transformation has already evolved from on-premise infrastructure to cloud computing and open APIs. The next stage is the emergence of standards that allow AI models, software platforms and intelligent agents to communicate seamlessly across organizations. These common protocols create an ecosystem where businesses can adopt best-in-class technologies without becoming constrained by isolated systems or proprietary architectures.

Open standards also encourage innovation. Rather than relying solely on large technology providers, organizations can integrate specialist solutions

from smaller, high-performing companies that contribute new capabilities to a shared digital ecosystem. This collaborative approach accelerates competition, improves performance and expands opportunities for businesses of every size.

Ultimately, competitiveness depends on more than technology investment. It requires transparent data exchange, innovation-friendly architectures and digital environments where organizations can collaborate securely and efficiently. Governments, technology providers and industry leaders all have a role to play in encouraging greater interoperability while supporting responsible innovation.

Organizations that embrace open standards today will be better positioned to innovate faster, integrate emerging AI capabilities more effectively and build resilient digital ecosystems capable of sustaining long-term competitive advantage. ■

Trust Must Become AI's Foundation



Saima Tariq Khan
Founder, OrionsFlow & Senior AI Advisor, Assessed Intelligence

Artificial intelligence is often discussed in terms of computing power, infrastructure and algorithms. Yet its long-term success depends on something far less technical but far more important: trust. Without trust, organizations cannot build the collaborative data ecosystems needed to unlock AI's full potential.

Trusted data-sharing is not simply a technology challenge—it is a governance challenge. Organizations must establish clear rules around consent, transparency, accountability and responsible data use so that individuals and institutions feel confident participating in AI-powered ecosystems. Data ecosystems are ultimately social ecosystems, built on the willingness of people to share information responsibly.

Governance should therefore be viewed as an essential part of digital infrastructure rather than a compliance exercise introduced after deployment. Just as highways require traffic rules to operate safely, digital

infrastructure requires governance frameworks that define how data is collected, shared and protected. Without these foundations, even the most advanced AI systems risk undermining public confidence.

Governments, regulators and industry all have important roles to play in creating consistent frameworks that encourage innovation while protecting individuals. Encouragingly, countries across the Gulf are strengthening privacy regulations and AI governance, creating an environment where trusted innovation can flourish.

As AI adoption accelerates, organizations that embed transparency, accountability and trust into every stage of implementation will build stronger relationships with customers, employees and regulators. In the AI economy, trust is not simply an ethical principle—it is a strategic advantage that enables sustainable innovation and long-term competitiveness. ■



Commercialize Data Before Scaling AI



Dr. Satyam Priyadarshy
Founder & CEO, Reignite Future

The conversation around artificial intelligence often begins with infrastructure—larger data centres, more computing power and increasingly sophisticated AI models. Yet organizations risk making costly investments if they fail to answer one fundamental question first: how will AI create business value?

Before expanding infrastructure, organizations should focus on commercializing their data. AI should enable new products, improve operations and unlock measurable growth rather than simply increasing technology expenditure. Infrastructure without a clear strategy for value creation can become a sunk cost rather than a competitive advantage.

Success requires shifting the conversation from return on investment to return on innovation. Organizations should adopt AI in phases, proving value through targeted use cases before scaling infrastructure and governance. This incremental approach allows businesses to learn, refine

governance frameworks and develop standards as AI capabilities continue to evolve.

Every industry will follow a different path. Manufacturing, energy, healthcare and financial services each have unique operational challenges and data environments. Rather than applying one-size-fits-all solutions, organizations should build sector-specific approaches that reflect their commercial priorities while sharing lessons across industries.

The future of AI will belong to organizations that create value before they scale technology. Infrastructure remains essential, but it should follow innovation—not precede it. By commercializing data first and expanding AI capabilities in measured stages, businesses can achieve sustainable growth while building governance, trust and competitiveness alongside technological progress. ■

CHAPTER 5

Infrastructure Alone Won't Create an AI Economy

Turning Digital Investment into Enterprise Adoption

Artificial intelligence has triggered an unprecedented wave of investment in digital infrastructure. Governments and enterprises around the world are committing billions of dollars to hyperscale data centres, sovereign cloud platforms, high-performance computing, advanced semiconductors and next-generation connectivity. These investments are essential foundations for the AI economy, but they do not, by themselves, create economic value.

The defining challenge of the next decade will not be building AI infrastructure. It will be ensuring that organizations, industries and entire economies possess the capability to use that infrastructure productively.

Too often, discussions about AI competitiveness focus on compute capacity, cloud availability or infrastructure spending. While these assets are critical, they represent only the supply side of the AI economy. Sustainable competitive advantage depends equally on the demand side—the willingness and ability of businesses, governments and workforces to integrate AI into everyday operations and transform it into measurable commercial outcomes.

Infrastructure should therefore be viewed as an enabler rather than an objective. Its true value is realized only when it accelerates innovation, increases productivity and creates entirely new sources of economic growth.

Build AI Infrastructure That Businesses Can Actually Use

The success of AI investment should never be measured by the number of data centres constructed or the volume of computing power deployed. Instead, organizations should ask a more strategic question: how effectively does this infrastructure enable business transformation?

The greatest return on infrastructure investment comes when AI becomes accessible across organizations of every size, from large enterprises to small and medium-sized businesses. Cloud platforms, secure digital ecosystems and scalable computing resources should lower the barriers to AI adoption rather than creating exclusive capabilities

available only to a limited number of organizations.

Accessibility is particularly important because AI adoption remains highly uneven across industries. While leading organizations continue to accelerate their digital transformation, many businesses still lack the technical capability, skilled workforce or financial resources required to deploy AI effectively. Closing this adoption gap is essential if infrastructure investment is to translate into broad-based economic growth.

Organizations must therefore complement infrastructure development with practical enablement programmes that support implementation, workforce capability, executive education and industry-specific adoption strategies. Infrastructure without adoption risks becoming underutilized capacity rather than a catalyst for innovation.

Equally important is designing infrastructure for long-term resilience. AI systems depend on secure cloud environments, trusted data ecosystems, high-performance connectivity and cybersecurity capable of protecting increasingly intelligent digital operations. Organizations should invest in infrastructure that is scalable, interoperable and sufficiently flexible to accommodate future technological advances without requiring constant reinvention.

Measure Infrastructure by the Value It Creates

Artificial intelligence should ultimately be evaluated through business performance rather than technology deployment. Infrastructure investments generate lasting value only when they improve productivity, accelerate innovation, strengthen competitiveness and create measurable economic outcomes.

Organizations should therefore establish clear links between infrastructure investment and commercial performance. AI platforms should support faster product development, improved customer experiences, more efficient operations and new revenue opportunities



Long-term success depends on creating environments where businesses can confidently adopt AI, employees can apply it effectively and leaders can convert technological capability into sustainable commercial value.

rather than existing primarily as technology assets. Every infrastructure decision should be guided by its ability to enable business transformation rather than simply increasing technical capability.

Leadership also plays a decisive role in maximizing infrastructure value. Executive teams should ensure that technology investment remains closely aligned with strategic priorities, organizational capability and measurable return on investment. Infrastructure planning should be integrated into broader business strategy rather than treated as an isolated technology initiative.

Public-private collaboration represents another essential element of successful AI infrastructure. Governments provide the regulatory environment, long-term investment frameworks and national digital strategies that enable innovation, while industry contributes technology expertise, operational experience and commercial execution. Together, these partnerships create AI ecosystems capable of accelerating adoption across entire economies.

The discussion also reinforced an important principle that is becoming increasingly relevant as AI matures: infrastructure alone cannot guarantee competitive advantage. Competitive advantage emerges when organizations combine trusted infrastructure with skilled people, responsible governance, strong leadership and disciplined execution. These elements work together to transform technology investment into enterprise capability.

As AI becomes embedded across every sector, the distinction between digital infrastructure and economic infrastructure will continue to disappear. Cloud platforms, intelligent networks, secure data environments and advanced computing will become as fundamental to economic competitiveness as transportation, energy and communications infrastructure were during previous industrial revolutions.

The organizations and nations that lead the next phase of AI will not simply build larger technology platforms. They will build ecosystems where infrastructure, talent, governance and innovation reinforce one another to accelerate widespread adoption and measurable economic growth.

Artificial intelligence has already demonstrated its extraordinary technical potential. The next chapter of the AI economy will be written by those who understand that infrastructure is only the beginning. Long-term success depends on creating environments where businesses can confidently adopt AI, employees can apply it effectively and leaders can convert technological capability into sustainable commercial value.

Ultimately, the greatest return on AI infrastructure investment will not be measured in servers, data centres or processing power. It will be measured in productivity, profitability, innovation and the creation of resilient economies where artificial intelligence becomes an engine of inclusive and lasting growth. ■

Access to Compute Infrastructure will Determine AI Competitiveness



**Omar AlSheikh, Country Head and Senior Director,
KSA & Bahrain- Energy, Services & Government, Infosys**

Artificial intelligence will not scale through ambition alone. It requires one essential resource that has quickly become the defining constraint on AI adoption: access to compute. While organizations continue to develop innovative AI solutions, many remain unable to move beyond pilot projects because they lack affordable and scalable computing infrastructure.

For this reason, I believe the highest priority is expanding access to compute across the ecosystem. Compute is no longer simply a technology resource—it is becoming a strategic national asset that will determine how successfully countries compete in the AI economy. Widening access allows startups, universities, research institutions and enterprises of every size to participate in innovation rather than concentrating AI capabilities within a small number of large organizations.

Greater accessibility also accelerates transformation across critical sectors including energy, healthcare, financial services and government. When computing resources are available at scale and on demand, organizations can deploy AI more rapidly, improve productivity and create measurable business value. Democratizing access therefore strengthens both enterprise performance and national competitiveness.

National AI strategies should embed accessibility as a core design principle rather than treating it as a secondary consideration. Infrastructure investments must be accompanied by policies that ensure organizations across the economy can benefit from them. The nations that succeed in the AI era will not necessarily be those with the greatest computing capacity, but those that make compute broadly accessible, enabling innovation, economic growth and scalable AI adoption across every sector. ■

Expand Access Before Expanding Capacity



**Hany Azzam
Customer Success Lead, Microsoft Saudi Arabia**

If artificial intelligence is to become a true engine of economic growth, expanding access to compute must become a national priority. While discussions around AI infrastructure often focus on the number of data centres, GPUs and computing capacity being deployed, infrastructure alone does not create value. Its value is realized only when organizations across the economy can access, adopt and use it effectively.

For this reason, I believe the most important recommendation is expanding access to compute across the ecosystem. National AI strategies and public-private partnerships are essential for building supply, but access is what transforms infrastructure into enterprise adoption. Startups, hospitals, universities and government agencies all need affordable, secure access to computing resources if AI is to deliver widespread economic impact rather

than isolated success stories.

Success should not be measured by the amount of infrastructure deployed, but by the outcomes it enables. Higher adoption rates, greater productivity, enterprise transformation and measurable economic gains are stronger indicators of progress than compute capacity alone. Underutilized infrastructure represents stranded investment, not innovation.

However, access alone is insufficient. Nations must also invest in the people capable of using AI effectively. Developers, security specialists, business leaders and change management professionals all play critical roles in translating infrastructure into business value. Compute and capability must grow together. Only then will national AI infrastructure become a catalyst for sustainable innovation and long-term competitiveness. ■

Measure AI Infrastructure by Economic Value



**Ramy AlDamati
Chief Metaverse & AI Strategy Officer, MetaServe Middle East**

Building national AI infrastructure is only the first step. The greater challenge is ensuring that these investments generate measurable economic outcomes. For this reason, I believe the most important recommendation is linking AI infrastructure investment to economic value.

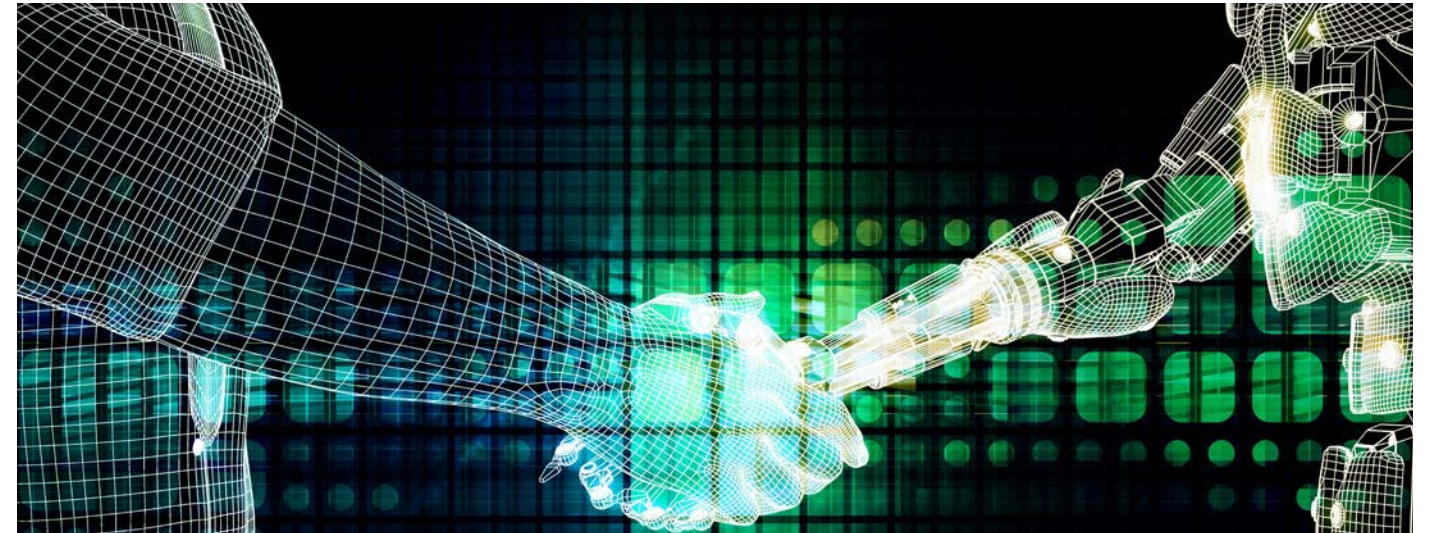
The first four recommendations—national strategies, access to compute, public-private partnerships and resilient infrastructure—create the capability to deploy AI. The fifth recommendation asks a more important question: what value does that capability produce? Nations should evaluate AI investments by their ability to increase productivity, strengthen competitiveness, improve public services and create new sources of economic growth rather than simply counting data centres or computing resources.

Achieving these outcomes requires a coordinated ecosystem. Governments provide strategic direction, while industry contributes technology,

implementation expertise and innovation. Public-private collaboration also ensures that AI infrastructure benefits not only large enterprises, but startups, universities, researchers and SMEs that drive broader innovation across the economy.

Strong governance must underpin this transformation. As AI adoption accelerates, organizations need frameworks that encourage innovation while maintaining accountability, responsible deployment and long-term sustainability. Infrastructure, governance and leadership should evolve together to maximize national competitiveness.

Ultimately, AI infrastructure should not be viewed as an end in itself. Its success should be measured by the economic opportunities it creates, the industries it transforms and the long-term value it delivers to society. ■



Sovereign AI Must be Built for the Long Term



**Irina Karagyaur
Co-Founder & General Manager, BQ9 Agency**

As artificial intelligence becomes embedded in every aspect of society, nations must look beyond simply expanding computing capacity. The greater challenge is building sovereign, resilient and sustainable AI infrastructure that reflects each country's strategic priorities, protects critical assets and enables long-term economic competitiveness.

For this reason, I believe the most important recommendation is building resilient and sustainable AI infrastructure. However, resilience must also include sovereignty. Every nation has unique economic priorities, regulatory frameworks and strategic dependencies, meaning there can be no universal definition of sovereign AI. Each country must determine how its data, compute resources, models and digital infrastructure should be governed to support national interests while remaining open to innovation.

As AI adoption accelerates, infrastructure must also be designed responsibly. Growing demand for data centres and advanced computing

places increasing pressure on energy and water resources, making sustainability a strategic requirement rather than an environmental aspiration. Long-term AI leadership will depend on infrastructure capable of supporting rapid innovation without compromising resilience or resource security.

Cybersecurity must become an integral part of this strategy. The rise of autonomous AI agents and increasingly sophisticated digital ecosystems introduces new risks around sensitive data, intellectual property and national security. Protecting these assets requires stronger governance, specialist talent and collaborative dialogue between governments, industry and academia.

Ultimately, sovereign AI is not simply about technology ownership—it is about giving every nation the ability to shape AI according to its own values, priorities and long-term vision while building resilient infrastructure capable of supporting future innovation. ■

Partnerships Turn AI Infrastructure into National Capability



**Robin Benet Machado
Head of Digital R&D MEA, Siemens Energy & ADYBC Board Member**

Artificial intelligence infrastructure is only valuable when it is supported by the partnerships and execution needed to transform investment into national capability. While resilient infrastructure and national AI strategies are essential foundations, they should be regarded as baseline requirements. The real challenge lies in enabling organizations to access, adopt and apply AI at scale.

For this reason, I believe strengthening public-private infrastructure partnerships is the most important recommendation, closely supported by expanding access to compute and linking infrastructure investment to measurable economic outcomes. Governments, technology providers and industry each bring complementary strengths that no single organization can deliver alone. Together, they can build the energy systems, digital infrastructure and innovation ecosystems required to support widespread AI adoption.

The energy sector illustrates this challenge clearly. AI requires enormous computing power, which in turn depends on reliable energy infrastructure. Nations must therefore balance investments that support AI growth while continuing to meet the essential infrastructure needs of citizens and businesses. Public-private collaboration enables countries to mobilize investment, develop local capabilities and strengthen industrial competitiveness simultaneously.

Equally important is ensuring that startups, researchers and smaller businesses have access to AI infrastructure. Innovation cannot flourish if only a handful of organizations can afford to experiment with new technologies. Expanding access, encouraging collaboration and focusing relentlessly on execution will allow AI infrastructure to become an engine of national productivity rather than simply a collection of technology assets. ■

CHAPTER 6

From AI Investment to Measurable Value

Commercializing AI for Sustainable Growth and Competitive Advantage

The AI Economy Will Be Measured by Value, Not Technology

Artificial intelligence has moved beyond experimentation. Across every industry, organizations have invested in infrastructure, data platforms, cloud computing and increasingly sophisticated AI models. The conversation is no longer about whether AI has transformative potential. It is about whether organizations can consistently translate that potential into measurable business value.

Despite billions invested globally, many organizations remain trapped in what has become known as “pilot purgatory”—a cycle of promising demonstrations that never mature into enterprise-wide transformation. While technical capability continues to advance at extraordinary speed, commercial returns have often struggled to keep pace. The organizations that will lead the next decade will not necessarily be those deploying the most AI. They will be those that convert AI into sustained profitability, operational excellence and long-term competitive advantage.

This demands a fundamental shift in how organizations think about artificial intelligence. AI should no longer be viewed as a technology programme owned by innovation teams or IT departments. It should become a business capability embedded within corporate strategy, executive decision-making and commercial performance. Success is no longer defined by technology adoption. It is defined by measurable business outcomes.

The future of AI belongs to organizations that move beyond experimentation and build disciplined operating models capable of delivering repeatable value at scale.

Measure Success Through Enterprise Value Creation

Artificial intelligence investments should begin with business priorities rather than technology opportunities. Organizations frequently make the mistake of asking where AI can be implemented instead of identifying where the

business can create the greatest value. This technology-first mindset often produces isolated pilots with limited strategic impact.

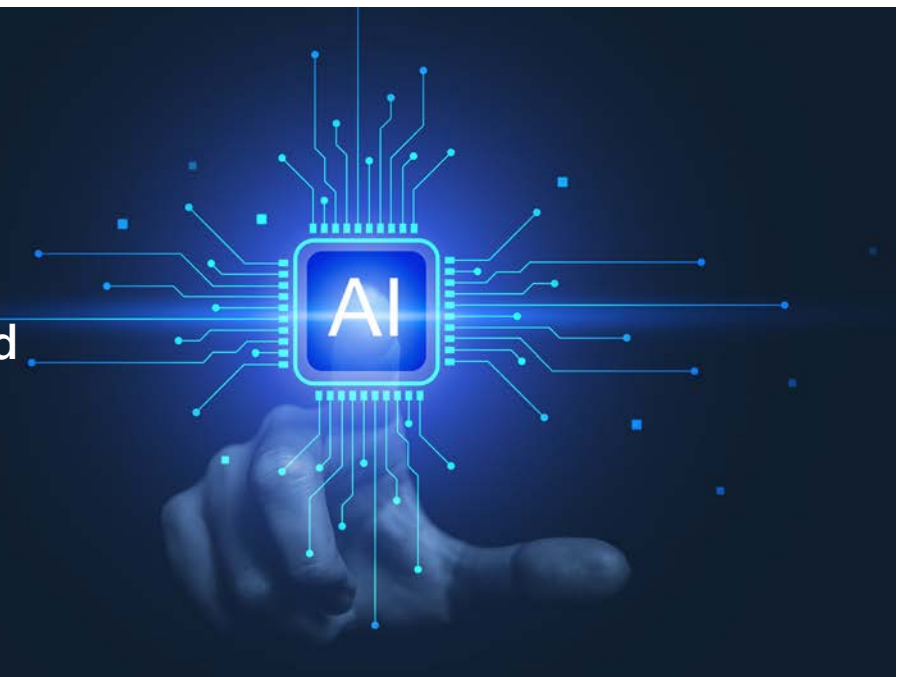
Instead, AI initiatives should be evaluated through the same commercial disciplines applied to every other strategic investment. Productivity gains, profitability, revenue growth, customer experience, operational resilience, risk reduction and shareholder value should become the primary metrics used to evaluate AI success. When organizations define desired business outcomes first, technology decisions become significantly clearer, ensuring that AI supports enterprise priorities rather than distracting from them.

This commercial discipline also strengthens executive ownership. AI should never operate independently of business strategy. Every major AI initiative should have accountable business leadership responsible for delivering measurable enterprise outcomes rather than simply overseeing technical implementation. Executive sponsorship creates stronger alignment between investment decisions, organizational priorities and long-term value creation.

Scaling AI also requires organizations to identify repeatable use cases capable of generating enterprise-wide impact. Successful pilots should become standardized operating capabilities rather than isolated success stories. Organizations that systematically replicate proven AI applications across business functions create cumulative productivity gains that compound over time, transforming AI into an enterprise growth engine rather than an innovation programme.

Equally important is developing the organizational capability to continuously evaluate AI investments. As technologies evolve rapidly, organizations should regularly assess where AI continues to create competitive advantage, where investments should be expanded and where resources should be redirected toward emerging opportunities.

Ultimately, AI should not be measured by the sophistication of the technology an organization deploys. It should be measured by the quality of the business it builds.



Build Organizations That Continuously Convert AI Into Competitive Advantage

Long-term AI leadership depends on more than successful technology deployment. It requires organizations to build integrated operating models that combine leadership, governance, talent, infrastructure and innovation into a unified framework for continuous transformation.

Leadership remains the defining factor. Executive teams must position AI as a strategic business capability that influences corporate strategy, operational excellence and future growth. Technology teams alone cannot drive enterprise transformation. AI succeeds when commercial leaders actively shape investment priorities, organizational culture and performance expectations around measurable business outcomes.

Organizations must also cultivate a culture of continuous improvement rather than one-time digital transformation. Artificial intelligence is not a destination reached through a single implementation programme. It is an evolving capability requiring ongoing learning, workforce development and organizational adaptation. Businesses that embed experimentation, measurement and reinvestment into their operating model will remain more agile as technologies continue to advance.

Another critical success factor is balancing innovation with disciplined governance. Organizations should encourage rapid experimentation while maintaining clear accountability, responsible oversight and robust risk management. Governance should enable organizations to innovate confidently rather than limiting their ability to compete.

Partnerships also play an increasingly important role in accelerating enterprise AI. Collaboration across technology providers, industry partners, academic institutions and

innovation ecosystems enables organizations to access specialist expertise, accelerate implementation and reduce the complexity of large-scale transformation. The AI economy is increasingly collaborative, rewarding organizations that participate in connected ecosystems rather than operating in isolation.

Perhaps the most important lesson is that AI should become part of the organization’s operating model rather than a standalone technology initiative. Every business process, investment decision, customer interaction and operational workflow should be evaluated through the lens of intelligent augmentation. AI creates its greatest value when it becomes embedded in how organizations think, decide and operate every day.

The organizations that dominate the AI economy will not necessarily own the most powerful models or the largest computing infrastructure. Those advantages are becoming increasingly accessible to competitors. Sustainable differentiation will instead come from execution—the ability to repeatedly convert intelligent technologies into commercial outcomes faster, more consistently and at greater scale than others.

Artificial intelligence is entering a new phase of maturity. The winners will no longer be determined by technological ambition alone, but by commercial discipline, strategic leadership and relentless focus on measurable value creation.

Ultimately, AI should not be measured by the sophistication of the technology an organization deploys. It should be measured by the quality of the business it builds. Those that consistently transform intelligence into productivity, innovation into profitability and technology into enduring enterprise value will define the next generation of market leaders. ■

Commercialising AI Through Practical Enterprise Adoption



Dr. Morgan Eldred
Founder, Digital Energy

Artificial intelligence will only fulfil its economic potential when organisations move beyond building technology and begin scaling practical business applications. While enormous investment has been directed towards infrastructure, models and computing capacity, the next stage of AI growth depends upon creating solutions that solve real operational problems across every industry.

Much of today's software environment remains rooted in legacy architectures designed before AI became widely available. This creates a significant opportunity to redesign enterprise systems around intelligent automation rather than simply adding AI features onto existing processes. Organisations that embrace AI-first operating models will create substantial productivity gains while improving decision making, customer experience and workforce effectiveness.

This transformation will not occur overnight. Like previous technology

revolutions, AI requires time for businesses to discover high-value use cases and for markets to mature. However, organisations that invest early in practical implementation will establish lasting competitive advantages as adoption accelerates.

Investment should therefore prioritise commercial deployment rather than technology demonstration. Capital must support innovators who can build scalable applications, simplify adoption and deliver measurable business outcomes across industries. As AI becomes embedded within everyday operations, value creation will increasingly come from execution rather than invention. The organisations that succeed will not necessarily possess the largest models or the greatest computing power. They will be those that consistently convert AI capability into profitable products, efficient operations and sustainable enterprise growth. ■

Build AI Ecosystems That Create Long-Term Competitive Advantage



Richard Frey
Chief Executive Officer & Co-Founder, INAIT

Capital alone does not create AI leadership. Sustainable competitive advantage emerges when investment supports complete innovation ecosystems that combine research excellence, entrepreneurial talent, industrial collaboration and commercial execution.

Current attention has focused heavily on generative AI and large language models, but these technologies represent only the beginning of a much broader transformation. Significant opportunities are emerging across physical AI, robotics, intelligent automation and autonomous systems that will redefine industries over the coming decade. Organisations that invest exclusively in today's dominant technologies risk overlooking the next wave of innovation.

History suggests that first movers do not always become long-term winners. Instead, market leadership often belongs to those organisations capable of continuously adapting as technologies mature, commercial

opportunities evolve and customer demand changes. This requires investment strategies that balance short-term commercial deployment with long-term research and ecosystem development.

Business leaders should therefore build innovation environments that encourage collaboration between universities, technology companies, investors, startups and established enterprises. Such ecosystems accelerate knowledge transfer, reduce commercialisation risk and enable breakthrough technologies to scale more rapidly into global markets.

The future AI economy will reward resilience more than speed. Those who combine patient capital with world-class talent, research capability and industrial partnerships will be best positioned to capture enduring value as AI expands beyond today's applications into entirely new categories of intelligent systems. ■



Measure AI Success by Economic Impact, Not Technological Hype



Mohammed ("Moody") Hadi, Head of AI Strategy & Execution,
Enterprise Data Organization, S&P Global

Artificial intelligence is entering a period where commercial discipline must replace market enthusiasm. While investment in AI continues to accelerate, long-term success will depend less on the scale of funding and more on the ability to demonstrate measurable economic value. Organizations should resist the temptation to evaluate AI through the number of models deployed or the pace of technology adoption. Instead, success should be measured by improvements in productivity, operational efficiency, customer value, revenue growth and enterprise competitiveness.

Every major technology revolution experiences a cycle of inflated expectations before sustainable business models emerge. AI is no exception. Organizations that focus on solving meaningful business

problems with clear economic outcomes will outperform those pursuing AI simply to keep pace with market trends. Investment decisions should therefore be guided by rigorous commercial evaluation, ensuring that every initiative contributes to strategic priorities and delivers measurable return on investment.

Leaders also have a responsibility to establish transparent performance metrics that distinguish genuine value creation from speculative activity. As AI becomes embedded across the enterprise, disciplined governance and outcome-based investment will become increasingly important. The organizations that lead the AI economy will not be those investing the most capital, but those consistently converting intelligent technologies into sustainable business performance and long-term economic growth. ■



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