KPMG | 85 Be in Front

AI in Infrastructure Sector

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AI in Infrastructure sector

Trends, opportunities and challenges

INFRASTRUCTURE SECTOR – TRENDS, OPPORTUNITIES AND CHALLENGES

AI is reshaping infrastructure from reactive operations to predictive, autonomous systems cutting failures, energy use, and inspection costs

Key Trends Reshaping Infrastructure	Prevalent Opportunities	Related Challenges
Mega projects drive delivery complexity Singapore's infrastructure pipeline is anchored by multi-package mega programmes (e.g., Changi T5 and major rail links), increasing interface complexity and delivery risk	**AI control towers for delivery** AI can predict schedule/cost risks and optimise sequencing via project "control towers" that fuse schedule, cost, design and site signals into early warnings	**Data quality and governance gaps** Multi-contractor data inconsistency and limited auditability make AI recommendations harder to trust in claims-heavy, public-accountable projects
Integrated digital delivery gaining traction Singapore is scaling Integrated Digital Delivery and digital regulatory workflows (e.g., CORENET X) to cut fragmented submissions and shorten approval cycles	**AI-assisted compliance and submissions** AI can automate code checks, completeness validation and evidence-pack generation – reducing resubmissions and accelerating multi-agency approvals	**Interoperability and cyber risk** Ecosystem-wide data sharing increases interoperability friction across BIM stacks and elevates cybersecurity/data-protection requirements
Industrialised construction Design for Manufacturing and Assembly (DfMA) is being pushed to reduce labour dependence and shift build activity into controlled factory settings	**AI design-to-factory optimisation** AI can optimize module design, tolerances and factory sequencing from BIM, and apply computer vision for QA/QC and safety at scale	**Skills, data and adoption hurdles** Limited local training data and uneven SME capability (tools, skills, change management) slow consistent AI-enabled industrialisation
Decarbonisation of built environment National decarbonisation targets (Green Plan / Green Building Masterplan) are tightening expectations on energy performance and whole-life sustainability	**AI for carbon and energy** AI can deliver energy optimization (continuous commissioning) now and evolve to whole-life carbon "digital twins" for retrofit prioritisation and abatement planning	**Auditable measurement and data access** ESG credibility requires robust M&V and explainability, while occupant/tenant and asset data often remains siloed or sensitive
Smart utilities and resilience PUB is operationalising AI/digital twins and advanced acoustics to detect and localise leaks faster across large water networks	**Predictive maintenance at network scale** AI enables anomaly detection, predictive maintenance and smarter dispatch today, and more autonomous field operations	**Sensor reliability and safety assurance** Model performance depends on sensor fidelity/uptime and requires strict human-in-the-loop controls and explainability

Sources: 'Singapore's Digital Retail Outlook 2025–2026', Sellercraft, Link; 'Singapore Green Plan 2030: reflection on the last five years and predictions for the next five', A&O Shearman, Link; 'Design for Manufacturing and Assembly (DfMA)', Building and Construction Authority, Link; 'The Future of Construction in Singapore: Trends and Technologies Shaping the Industry', BES Global Pte Ltd, Link; all accessed in Mar 2026

PREVALENT AI THEMES IN INFRASTRUCTURE SECTOR

Infrastructure companies are using AI to enable real-time, predictive, and autonomous operations across cities

	Key themes in market	Future imperatives for players
Real-time environmental monitoring	AI enables continuous monitoring of environmental variables such as air quality, water usage, temperature, waste levels allowing cities to move from static reporting to proactive infrastructure management • Bangkok-based GreenIO developed AI-enabled air quality monitoring devices that generate real-time alerts/dashboards; deployments were done with Bangkok Metropolitan Administration and other public bodies	• Future platforms must fuse IoT sensors, satellite data, weather data, and citizen inputs for a unified environmental view • Companies must move beyond static dashboards to AI systems that continuously predict risks and trigger preventive action
Smart transportation systems	Smart transportation is the largest infrastructure segment, driven by AI applications such as traffic prediction, adaptive signal control, vehicle flow optimisation, and incident detection • Singapore's smart traffic system uses AI, IoT, real-time analytics, and dynamic pricing to reduce congestion, improve road safety, cut emissions, and deliver smoother, more predictable urban mobility	• Replace static rules with real-time AI that dynamically adapts to congestion, incidents, and demand fluctuations • Enable AI-driven dynamic pricing and policy-linked controls to actively shape travel behaviour and reduce congestion
AI-driven energy and utility optimisation	AI is increasingly embedded in smart energy management systems, where machine learning models optimise energy distribution, demand forecasting, grid balancing, and renewable integration • In September 2025, NTU Singapore partnered with Aalborg University and Aarhus University (Denmark), to develop AI-powered digital twins and smart control systems that optimise district cooling and significantly reduce energy use and carbon emissions in dense urban environments	• Shift grid planning from capacity expansion to AI-enabled flexibility, demand response, and real-time load control • Evolve from monitoring assets to autonomous, AI-driven optimisation of supply, demand, storage, and grid constraints

Sources: "Singapore: AI, Digital Twins for Sustainable Urban Cooling", Open Gov, Link; "How Singapore's Smart Traffic System is Redefining Urban Mobility", IntelliStride, Link; "GreenIO creates AI-driven air quality device", Bangkok post, Link; other secondary sources; all accessed in Mar 2026

PREVALENT AI THEMES IN INFRASTRUCTURE SECTOR

AI is unlocking productivity gains in infrastructure, but adoption is constrained by data quality gaps and legacy system integration

Tailwinds in AI adoption

Predictive maintenance & asset reliability

AI enables predictive maintenance by forecasting asset failures in advance, allowing infrastructure owners to fix issues early and optimize maintenance timing

- Singapore agencies are using sensor data and AI analytics within digital-twin environments to predict deterioration in transport and urban infrastructure, enabling condition-based maintenance instead of fixed schedules

10-40%

reduction in maintenance costs is achievable with predictive maintenance, while also **cutting unplanned downtime by up to 50% through early fault detection** and data-driven maintenance scheduling

GenAI for engineering & project documentation

GenAI accelerates document-heavy infrastructure workflows by summarizing specifications, drafting RFIs and method statements, extracting requirements, and generating compliance reports

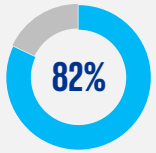
Headwinds in AI adoption

Trust concerns

Many organizations hesitate to adopt digital twins due to limited real-world adoption and concerns over poor data quality. Inconsistent or inaccurate data across systems can lead to unreliable insights, increasing adoption risk

Legacy Infrastructure & System Integration

Most infrastructure assets run on decades-old systems not built for real-time data or AI integration



organizations face data standardization and system-compatibility issues during AI integration

ROI concerns

GenAI and digital twins in infrastructure require high upfront investment and long adoption cycles, as returns are difficult to measure early and financial benefits often materialize only over the multi-year asset lifecycle

Sources: “Digital Twin Implementation for Singapore Infrastructure: Bridging the Physical and Virtual Worlds”, Linkedin, Link; “From silos to synergy: transforming asset management with digital twins”, KPMG, Link; “How AI-native public infrastructure changes how cities operate”, Mckinsey, Link; “Integrating Artificial Intelligence with Legacy Systems”;Link; other secondary sources; “Case Study of Singapore - Smart Cities: A Model for Urban Innovation”, MTI, Link; all accessed in Mar 2026

KPMG INFRASTRUCTURE PUBLICATIONS – KEY FINDINGS

Despite widespread belief in AI's value, foundational infrastructure gaps hinder enterprise-wide adoption

70%

Consider AI as a top investment priority

Source: KPMG 2025 Global Infrastructure and Transport CEO Outlook(1)

"The three critical enablers for AI to be mainstreamed in any organization are stakeholder buy-in, capacity development to use AI tools, and redesigning business processes" – **Sharad Somani, Partner, KPMG in Singapore**

58% **Plan to allocate 10-20% of budget on AI**

73% **Expect ROI from AI within 1-3 years**

Barriers to progress

- **60%** Cites lack of regulation
- **58%** Cites ethical challenges
- **49%** Cites data readiness

84% Say their organization started adopting/ exploring the use of AI in workplace

82% **Cite high-level strategic concerns**

Source: Intelligent Healthcare(2)

Obstacles in AI implementation

26% **Operate cloud-based infrastructure**

>50% Lack a unified enterprise data warehouse

52% Are unable to quantify the return on AI investment

~2/3 of public sector leaders report using AI for less than two years

79% Believe AI will deliver significant strategic advantage despite infrastructure gaps

Note(s): 1. Key findings of the survey based on responses from 1,350 CEOs between 05 Aug and 10 Sep 2025; 2. The findings are strengthened by quantitative survey of 1,390 decision-makers across key global markets, including 184 respondents from the government sector
Sources: 'KPMG 2025 Global Infrastructure and Transport CEO Outlook', KPMG, Link; 'Intelligent government', KPMG, Link; all accessed in Apr 2026

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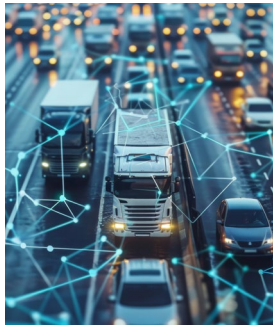
Case Studies



AI CASE STUDIES BY SECTOR – AI IN INFRASTRUCTURE (1/3)

AI-driven traffic management cut fatalities, speed up emergency response, and improved traffic flow

KPMG in India implemented an AI-powered Intelligent Traffic Management System (ITMS) for a State Road Development Corporation, integrating surveillance, violation detection, incident management, and real-time traffic monitoring to reduce congestion, improve road safety, and strengthen traffic rule enforcement across expressways

Client challenge

The expressway network operated by the State Road Development Corporation faced multiple structural and operational challenges:

- **Severe traffic congestion** across expressways
- **Frequent road accidents** resulting in high fatalities
- **Low adherence to traffic rules** and regulations

The core challenge was **to develop a comprehensive approach that could simultaneously manage and reduce congestion, improve road safety, and enhance compliance with traffic rules,** rather than addressing these issues in isolation

Our approach

KPMG in India was engaged to design and implement an AI-powered Highway Traffic Management System (HTMS) under a Public-Private Partnership (PPP) model, aimed at addressing the identified traffic and safety challenges

1. **Deployed AI-enabled surveillance and ANPR** to identify blacklisted vehicles, support crime detection, and enable continuous enforcement through mobile surveillance units
2. **Established integrated incident and accident management,** enabling automated alerts and faster emergency service deployment
3. Set up a **centralized command and control center for real-time monitoring** of incidents and streamlined emergency response

Value delivered

The AI-powered ITMS delivered measurable improvements across safety, responsiveness, and operational effectiveness

- **Improved road safety,** with AI-based enforcement and speed detection contributing to a **notable reduction in fatal accidents**
- Enhanced driver awareness **through real-time traffic, weather, and road closure updates** displayed on messaging sign boards at strategic locations
- **Faster emergency response**, supported by vehicle tracking systems and incident detection, **reducing response times by approximately half**

Why KPMG?

- Expertise in AI-driven public infrastructure and traffic transformation, enabling end-to-end design and implementation of the ITMS
- Capable to translate advanced AI technologies (ANPR, video analytics, 4D radar) into scalable, real-time enforcement

What we have learned

- Embedding AI across surveillance, enforcement, and incident response delivers measurable improvements in road safety and congestion management
- Centralized command-and-control with real-time data is critical to achieve faster emergency response and consistent traffic operations at scale

Sources: 'Revolutionizing traffic management and road safety with AI-powered intelligent traffic management system (ITMS), KPMG, Link; all accessed in Mar 2026

AI CASE STUDIES BY SECTOR – AI IN INFRASTRUCTURE (2/3)

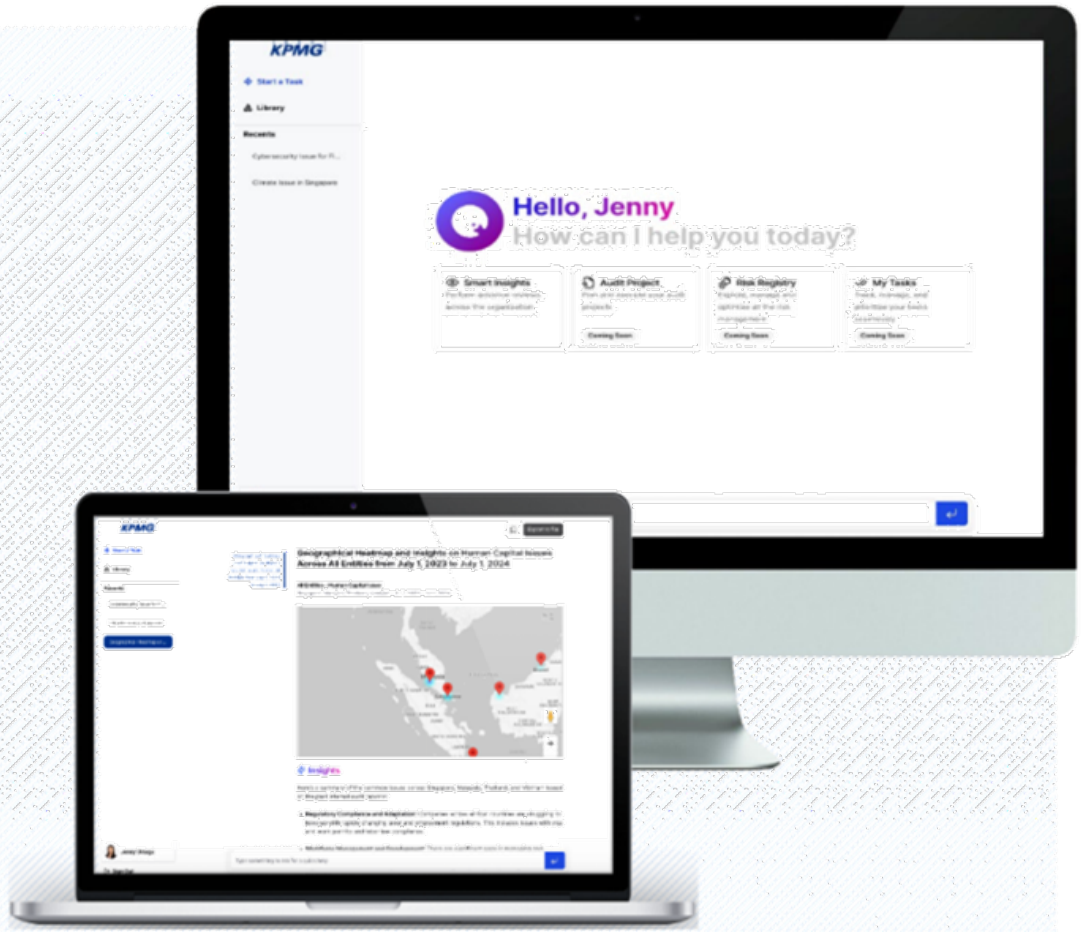
AI in IA –Reimaging internal audit processes with AI to unleash new value streams

Client challenge

Internal audit teams face growing challenges in today's evolving business landscape, where data complexity and volume have surged, making it difficult to quickly identify key risks and insights within organizations. Further, the audit process often involves repetitive manual tasks, such as data collection and report generation, which drain time and resources. The process of identifying and assessing risks becomes even more tedious in today's fast-evolving regulatory and business landscapes.

What we did

- Designed a collaborative, data-driven and automated Internal Audit management solution for employees enabled through AI
- Developed the Smart Insight develop deep understanding of issues or risk assessments across different entities. It also provides advanced insights to help analyse trends, findings, and highlight potential module that utilises AI to generate charts and tables, enabling internal auditors to risks.
- Designed a demo for an audit project that leverage AI to automate audit scoping, planning, execution, and reporting



AI CASE STUDIES BY SECTOR – AI IN INFRASTRUCTURE (3/3)

AI-driven traffic management cut fatalities, speed up emergency response, and improved traffic flow

We collaborated with Microsoft to transform our client's data analysis process using AI, significantly reducing costs by 15-20% and time for insight generation by 50%, while enhancing strategic decision-making capabilities.

Client challenge

Our client is a global oil and gas supermajor and one of the world's largest companies by revenue, that excels in exploration, refining, distribution, and power generation.

The global insights function of our client aims to inform strategic decisions by gathering and analyzing data from a wide range of sources including market and economic data, competitive intelligence, technology trends, policy regulatory and environment data as well as insights from consumer surveys.

A key challenge faced was the task of processing, analyzing, and deriving meaningful insights from the high volume of complex data from diverse sources efficiently. Our client sought our help in exploring new ways to use AI tools and our insights strategy experience to accelerate the identification and reporting of strategic insights

Our approach

In collaboration with Microsoft, KPMG embarked on the AI Powered Quantitative Insights PoC, targeting a single global quantitative insights program to serve as our pilot.

The objectives were multifaceted, focusing on data transformation, the effectiveness of AI tools like Copilot for Power BI, and ultimately, the creation of a sophisticated ecosystem that enabled stakeholders to engage in self-service analytics.

Through rigorous testing of hypotheses around data ingestion, AI-enhanced analytical capabilities, and self-service functionalities, we mapped data and relational models, facilitating the use of AI services in a previously unattainable manner.

Value delivered

The results of the PoC were compelling, demonstrating a potential 15-20% cost savings across global insight programs.

The transformation of traditional insights data into AI-ready formats led to a marked increase in the speed and depth of analysis achievable, evidencing the profound value potential in leveraging General AI for quantitative insights. The time taken from data gathering to insight generation was reduced from two weeks to 5 days.

The insights garnered from this initiative underscore the necessity for continued investment in technology, data transformation, and the upskilling of insight professionals to harness the full potential of AI capabilities.

Why KPMG?

- Strength in developing comprehensive consumer insights frameworks for global brands.
- Our global partnership with Microsoft gave us advanced access to emerging AI enabled solutions to apply to the PoC.
- Our thought leadership in AI combined with our expertise in data transformation and applied AI

What we have learned

- We set out to build a GenAI tool to analyze quantitative data sets but quickly discovered there were ready made tools in the market.
- We had to learn how to build a new type of semantic data model and data structure to make the most of the tool and to get to the right answer effectively.

Sources: 'Revolutionizing traffic management and road safety with AI-powered intelligent traffic management system (ITMS), KPMG, Link; all accessed in Mar 2026

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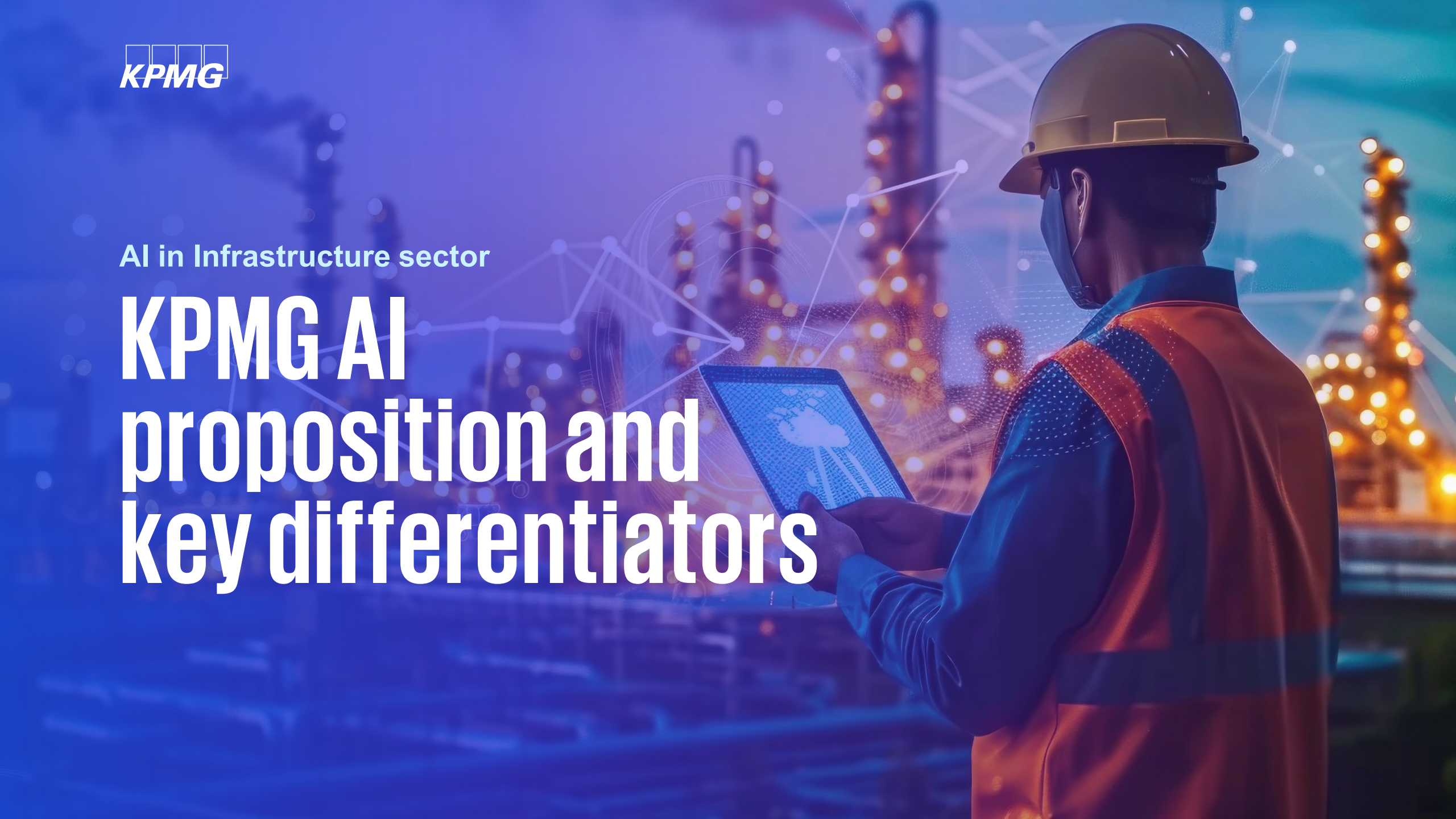
AI in Infrastructure sector

KPMG AI proposition and key differentiators



The KPMG Trusted AI Centre of Excellence
AI that deliver results, not just pilots.

Most organisations can launch AI pilots.
Very few manage to scale them.
The KPMG Trusted AI CoE exists to fix that.

What we do

We help organisations design, build, and scale AI that:

- Solves real business problems
- Is trusted by leaders, employees, and regulators
- Can be adopted and scaled across the organisation
- Enables intelligent governance, decision-making and operations

The result

AI that people trust, use, and rely on,
that leaders can see, measure, and defend.

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What makes our AI CoE different

KPMG Four-Door Framework

A structured way to scale AI across the enterprise

VALUE
Turn AI activity into real business impact and ROI.

TRUST
Build AI that's trusted by everyone, from the start.

PEOPLE
Design AI around how people work, so adoption sticks.

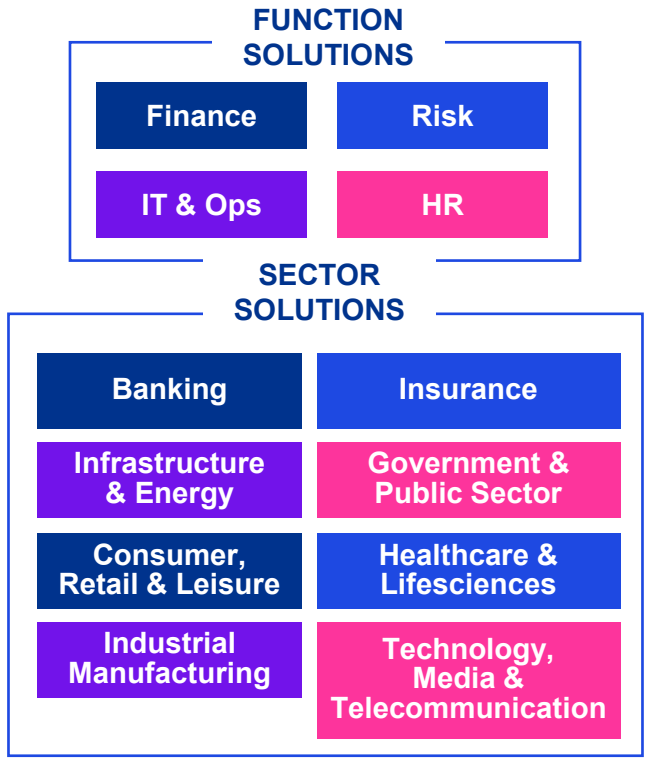
TECH & DATA
Enable AI to scale with the right technology foundation

Trusted ecosystem

KPMG brings together a powerful ecosystem of partners (leading technology companies, academia, industry organisations, and government agencies) to help turn AI ideas into tangible innovative solutions.

Co-creation of solutions

with you, for you in your function and sector



Support from EDB

With grants for

- Solution Design & Rapid Prototyping
- PoC/Pilot Build

Speed to market

- Faster time to market, going from idea to POC to scaled deployment
- Access to proven, reusable AI solutions and accelerators

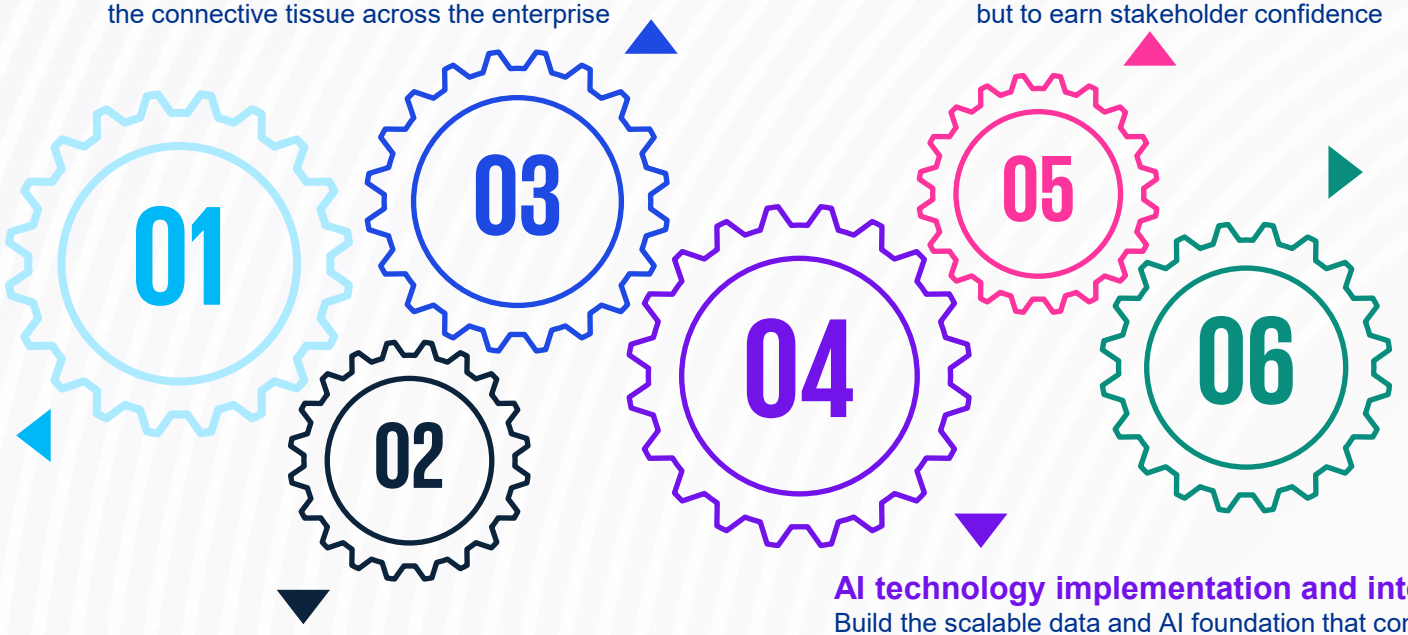
HOW KPMG CAN HELP (1/2)

Driving enterprise-wide AI impact by combining strategy, technology, workforce, and trust

AI strategy and program stand-up
Help clients shape a bold AI vision, underpinned by an enterprise-wide strategy, modern operating model, and trusted governance

Functional AI transformation
Helps re-imagine front- and back-office operations – from hyper-personalized customer engagement to AI-enabled finance, HR, and IT – so AI becomes the connective tissue across the enterprise

Trusted AI
Help clients design trusted AI by embedding ethics, transparency, and fairness at the core – not just to comply, but to earn stakeholder confidence



Bespoke AI solution and product deployment
Co-create bespoke AI solutions – spanning forecasting, pricing, trade promotions, and contract leakage – to power teams with KPMG retail solutions

AI change enablement and workforce shaping
Beyond technology, we help create an AI-ready workforce – co-driving adoption, new career paths, and skills that fuel innovation.

AI technology implementation and integration
Build the scalable data and AI foundation that connects your enterprise and powers your intelligent operating engine.

Sources: 'AI in Retail – Global lessons from strategy to storefront', KPMG, Link

HOW KPMG CAN HELP (2/2)

KPMG can help clients across their AI journeys

Develop a transformational AI strategy

Define your AI goals, identify opportunities and risks, and create a tailored strategy and execution plan. Build a business case with clear metrics to secure investments and ensure measurable success by scaling AI for enterprise-wide impact and building lasting capabilities.

Ensure AI trust and compliance

Scaling AI introduces complexities and risks. KPMG Trusted AI teams can help ensure your AI solutions are ethical, secure and compliant. Our Trusted AI Framework, built on 10 ethical pillars, empowers organizations to boldly deploy AI responsibly, transparently and with confidence.

Empower your workforce with AI

KPMG AI-enabled Workforce solutions deliver personalized adoption and upskilling experiences, helping your team embrace generative AI and infuse it into everyday work.

Build a sustainable AI technology infrastructure

Leverage KPMG professionals' experience to integrate AI frameworks, platforms and accelerators, helping you ensure your technology infrastructure is ready to scale AI initiatives.

Sources: 'Intelligent Retail, KPMG, Link

AI IMPLICATIONS ON INFRASTRUCTURE SECTOR

AI elevates infrastructure performance, sustainability, and efficiency, constrained by digital readiness and workforce capabilities

Implications of AI on infrastructure sector

Digitalizing of infrastructure is becoming a core value driver

- AI is viewed as a core lever for growth and competitiveness, not discretionary IT spend
- Near-term ROI expectations are driving board-level focus on AI-enabled value creation

Shifting asset operations to predictive, AI-driven models

- AI enables predictive maintenance and digital twins, improving asset uptime and reliability
- Optimizes lifecycle costs by reducing unplanned downtime and reactive maintenance spend

Enabling AI scale through strong digital and data foundations

- AI adoption depends on modern digital foundations, including data availability and integration across systems
- However, data readiness gaps and legacy system constraints remain key bottlenecks to scaling AI across infrastructure assets

Accelerating infrastructure's role in energy efficiency and sustainability

- AI is used to optimize energy consumption, traffic flow, and resource utilization across infrastructure assets
- Sustainability is shifting from compliance-led efforts to measurable operational and cost efficiency outcomes

Workforce capability is emerging as the primary execution bottleneck

- Shortages in project experience and specialized expertise constraint effective execution
- Firms are rethinking workforce models, prioritizing retention and reskilling over pure hiring

Sources: 'KPMG 2025 Global Infrastructure and Transport CEO Outlook', KPMG, Link; 'Emerging trends in infrastructure and transport', KPMG, Link; all accessed in Apr 2026

KPMG INFRASTRUCTURE SECTOR CREDENTIALS (1/5)

KPMG Conect – Smart monitoring for generator compliance

Generator compliance that's intelligent, efficient and future ready

Navigating generator regulatory compliance is increasing in complexity. Operators and network service providers face evolving regulations, operational demands and the challenge of managing vast amounts of data. With the shift to renewables, newer generators face added requirements for integrating intermittent sources like wind and solar.

KPMG Conect redefines generator compliance with its continuous, cloud-based monitoring platform. Powered by intelligent data and analytics enabling proactive compliance management and peace of mind.

How KPMG Conect can help

KPMG Conect streamlines generator compliance by providing a centralised platform for continuous compliance monitoring in real time. By integrating IoT data with power systems analytics, KPMG Conect provides a unique dashboard view into generator performance to help you monitor, assess and address compliance issues across NEM, WEM, NWIS, SWIS and NWPS before they escalate.

Why use KPMG Conect

- Delivers measurable compliance outcomes tested in live environments.
- Replaces costly and disruptive intrusive testing with a cloud-based compliance monitoring serviced by leveraging real-time analytics.
- Uses AI to generate clause-specific compliance statements and detect anomalies in real time, reducing manual effort
- Aligned with the international compliance management standard AS ISO 37301:2023, ensuring a transparent and auditable approach to regulatory compliance.

Key features of KPMG Conect

User friendly interface: The dashboard features an intuitive interface that enables users to navigate and interact with the system effectively

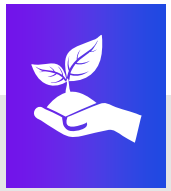
Alerts and notifications: Reminders & alerts are built in to ensure important compliance obligations are not missed

Simplified reporting: KPMG Conect simplifies the process by turning raw data into real time actionable insights.

KPMG INFRASTRUCTURE SECTOR CREDENTIALS (2/5)

KPMG Climate Digital Twin

The Digital Twin is an integrated, data-driven platform that empowers governments to anticipate risks, test scenarios, and make smarter, more resilient decisions for the future of Metro Manila

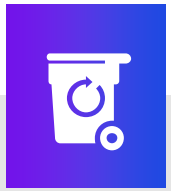


Climate and Disaster Resilience

Monitors climate hazards and forecasts to aid disaster preparedness

Flood and Typhoon Impact Assessment

Evaluates the extent and severity of damage caused by floods and typhoons

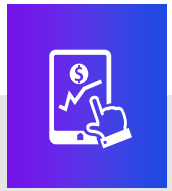


Plastic Waste Monitoring

Offers insights to pinpoint pollution hotspots, optimize trash trap placement, and collaborate with local authorities to minimise waste

Sustainable City Project Management

Facilitates quicker coordination with local governments for timely completion



City Economics Monitoring

Analyses foot traffic and spending levels in river corridors and commercial zones to identify key engagement areas and guide improvements in public spaces and property value

KPMG INFRASTRUCTURE SECTOR CREDENTIALS (3/5)

InvestIQ

InvestIQ is an AI-powered financial intelligence and investment analysis platform that enables teams (e.g., investment committees, infrastructure investors, CFOs) to analyse, validate, and monitor investment models in real time.

Sector relevance: Infrastructure | Energy | Capital Projects | Asset Investment

Problem areas addressed:

- Fragmented investment data and assumptions
- Manual financial and scenario modelling
- Limited sensitivity, risk, and ESG impact analysis
- Weak post-investment performance monitoring

Where applied: Investment portfolios (Multi-asset and multi-project environments)

How AI helped:

- Automated financial and scenario analytics adjusting CAPEX, OPEX, revenues, financing, and tax assumptions
- Risk intelligence and sensitivity analysis across NPV, IRR and investment viability
- ESG and new-technology impact modelling, including carbon savings and sustainability value drivers
- AI-driven investment monitoring with predictive deviation alerts post-FID

Key offerings/capabilities

- **Investment model intelligence:** Ingests and interprets excel-based financial models to convert raw data into structured, analysable outputs.
- **Scenario and sensitivity analysis:** Enables configurable sensitivity testing and Monte Carlo simulations to assess investment risk under multiple scenarios
- **Portfolio-level analytics:** Provides a unified view of multi-asset portfolios to analyze performance, exposure, and concentration risks
- **Risk monitoring and governance:** Tracks financial covenants and performance deviations with real-time alerts and full audit trails
- **AI-generated reporting:** Automatically generates investment committee papers, board reports, and lender documentation from model outputs
- **Data integration:** Integrates with enterprise systems (e.g., ERP, market data, operational feeds) to enable continuous, real-time analysis.

KPMG INFRASTRUCTURE SECTOR CREDENTIALS (4/5)

Nexus – HSE and EPC

Intelligent HSE Risk Detection

Construction facilities operate in high-risk environments where undetected safety hazards can rapidly escalate into serious HSE incidents. Traditional inspection-driven approaches limit real-time visibility and proactive risk prevention. Reduces safety incidents and near misses through continuous hazard detection, predictive risk insights, and disciplined corrective action tracking

Sector: Energy | LNG | Industrial Operations | Health, Safety & Environment (HSE)

Problem areas addressed:

- Reactive and labor-intensive safety inspections
- Limited real-time visibility of site-level hazards
- Delayed identification of recurring and systemic risks
- Inconsistent hazard classification and follow-up tracking

How AI helped:

- Computer vision-based hazard detection using site images and CCTV footage to identify unsafe conditions
- Automated risk classification across electrical, mechanical, access, PPE, and corrosion risks
- Predictive risk analytics highlighting high-risk zones and activities
- AI-assisted corrective action tracking monitoring closure against defined timelines

EPC Performance Management Monitor

Large organisations manage multiple EPC projects in parallel, where critical project data is fragmented across contractors, documents and reporting woes. Manual consolidation limits real-time visibility, delays risk detection, and weakens control over cost, schedule and performance outcomes, improved project control and decision-making by delivering real-time predictive visibility across cost, schedule and risk for complex EPC portfolios.

Sector: Sector Agnostic | Capital Projects | EPC | Program and Project Management

Problem areas addressed:

- Fragmented project data across contractors, systems and benefits
- Manual, time-intensive reporting and reconciliation efforts
- Limited real-time visibility of cost, schedule, and performance risks
- Difficulty identifying emerging issues across multi-project portfolios

How AI helped:

- Intelligent data ingestion and extraction using Document AI and OCR to consolidate data from reports, emails, PDFs and spreadsheets
- Data quality and anomaly detection identifying missing updates, inconsistencies, and abnormal progress patterns
- Predictive project analytics forecasting delays, cost overruns, and risk materialization using historical trends and leading indicators
- AI-assisted reporting generating project summaries, exception reports and management narratives from validated data

KPMG INFRASTRUCTURE SECTOR CREDENTIALS (5/5)

Sustainability Marketplace

Sustainability Marketplace

Small and medium enterprises (SMEs) play a critical role in the sustainability ecosystem but face challenges navigating fragmented sustainability data financing options, and ESG requirements, investors and solution providers similarly lack visibility into credible, investable SME opportunities

Sector: Sector Agnostic | Sustainability | Green Finance | ESG Ecosystem

Problem areas addressed:

- Fragmented information on sustainability projects, grants and ESG requirements
- Difficulty translating ESG ambitions into investable, bankable opportunities
- Limited visibility and credibility of SME sustainability maturity and data
- High search, due diligence, transaction fraction for investors and solution providers

How AI helped:

- Existing Use Case: AI-driven opportunity mapping matching SMEs and project owners with relevant investors based on sustainability focus, sector and scale
- New Use Cases: Gen-AI powered SME concierge guiding users to best-fit grants, projects, tools, partners through conversational interaction
- New Use Cases: Smart recommendations and alerts providing personalized insights, deadlines, and learning pathways based on user behaviour
- New Use Cases: AI-enabled ESG diagnostics and data trust layer supporting standardized ESG assessments, verified identities and auditable data traits

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