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AI ADOPTION BAROMETER

**AI Readiness Across Healthcare and
Social Impact Organizations in the UAE**

Driving AI for Social Good in the UAE



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At NYU Abu Dhabi, we believe the true measure of innovation lies not in its sophistication, but in its contribution to society.

Artificial intelligence presents one of the most consequential opportunities of our time to rethink how knowledge is applied in service of human well-being.

Nowhere is this more evident than in healthcare and social impact—where technology meets lived experience, and where decisions affect not systems alone, but individuals, families, and communities.

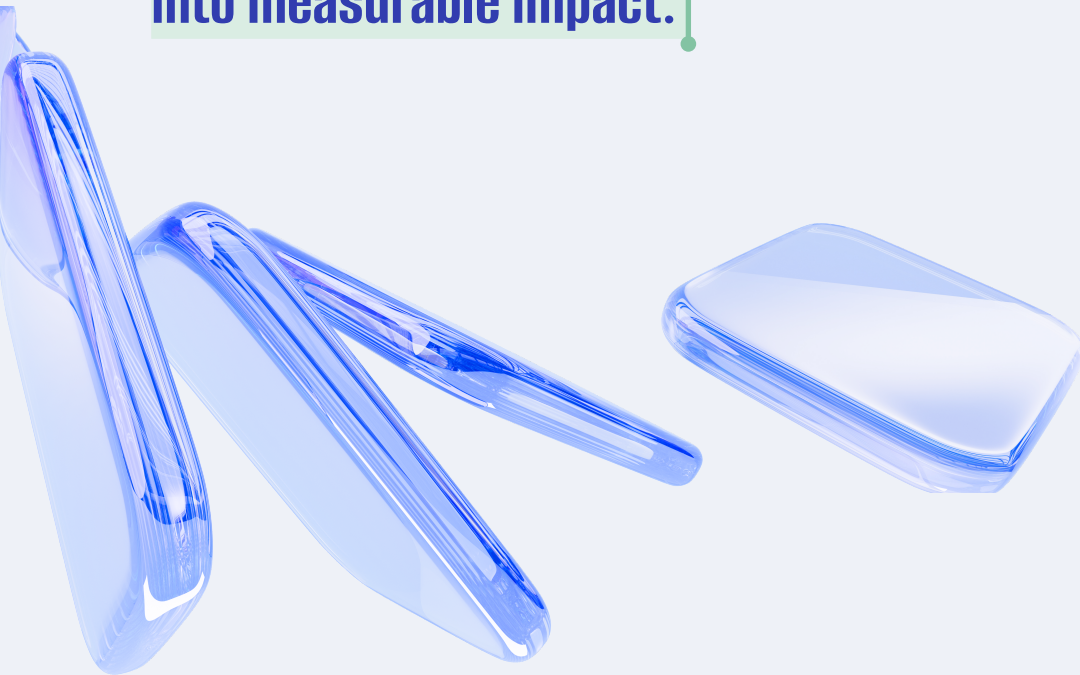
Through three sequential roundtables and a comprehensive survey of 52 UAE organizations, we have worked to understand not just the aspirations surrounding AI adoption but the practical realities—the governance gaps, funding constraints, and institutional readiness challenges—that determine whether promising pilots become transformative programs.

This work would not have been possible without the partnership and support of Google.org, whose commitment to AI for social good enabled both the research and the broader initiative of which this barometer is a part. We are deeply grateful to the healthcare and social impact leaders who participated in roundtables and surveys, sharing candid insights about their organizations' AI journeys. Their openness and engagement have produced findings that will benefit the entire ecosystem.

The UAE has created a powerful enabling environment for this transformation. Through sustained investment in research, infrastructure, and education, it has established itself as a global center for AI advancement.

The barometer reveals a critical insight:

The UAE's world-class AI infrastructure has created opportunity, but organizational readiness remains the determining factor in whether that opportunity translates into measurable impact.



Healthcare and social impact organizations now face a strategic inflection point. The institutions that invest in governance structures, operating models, and collaborative capacity now—while the window for establishing foundational capabilities remains open—will be positioned to lead the region's AI-enabled social transformation.

We offer this barometer as both a diagnostic tool and a call to action. For organizational leaders, it provides a candid assessment of where the sector stands and what capabilities must be built. For policymakers and funders, it identifies where targeted support can accelerate progress. For the broader ecosystem, it establishes a baseline against which we can measure our collective advancement.

The momentum for AI adoption in mission-driven sectors is undeniable. Our task now is to ensure that momentum translates into the systematic, ethical, and equitable implementation that our communities deserve.

EXECUTIVE SUMMARY

The UAE has moved decisively from AI ambition to execution. The National Strategy for Artificial Intelligence 2031 targets AED 335 billion in economic growth and positions the nation as a global AI hub. As the UAE accelerates this vision – through landmark infrastructure investments and commitments to transition half of government services to autonomous AI – mission-driven healthcare and social impact organizations have a narrowing window to align their operations with this national momentum. They now face a dual imperative: to operationalize AI at scale while safeguarding institutional trust, equity, and mission integrity.

This barometer synthesizes insights from three sequential roundtables convened by startAD with support from Google.org—an initial cross-sector session on March 26, 2025, followed by two sector-specific sessions on May 21, 2025 (healthcare and social impact). It also incorporates an online survey that received responses from 52 UAE-based organizations spanning healthcare (27), and social impact (25), selected to represent diverse operational scales. The survey assessed seven dimensions of AI maturity: use-case definition, deployment stage, strategic planning, leadership ownership, budget allocation, collaboration patterns, and risk mitigation.

The focus on healthcare and social impact organizations reflects both global priorities and UAE strategic commitments. The World Health Organization and United Nations identify these sectors as high-impact domains for AI adoption, particularly for advancing Sustainable Development Goals in health, education, and climate action.

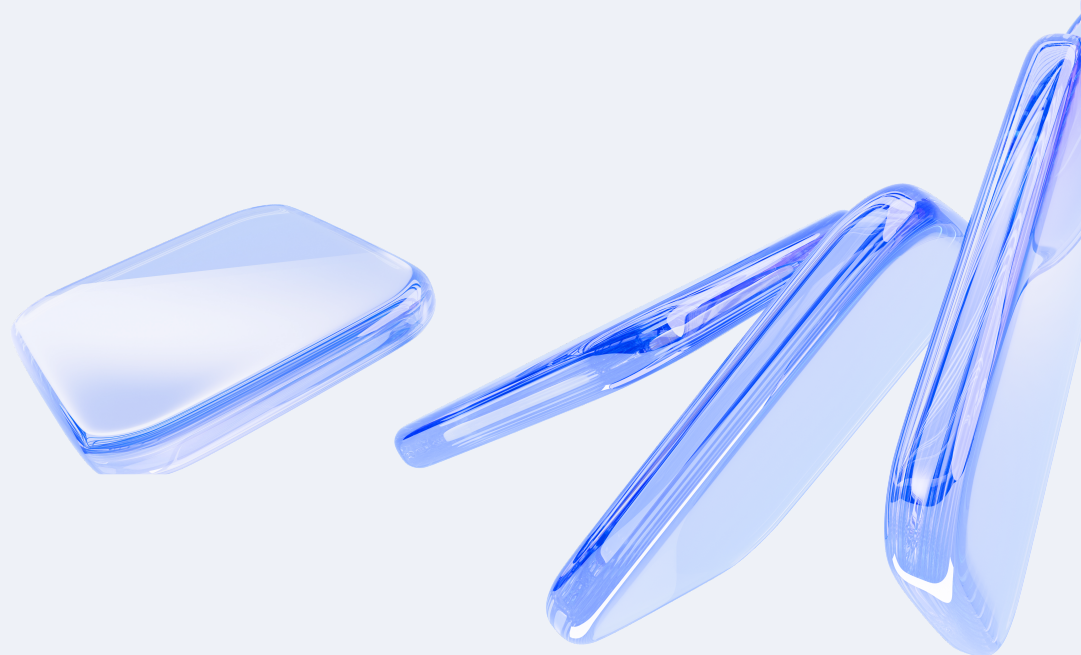
UAE Government. (2021). "UAE National Strategy for Artificial Intelligence 2031." Ministry of Cabinet Affairs. Retrieved from <https://ai.gov.ae>

The UAE National Strategy for Artificial Intelligence 2031 mirrors this consensus, explicitly prioritizing healthcare and social services as sectors where AI-driven transformation can most directly touch citizens' daily lives.

The findings reveal a landscape marked by strategic intent and emerging executional readiness.

- A) Healthcare organizations demonstrated more advanced maturity with 81 percent having defined AI use cases and 58 percent actively piloting or deploying AI solutions, yet material constraints persist in funding, governance, and scale-up capacity
- B) Social impact organizations, while equally enthusiastic about AI's transformative potential, face structural capacity gaps. Currently, 42 percent are yet to develop defined use cases, 45 percent operate without strategic roadmaps, and 52 percent report zero dedicated AI funding. However, these gaps represent clear opportunities for targeted investment and capacity-building initiatives.

The implication is clear: healthcare requires scaling mechanisms; social impact requires foundation-building. Yet, the critical question facing these organizations is not whether to adopt AI, but how to scale responsibly while capturing meaningful value aligned with their institutional missions. The organizations that build foundational capabilities now—in data infrastructure, technical talent, and ethical governance—will be positioned to lead the UAE's transition into what the National Strategy envisions as an era of intelligent public services and societal impact.





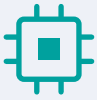
For healthcare leaders,

the path forward requires three immediate decisions: establishing executive-level AI governance (appointing accountable owners with budget authority), standardizing data infrastructure to enable interoperability, and creating pilot-to-production pathways that move beyond experimentation to scaled deployment.



For social impact leaders,

priorities differ fundamentally: securing dedicated AI funding (even modest initial allocations of \$50-100K can unlock momentum), identifying one high-impact use case aligned to organizational mission, and continuing to build partnerships with technical institutions or peer organizations to access capabilities collectively.



For all mission-driven organizations,

three cross-cutting imperatives apply immediately: (1) Designate an executive owner for AI strategy this quarter, (2) conduct an honest assessment of current AI readiness using established frameworks, and (3) join or establish peer networks for shared learning and resource pooling. The UAE's compact geography and interconnected institutions create unique conditions for collaborative acceleration, but only if organizations act decisively.

THE UAE AI CONTEXT

NATIONAL STRATEGY

MEETS SECTORAL

REALITY



ALIGNING WITH VISION 2031

The UAE's ambition is clear and comprehensive. Since appointing the world's first Minister of State for Artificial Intelligence in 2017, the nation has built a formidable AI ecosystem anchored by the UAE National Strategy for Artificial Intelligence 2031.

Healthcare and social impact represent strategic priorities both globally and within the UAE's national AI framework. The World Health Organization identifies healthcare as a critical domain for AI-enabled transformation, with the technology showing potential to address the global shortage of 11 million health workers expected by 2030¹ and extend essential healthcare services to 4.5 billion people currently lacking access². Similarly, the United Nations frames social impact sectors—particularly education, poverty alleviation, and climate action—as high-priority areas where AI can accelerate progress toward Sustainable Development Goals³.

² World Health Organization. "Health workforce." WHO Health Topics.

Retrieved from https://www.who.int/health-topics/health-workforce#tab=tab_1

³ United Nations News. (2024). "Universal health coverage: 'We have the solutions', says WHO chief." UN News.

Retrieved from <https://news.un.org/en/story/2024/12/1158111>

⁴ United Nations. (2025). "Harnessing Artificial Intelligence for Sustainable Development Goals (SDGs)." UN Sustainable Development Group.

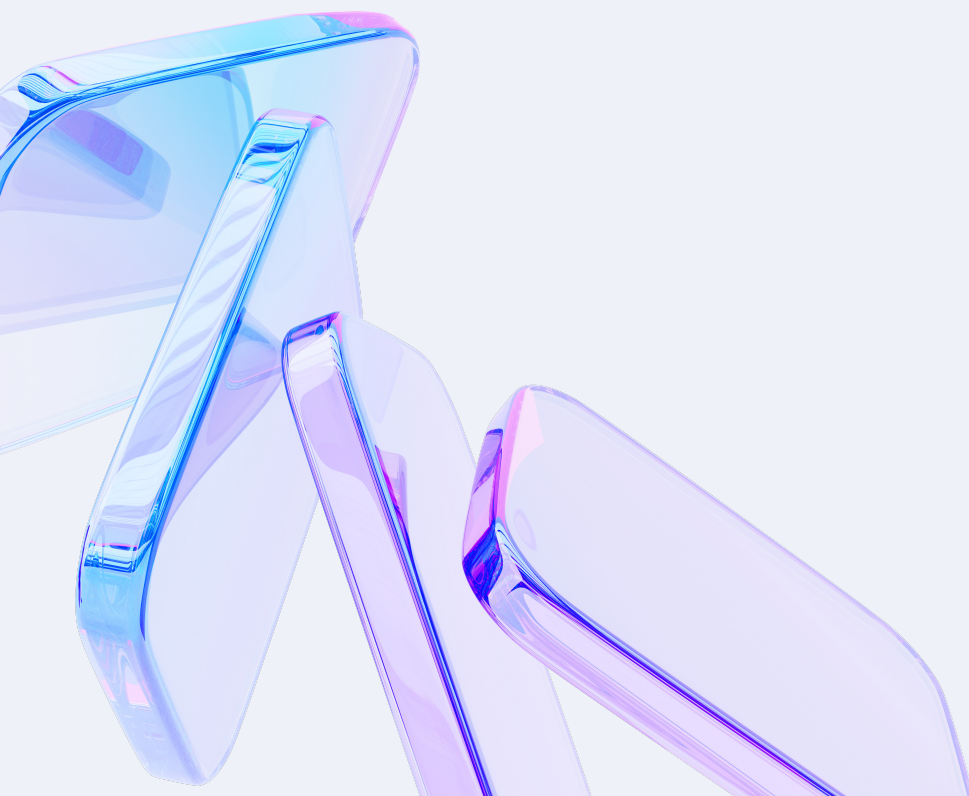
Retrieved from <https://unsdg.un.org/latest/announcements/harnessing-artificial-intelligence-sustainable-development-goals-sdgs>

The UAE National Strategy for Artificial Intelligence 2031 explicitly designates both healthcare and social services as priority sectors for AI deployment, calling for “AI-driven predictive systems in healthcare” and “intelligent solutions addressing national challenges.” This alignment between global consensus and national strategy creates a compelling rationale for concentrated focus: these sectors represent domains where the UAE possesses both strategic ambition and the infrastructure to lead, while simultaneously addressing areas with the greatest potential for meaningful impact on citizens’ lives.

With initiatives including Mohamed bin Zayed University of Artificial Intelligence (MBZUAI), the world’s first graduate-research university dedicated exclusively to AI, the Technology Innovation Institute’s open-source Falcon models, and G42’s advanced AI infrastructure, the UAE has assembled world-class technical capabilities and research institutions. For healthcare and social impact organizations, these national initiatives create both infrastructure advantage and performance expectation. The UAE government has published comprehensive resources, including the AI Adoption Guideline in Government Services, Generative AI Guide, AI Ethics Guide, and AI Maturity Self-Assessment Tool. These are frameworks explicitly designed to accelerate institutional AI adoption.

The central issue this barometer surfaces is a persistent mismatch between national capability and organizational readiness.

Closing that gap is now a strategic necessity for realizing Vision 2031 outcomes in the lived experience of patients, beneficiaries, and communities.



SURVEY METHODOLOGY

MEASURING REGIONAL

AI READINESS



To establish an empirical baseline for sectoral maturity, we conducted a cross-organizational assessment, designed specifically for the UAE, spanning healthcare, social impact, and adjacent sectors.

61 responses were recorded as 52 entities (including 2 that operate in both sectors) participated in the survey, 32 from healthcare entities and 29 from social impact organizations. Respondents were predominantly senior decision-makers: 71 percent of healthcare participants and 52 percent of social impact participants occupied leadership positions.

The remaining healthcare respondents comprised data or technical teams (10 percent), policy or legal teams (6 percent), and business unit representatives piloting AI tools (6 percent).

Among social impact respondents, 10 percent represented business units piloting AI tools. This composition ensured the assessment captured both strategic governance perspectives and operational implementation insights.

The assessment evaluated seven maturity dimensions synthesized from established AI maturity frameworks—including the World Economic Forum’s analysis of barriers to healthcare AI adoption⁵, Gartner’s AI Maturity Model⁶, and the UAE AI Maturity Self-Assessment Tool⁷—adapted to reflect the UAE’s institutional and regulatory environment:



Use Case Development



Deployment stage



Strategic planning sophistication



Leadership ownership



Budget allocation



Collaboration patterns



Risk mitigation approaches

⁵ World Economic Forum. (2025). “The Future of AI-Enabled Health: Leading the Way.” WEF White Paper. Retrieved from https://reports.weforum.org/docs/WEF_The_Future_of_AI_Enabled_Health_2025.pdf

⁶ Gartner. (2024). “AI Maturity Model and AI Roadmap Toolkit.” Retrieved from <https://www.gartner.com/en/chief-information-officer/research/ai-maturity-model-toolkit>

⁷ UAE Government. (2023). “AI Maturity Self-Assessment Tool.” Ministry of AI. Retrieved from <https://ai.gov.ae/wp-content/uploads/2023/03/AI-Maturity-Self-Assessment-Tool.xlsx>



KEY STRATEGIC FINDINGS

WHERE AI ADOPTION IS STALLING—AND WHY

The survey data across 52 UAE organizations (61 responses) reveals a consistent pattern: while AI enthusiasm is high and experimentation is widespread, four critical barriers are preventing translation from pilots to scaled institutional practice. Capability gaps (lack of defined use cases and strategic roadmaps), resource constraints (limited dedicated budgets), governance challenges (diffused leadership accountability and regulatory uncertainty), and execution infrastructure deficits (inability to move from functional to enterprise-wide deployment) are shaping adoption trajectories across both sectors.

The following strategic findings synthesize what these barriers mean in practice—where adoption momentum is real, where structural factors are creating friction, and why organizational readiness has emerged as the primary constraint. Detailed barrier analysis and sector-specific data are presented in the “Healthcare Organizations: Advancing Unevenly with Resource Constraints” and “Social Impact Organizations: Building Momentum” sections.

1. AI adoption in healthcare is active - but constrained by availability of funds

Healthcare organizations demonstrate high AI activity—81 percent have defined use cases and 58 percent are piloting or deploying solutions—yet face a critical resource barrier: 42 percent report zero dedicated AI budget. This funding gap creates structural tension between experimentation momentum and the capital discipline required for sustainable, enterprise-wide scale.

2. Pilots are outpacing strategic planning

Despite widespread piloting (58 percent of healthcare organizations), only 35 percent have detailed AI roadmaps and 36 percent have well-defined strategic goals. Organizations are testing AI but struggling to move beyond the pilot phase—a gap that points to challenges in translating experiments into scalable initiatives.

3. Leadership visibility has not translated to institutional accountability

While 71 percent of healthcare respondents hold leadership positions, demonstrating strong executive visibility for AI initiatives, this has not consistently translated into coordinated execution. Only 36 percent report well-defined strategic goals, suggesting a governance barrier: AI responsibility is often distributed across committees or functions rather than anchored in a single accountable executive with mandate, budget authority, and cross-functional coordination power.

4. Social impact organizations face foundational capacity gaps

Social impact organizations face capability and resource barriers that are structural, not incremental: 42 percent are yet to define AI use cases, 52 percent report zero AI funding and only 31 percent have strategic roadmaps. These gaps reflect underdeveloped foundational capabilities—data readiness, technical planning infrastructure, and dedicated resourcing—rather than lack of ambition. The challenge is not awareness or intent but the absence of institutional preconditions required to translate AI interest into actionable implementation.

5. Investment constraints reflect organizational realities, not capability gaps

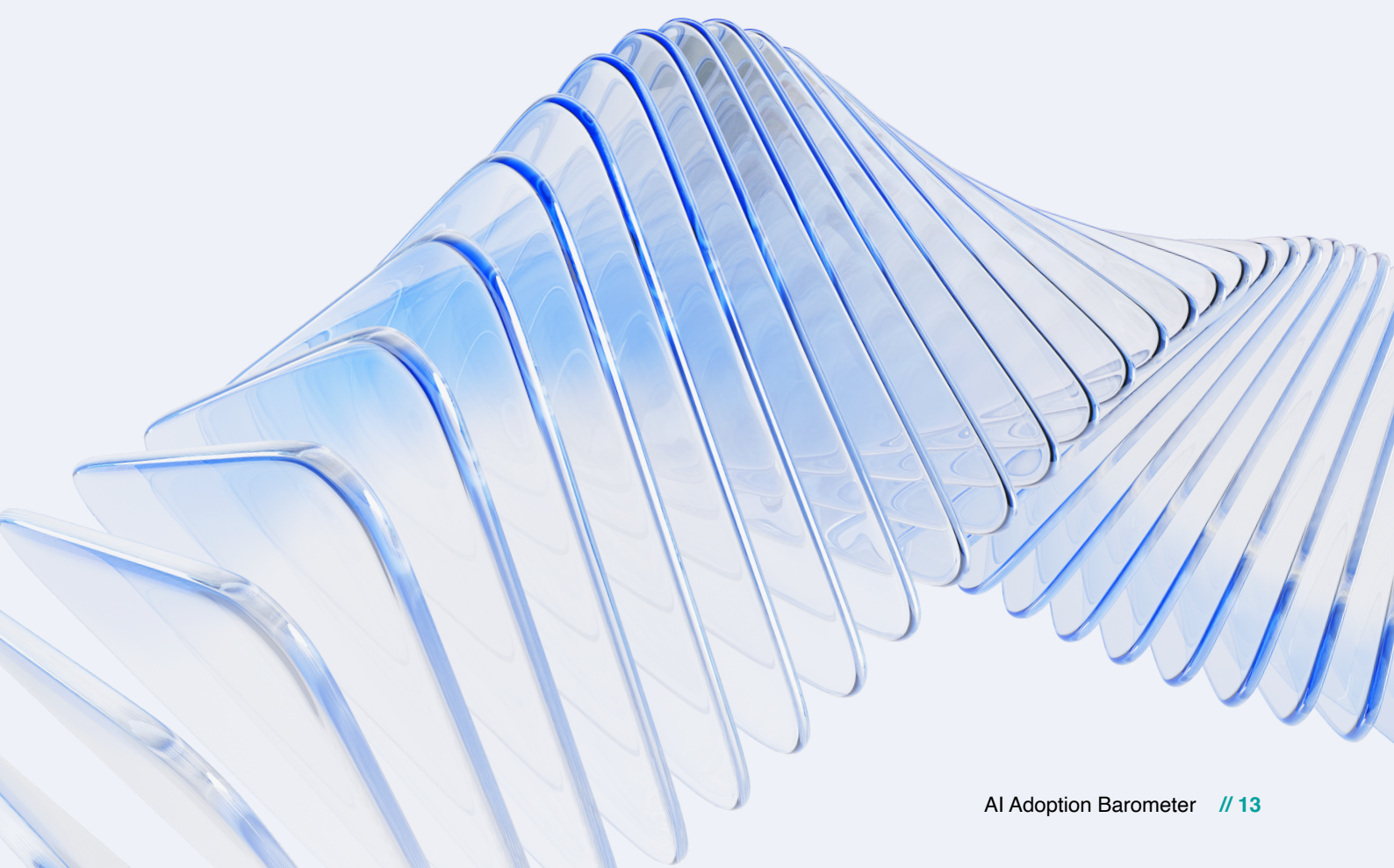
Social impact organizations' lower AI investment levels (52 percent with zero dedicated funding versus 42 percent for healthcare) reflect constrained discretionary budgets and mission-critical trade-offs between innovation and core service delivery, rather than lack of technical interest or leadership capability.

6. Responsible AI concerns signal readiness, not hesitation

Concerns around explainability, data protection, bias, and cybersecurity reflect growing institutional maturity. In mission-critical sectors where errors carry significant consequences (patient safety, vulnerable populations), robust governance frameworks are increasingly understood as preconditions for confident scaling rather than barriers to innovation. The sophistication of risk questions being asked reflects growing AI literacy among leadership.

7. National capability is not the bottleneck

The UAE's AI ecosystem is globally competitive. A few key constraints now lie at the organizational level: operating models, funding discipline, talent integration, and governance mechanisms. Addressing these will translate national capability into institutional execution.



HEALTHCARE SHOWS PROGRESS, SOCIAL IMPACT ORGANIZATIONS ARE BUILDING MOMENTUM



HEALTHCARE ORGANIZATIONS: ADVANCING UNEVENLY WITH RESOURCE CONSTRAINTS

Healthcare organizations demonstrate notable AI maturity across most measured dimensions, reflecting a combination of clear clinical use cases, executive sponsorship, and sustained exposure to regulated data environments. These structural advantages have enabled healthcare entities to move beyond abstract experimentation and into early-stage execution.

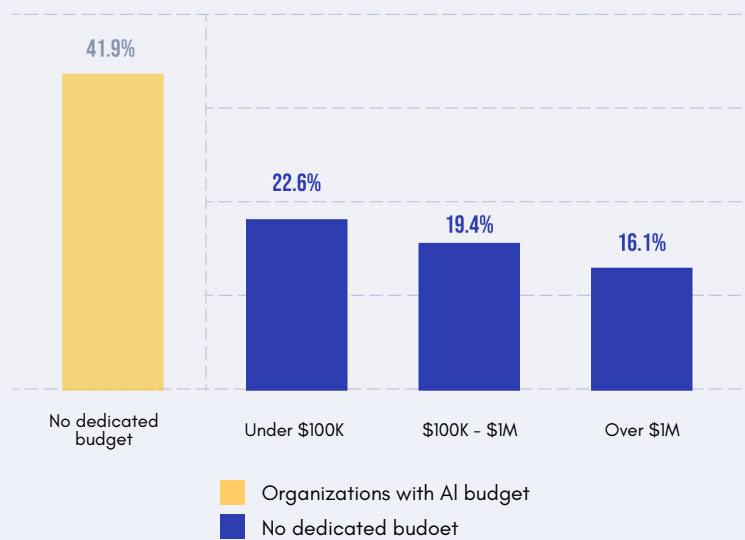
81 percent have defined specific AI use cases, which represents a foundational requirement for moving beyond abstract experimentation.

Nearly six in ten (58 percent) have advanced to piloting or production deployment, with only 13 percent indicating no near-term implementation plans.

However, strategic clarity remains incomplete for many. While 35 percent report detailed implementation roadmaps, 36 percent acknowledge possessing only general AI awareness without concrete plans. Notably, 13 percent lack clarity on how AI integrates into long-term institutional strategy, and only 36 percent have articulated well-defined strategic goals for their AI programs.

The most significant constraint is financial capacity with 42 percent of healthcare organizations reporting no dedicated AI budget whatsoever. This contrasts starkly with global patterns where enterprise healthcare organizations typically invest millions annually in AI capabilities.

EXHIBIT 1
NEARLY HALF OF ORGANIZATIONS HAVE NO DEDICATED AI BUDGET



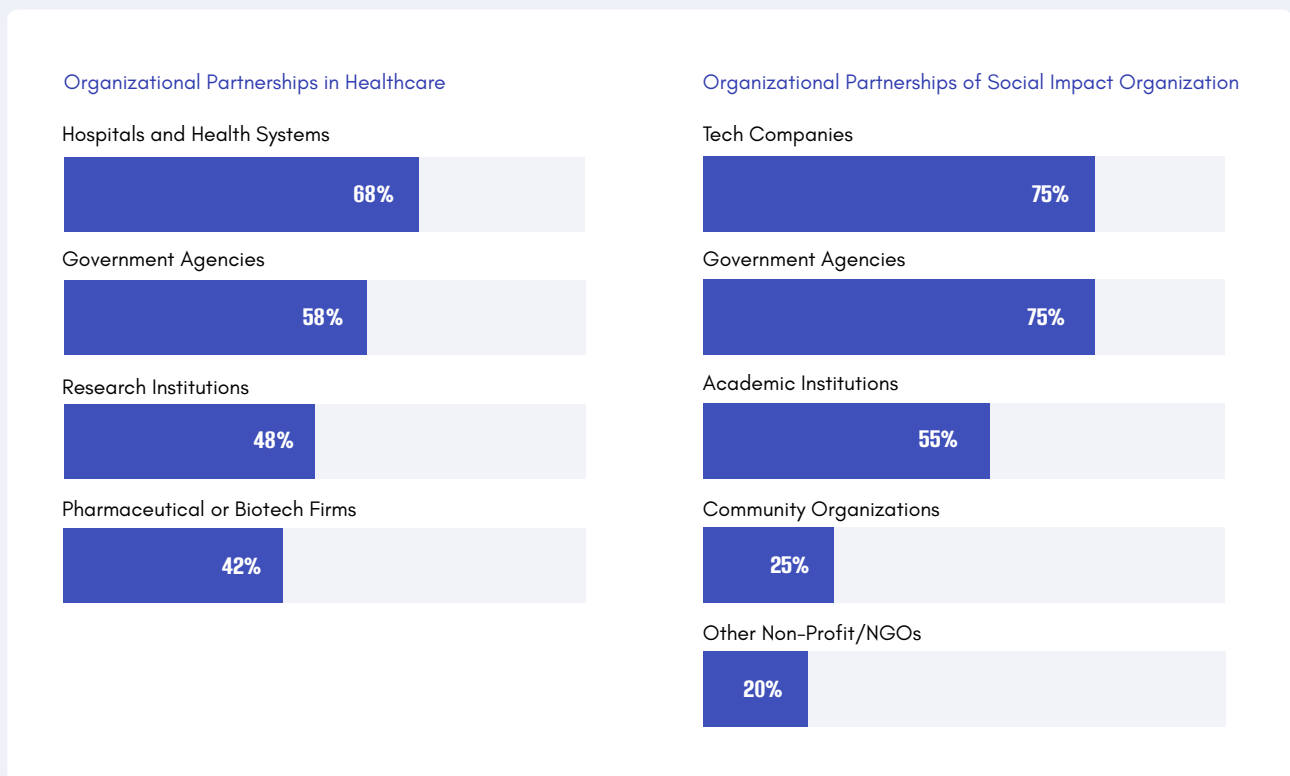
What is the annual budget in USD dedicated to AI within your organization?

Leadership engagement, however, appears reasonably robust. 71 percent of healthcare respondents occupy leadership positions, suggesting executive-level ownership of AI initiatives. Yet operating model maturity lags behind executive attention. The disconnect between high leadership visibility (71 percent), active pilots (58 percent), and limited strategic infrastructure—only 35 percent with detailed roadmaps, 36 percent with well-defined goals, and 42 percent with zero dedicated budgets—reveals a critical gap. Executive attention without institutional operating infrastructure (governance structures, resource allocation mechanisms, and cross-functional coordination processes) proves insufficient for enterprise-wide scale.

Collaboration networks indicate reliance on internal healthcare ecosystem partnerships for AI advancement: organizations partner primarily with hospitals and health systems (the most selected category), government agencies, research institutions, and pharmaceutical or biotech firms. This clinically embedded approach reflects a sector-specific logic—healthcare organizations are building AI capacity by leveraging peer institutions with shared regulatory environments, patient data standards, and clinical validation requirements, rather than seeking external technology partnerships alone.

EXHIBIT 2

PERCENTAGE OF RESPONSES TO “WHO WOULD BE YOUR KEY COLLABORATORS FOR SUCCESSFUL AND IMPACTFUL AI ADOPTION?” WITHIN HEALTHCARE AND SOCIAL IMPACT ORGANIZATIONS



The cumulative pattern reveals a sector advancing in experimentation but not yet in institutionalization. Without systematic governance, and integrated operating models, AI initiatives risk remaining siloed—successful in isolation but disconnected from broader transformation agendas such as workforce redesign, care model evolution, or long-term cost efficiency. The differentiator between healthcare AI leaders and laggards will be the speed at which organizations move from fragmented pilots to enterprise-grade operating models that embed AI into core institutional strategy, governance, and resource allocation.

Social Impact Organizations: High Aspiration, Limited Infrastructure

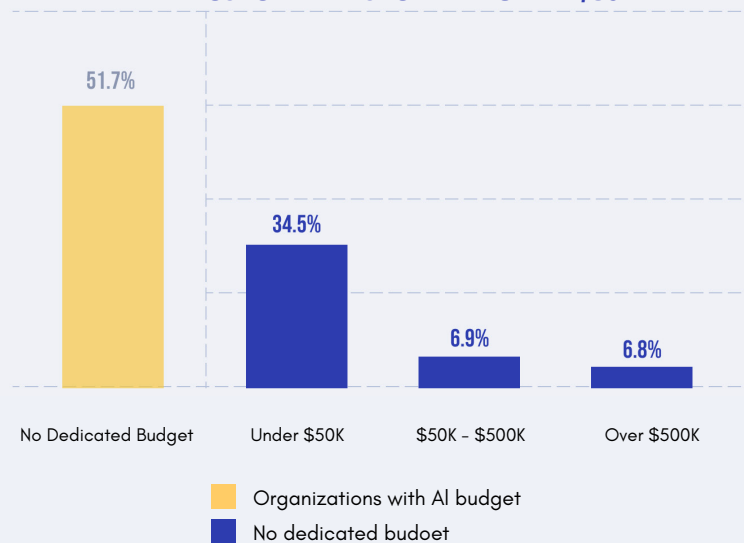
Social impact organizations face structural – not incremental capability gaps. 42 percent lack defined AI use cases entirely, and 38 percent report no clearly articulated long-term strategic goals for AI integration.

Only 33 percent have progressed to pilot or production stages, while 21 percent have no immediate plans to pursue AI implementations.

Strategic planning capacity is particularly limited. 57 percent possess only broad conceptual understanding of AI possibilities, while just 31 percent have developed detailed or comprehensive implementation roadmaps. Leadership representation at 52 percent of survey respondents reflects the sector’s governance structures, where technical and operational staff often hold greater decision-making influence than in clinically hierarchical environments. This distributed ownership model shapes how AI priorities are set and resources are mobilized—decisions emerge through cross-functional consensus rather than centralized executive mandate.

Funding limitations are acute, with AI investment often competing directly with core service delivery. 52 percent report zero dedicated funding, and no respondents report budgets exceeding \$1M. For organizations already operating on constrained resources, AI investments compete directly with core mission delivery.

EXHIBIT 3
OVER HALF OF SOCIAL IMPACT ORGANIZATIONS HAVE NO DEDICATED AI BUDGET —
AND MOST OF THE REST OPERATE UNDER \$50K



What Is The Annual Budget In Usd Dedicated To Ai Within Your Organization?

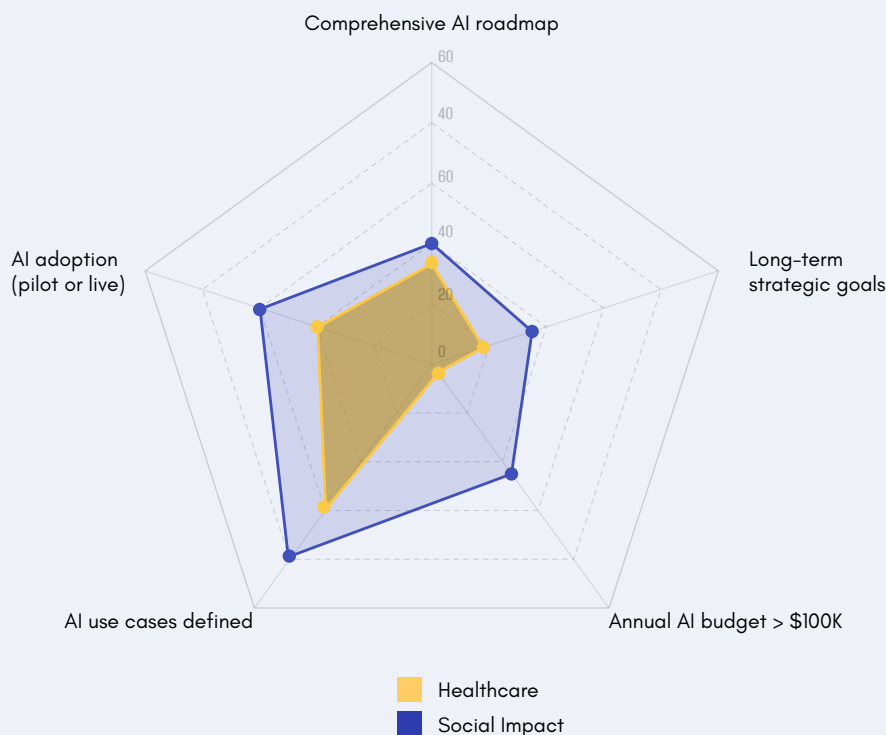
Collaboration networks reflect external partnership dependencies: social impact organizations partner primarily with technology companies and government agencies, followed by academic institutions [Exhibit 2]. This pattern indicates organizations are accessing AI capabilities through external technical expertise rather than building internal capacity or leveraging peer institution partnerships. Partnerships with other nonprofits and community organizations are less common, suggesting AI adoption has not yet become a shared ecosystem priority among social sector organizations.

Absent shared infrastructure or pooled capacity models, AI adoption in the social sector risks reinforcing fragmentation rather than enabling scale.

COMPARATIVE ANALYSIS: STRUCTURAL DIVERGENCE REQUIRING DIFFERENTIATED STRATEGIES

When analyzed comparatively, the data underscore systematic differences in organizational readiness within the two sectors of healthcare and social impact.

EXHIBIT 4
AI READINESS COMPARISON BETWEEN THE HEALTHCARE AND SOCIAL IMPACT ORGANIZATIONS



This divergence suggests that one-size-fits-all AI adoption strategies will prove insufficient. Healthcare organizations primarily need scaled funding, governance frameworks, and pathway guidance to transition successful pilots into enterprise-wide deployment. Social impact organizations require more foundational investments including building data infrastructure, developing technical literacy, establishing strategic planning capacity, and securing basic funding before sophisticated AI implementations become viable. The table below builds on the radar chart (Exhibit 4) by providing exact percentages and breakdowns for each key readiness indicator.

SUMMARY OF MATURITY INDICATORS

MATURITY INDICATOR	HEALTHCARE	SOCIAL IMPACT
AI use cases defined	81%	58%
In pilot or production	58%	33%
Comprehensive roadmaps	35%	31%
Well-defined strategic goals	36%	19%
Budget \geq \$1M	16%	0%
No dedicated AI budget	42%	52%
Leadership ownership	71%	52%

Both sectors operate within the UAE's resource-rich AI ecosystem yet struggle to convert national capabilities into organizational capacity. The implication is clear: healthcare requires scaling mechanisms, while social impact requires foundation-building.

Applying identical AI strategies across both sectors will systematically fail. Understanding why this gap persists—and how to close it—is essential for achieving the ambitious targets set forth in the National Strategy for Artificial Intelligence 2031.

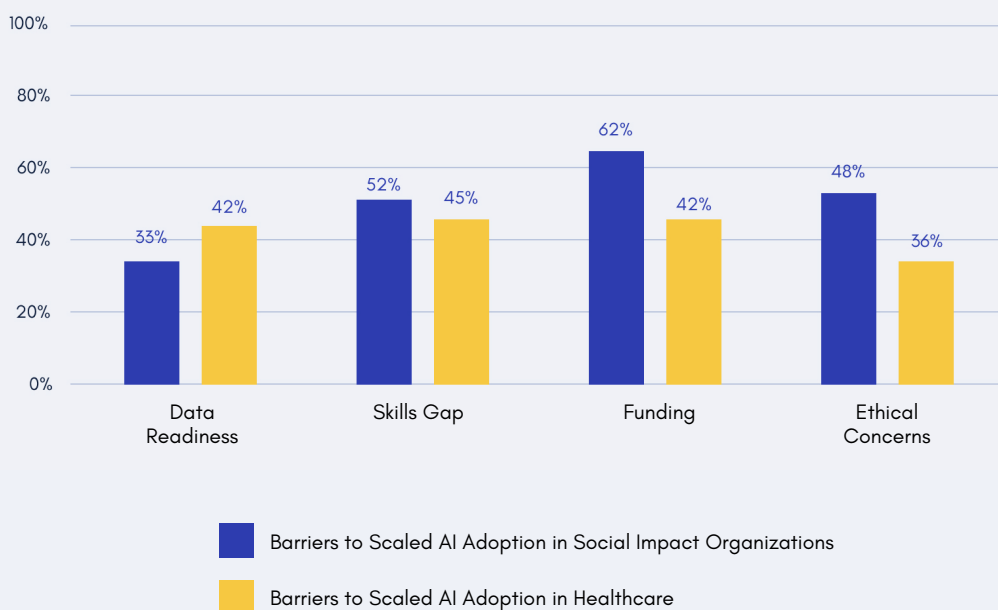
BARRIERS STRUCTURAL AND SYSTEMIC CONSTRAINTS TO ADOPTION



While opportunities abound, organizations confront persistent obstacles preventing scaled AI deployment. These barriers are structural, reinforcing, and mutually compounding—particularly for resource-constrained organizations.

EXHIBIT 5

ACROSS SECTORS, FUNDING AND SKILLS REMAIN THE STEEPEST BARRIERS TO AI ADOPTION.



STRUCTURAL AND OPERATIONAL BARRIERS

Data Readiness and Quality

33 percent of social impact organizations cite lack of access to structured, interoperable data as a primary constraint. Thirty-one percent across all sectors identify data quality as critical barriers. Many organizations struggle with legacy systems generating siloed, unstructured information incompatible with modern AI architectures.

Talent and Expertise Gaps

52 percent of social impact respondents identify talent as their foremost barrier, while 45 percent of healthcare organizations report similar constraints. The shortage is not merely quantitative but qualitative: Organizations require professionals possessing both technical AI competencies and deep domain expertise in healthcare delivery or social service provision. This combination remains exceptionally rare and expensive.

Funding Scarcity

As documented, 42 percent of healthcare organizations and 52 percent of social impact entities operate with zero dedicated AI budget. Of those with funding, allocations typically fall below \$100,000. This is insufficient for sustained experimentation, infrastructure upgrades, or talent acquisition. Long-term R&D investment is rare, limiting organizations to short-term pilots that rarely achieve production scale.

Infrastructure Fragmentation

Organizations operate at varying levels of technological maturity, with different departments running incompatible systems. This fragmentation complicates data integration, limits interoperability, and prevents cohesive AI strategies. 23 percent of healthcare respondents explicitly flag legacy infrastructure as barriers.

REGULATORY AND GOVERNANCE CHALLENGES

Transparency, Explainability, and Trust

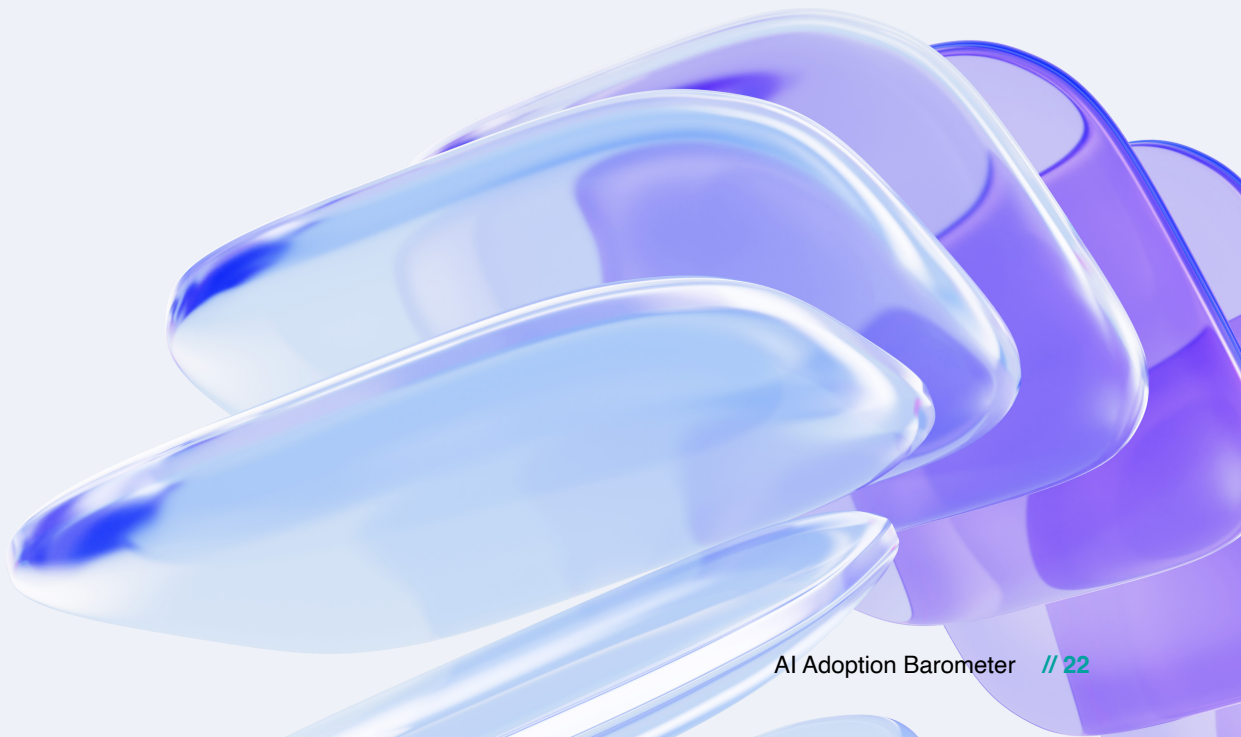
54 percent of healthcare respondents cite AI's "black box" nature as major concerns. Clinicians require explainable models to understand diagnostic recommendations and treatment pathways. This is a requirement both for professional confidence and regulatory compliance. The risk of AI hallucinations (plausible but incorrect outputs) is particularly acute in clinical settings where errors can have life-threatening consequences.

Ethical Concerns and Algorithmic Bias

36 percent of healthcare leaders worry about algorithmic bias, privacy violations, and transparency failures. Social impact organizations fear that AI could inadvertently perpetuate inequalities, particularly if training data reflect historical biases or systems developed elsewhere fail to account for regional contexts. The UAE's multicultural, multilingual population creates unique challenges: AI systems must function accurately across Arabic dialects, serve diverse demographic groups equitably, and respect cultural norms that vary significantly across communities.

Data Privacy and Cybersecurity

42 percent of healthcare leaders express concerns about data protection regulation compliance and cybersecurity exposure. The interconnected nature of healthcare IT systems creates vulnerabilities, particularly as patient data becomes digitized and cloud-based. Social impact organizations managing sensitive beneficiary information face parallel risks. Data breaches could undermine organizational credibility, expose vulnerable populations to harm, and trigger regulatory penalties.



CURRENT IMPLEMENTATIONS DEMONSTRATING VALUE THROUGH DEPLOYED SYSTEMS



Despite challenges, pioneering organizations across both sectors have successfully deployed AI solutions, offering tangible proof points for broader adoption and demonstrating that scaled implementation is achievable within the UAE context.

SECTOR	REPRESENTATIVE PILOTS
Healthcare	<ul style="list-style-type: none"> • Predictive pharma testing • AI-assisted imaging • Automated clinical notes • Bedside fall-prevention monitoring • Early disease-risk models
Social Impact	<ul style="list-style-type: none"> • Personalised learning paths • AI-based aid forecasting • Mental-health chatbots • Real-time learner feedback bots

These implementations validate that AI can deliver measurable value in mission-critical contexts within the UAE. However, the majority remain at pilot scale or limited deployment. The critical challenge now is transitioning successful pilots to enterprise-wide implementation—a shift requiring sustained investment, workflow redesign, change management, and institutional commitment beyond initial proof-of-concept enthusiasm.

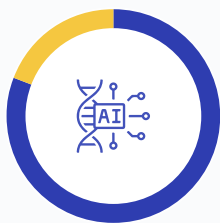
OPPORTUNITIES HIGH-IMPACT USE CASES ALIGNED WITH NATIONAL PRIORITIES



Despite readiness gaps, organizations have identified domains where AI delivers—or promises to deliver—measurable value. These opportunities align remarkably well with the priority sectors identified in the UAE National Strategy.

HEALTHCARE: PERSONALIZED MEDICINE, OPERATIONAL EFFICIENCY, AND DISCOVERY

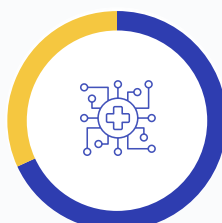
AI APPLICATIONS IN HEALTHCARE



81%

**AI Driving
Personalized Medicine**

Respondents chose AI for personalized medicine



68%

**AI Accelerating
Diagnostics**

Respondents chose AI for accelerating diagnostics



52%

**AI Supporting Remote
Monitoring/Tele-health**

Respondents chose AI for remote monitoring/
tele-health

AI is transforming healthcare by enhancing personalized medicine, diagnostics, and remote care.

Clinical Decision Support and Diagnostics

AI-assisted diagnostics in radiology and pathology represent among the most mature and value-proven applications, with demonstrable gains in speed, accuracy, and specialist leverage highlighted by 68 percent of healthcare respondents as priority areas. Predictive medicine leveraging patient data for early disease detection is similarly prominent (81 percent), enabling clinicians to intervene before conditions become acute. Systems are already operational in several UAE healthcare facilities, reducing diagnostic turnaround times while augmenting specialist capacity.

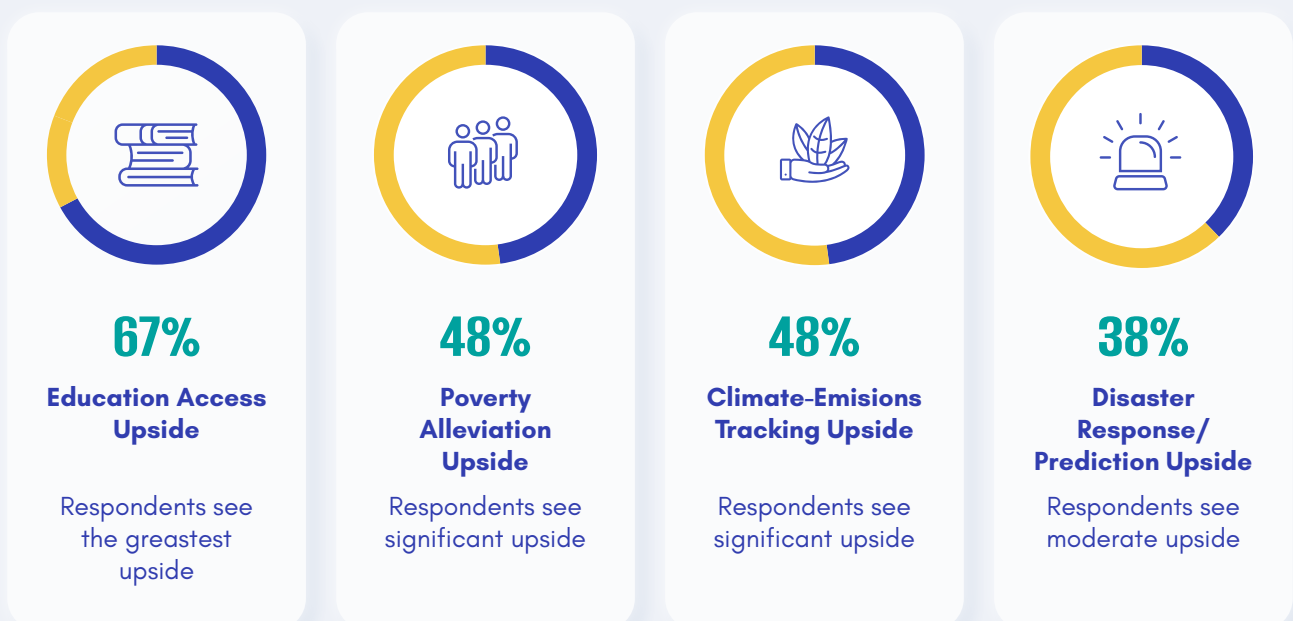
Operational Optimization

Healthcare organizations face persistent workforce shortages and administrative burdens that limit clinical capacity. AI is being deployed to automate clinical dictation and medical documentation, streamline capacity forecasting, and optimize staffing models. 52 percent of respondents prioritize remote monitoring and telehealth enablement, reflecting post-pandemic shifts in care delivery models.

Drug Discovery and Clinical Research

AI is also shortening drug-discovery and clinical-trial cycles, and enabling digital-twin simulations for precision care in the UAE.

SOCIAL IMPACT: ACCESS, EQUITY, AND SCALED SERVICE DELIVERY



Education access is the most significant AI upside, followed by poverty alleviation and climate-emissions tracking.

Education and Accessibility: AI as an Access Multiplier

67 percent of social impact respondents identify education access as AI's highest-value domain. Personalized learning platforms for people of determination are operational, adapting content and pacing to individual needs. This is a direct application area highlighted in the National Strategy's focus on inclusive, technology-enabled education. AI-powered chatbots provide real-time feedback, enabling learners to progress independently.

Humanitarian Response and Resource Optimization

48 percent of respondents prioritize poverty alleviation, where AI optimizes aid distribution through demand forecasting models. Supply chain optimization reduces waste and improves crisis responsiveness—capabilities increasingly critical as climate-related disasters intensify across the region.

Climate Action and Environmental Monitoring

Climate emissions tracking (48 percent) and disaster response prediction (38 percent) represent urgent application areas. **AI enables real-time environmental monitoring and modeling of climate-related risks, informing both policy and operational decisions. These tools directly support the UAE's Net Zero 2050 commitment.**

Current deployments also include adaptive learning for people of determination, AI-guided aid-distribution models, grant-writing automation and always-on chatbots for mental-health or beneficiary support.

These applications mirror global adoption patterns while reflecting distinctly regional priorities. The UAE's context (characterized by multicultural populations, rapid urbanization, climate pressures, and ambitious national development goals) creates both urgent need and enabling conditions for AI-powered solutions in mission-critical sectors.

RISKS

ANTICIPATING AND MITIGATING UNINTENDED CONSEQUENCES



Beyond barriers to adoption, organizations identify specific risks requiring active management. These risks carry both technical and societal dimensions, with potential impacts on safety, equity, and mission integrity that could undermine public trust in AI-enabled services.

HEALTHCARE-SPECIFIC RISKS

Clinical Errors and Patient Safety: Misdiagnosis, incorrect treatment recommendations, or medication errors attributable to AI system failures with consequences that could be fatal.

Data Breaches and Privacy Violations: Exposure of sensitive patient information through cyberattacks or system vulnerabilities, with severe reputational and legal consequences.

SOCIAL IMPACT-SPECIFIC RISKS

Algorithmic Bias and Perpetuated Inequality: AI models trained on non-representative data amplifying existing disparities rather than reducing them.

Mission Drift: Efficiency imperatives overwhelming values-driven decision-making, causing organizations to optimize for metrics rather than meaningful human impact.

CROSS-SECTOR RISKS

Cultural Misalignment: AI systems designed elsewhere failing to account for regional languages, norms, and contexts, producing inappropriate or ineffective interventions.

Trust Erosion: High-profile AI failures damaging public confidence in both technology and mission-driven organizations, with disproportionate impact on already-marginalized communities.

These risks are not hypothetical. They are well-documented in global deployments and carry heightened consequences in healthcare and social service contexts. Organizations globally have experienced AI-related incidents, and the potential for harm in these contexts is substantial. Robust risk mitigation (including continuous monitoring, validation protocols, human oversight mechanisms, and rapid response capabilities) must accompany AI deployment.

STRATEGIC IMPERATIVES PATHWAYS FROM AMBITION TO IMPACT



The convergence of roundtable insights, survey evidence, and the UAE's strategic context points toward several high-priority interventions required to accelerate AI adoption and capture meaningful value in healthcare and social impact sectors.

Cross-Sector Collaboration and Shared Infrastructure

Organizations should establish formal peer networks for co-developing use cases, sharing implementation insights, and creating pooling resources where scale advantages exist. Consortia models can enable smaller organizations to access capabilities unaffordable individually—shared data platforms, common AI tools, collective procurement of technical expertise.

Healthcare and social impact sectors face sufficiently similar challenges—data quality, talent gaps, ethical concerns, regulatory uncertainty—that joint initiatives could yield mutual benefits. The UAE's compact geography and interconnected institutions create favorable conditions for such collaboration. Regular cross-sector convenings should become standing forums for strategic coordination. AI adoption will reward institutions that treat it as a long-term capability investment—not a sequence of isolated technology experiments.

Tailored Resources by Adoption Stage

Recognizing that organizations are at different points in their AI journey, startAD with support from Google.org will release [two practical resources](#): a playbook for identifying the right use cases and a guide for implementing AI adoption effectively.



CONCLUSION

TRANSLATING NATIONAL AI LEADERSHIP INTO SECTORAL IMPACT

The UAE has assembled world-class AI infrastructure and capabilities—research institutions, advanced technology platforms, comprehensive government frameworks. **Yet this barometer reveals a critical translation gap: while national AI capacity is globally competitive, organizational absorption capacity lags.** Mission-driven institutions delivering healthcare and social services directly to citizens have not yet converted available resources into scaled operational practice.

The barrier is not technology availability. It is institutional readiness.

Healthcare organizations demonstrate active experimentation—58 percent piloting or deploying AI solutions—but lack the operating infrastructure to scale: only 35 percent have strategic roadmaps, 36 percent have defined goals, and 42 percent report zero dedicated budgets. Executive attention exists without the governance structures, resource allocation mechanisms, and cross-functional coordination processes required for enterprise-wide transformation. Social impact organizations face structural capacity constraints shaped by grant-based funding models, distributed governance, and external technical dependencies—requiring fundamentally different enabling interventions than healthcare.

Both sectors share a common challenge: moving from fragmented pilots to integrated operating models. This demands executive ownership anchored in clear accountability, systematic resource allocation matched to multi-year ambitions, governance frameworks that enable confident scaling, and collaborative infrastructure allowing organizations to build capacity collectively rather than in isolation.

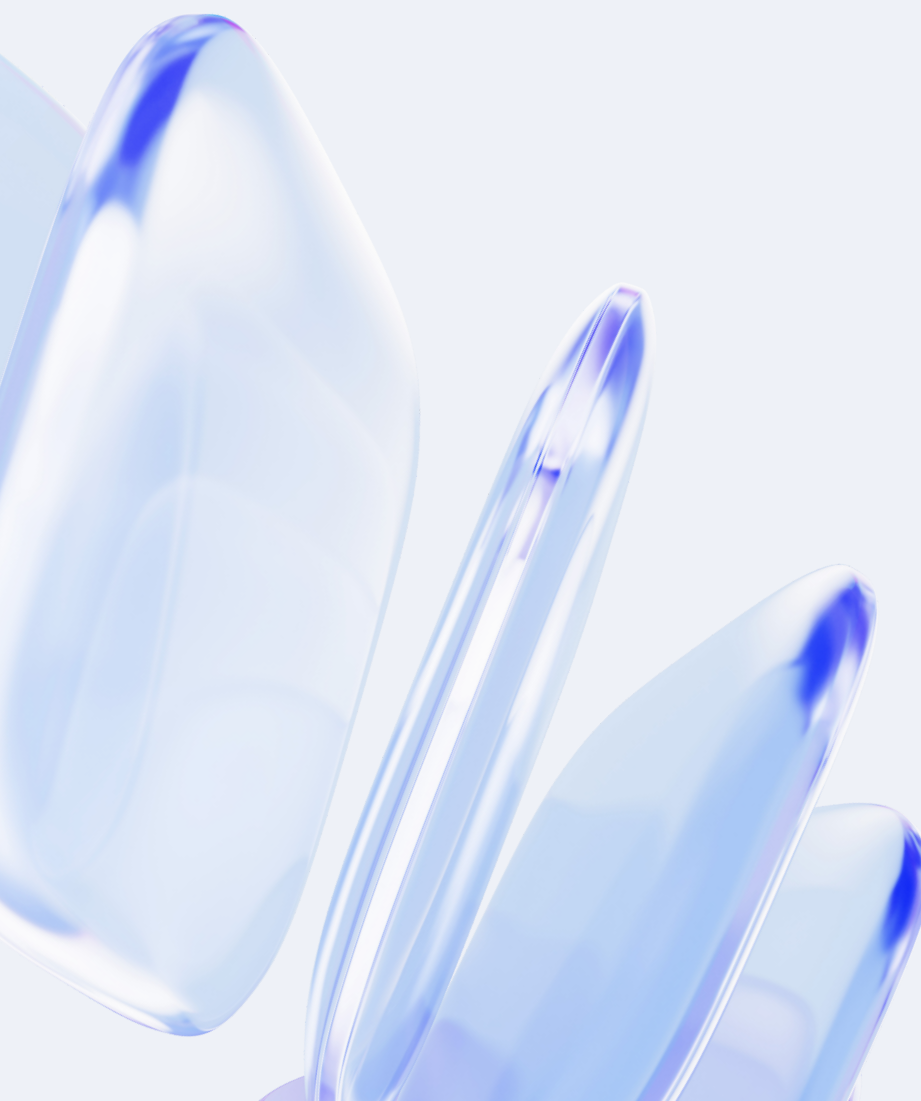
The window for establishing institutional AI capability is open.

Organizations that build foundational operating infrastructure now, while the UAE's AI ecosystem continues maturing and before competitive dynamics entrench capability gaps, will define what measurable, mission-aligned AI impact looks like. Those that delay risk perpetual pilot mode: active experimentation disconnected from institutional transformation.

The momentum exists. National infrastructure is in place. The determinant of success is organizational action.

Healthcare and social impact leaders face a choice: invest decisively in the governance, funding discipline, and operating models that enable scale, or watch AI remain a marginal experiment rather than a transformative capability. The institutions that act with strategic urgency now will convert the UAE's AI leadership into lived improvements for the patients, beneficiaries, and communities they serve.

The time to move from aspiration to execution is now.



ABOUT THIS RESEARCH



This barometer synthesizes findings from three roundtables convened by startAD and Google.org between March and May 2025: an initial cross-sector session on March 26 bringing together healthcare and social impact leaders, followed by two focused convenings on May 21—one dedicated to healthcare organizations and one to social impact entities. **The report also incorporates data from a regional AI maturity survey fielded across the UAE, capturing 61 responses (32 healthcare, 29 social impact).**

The research was conducted in partnership with organizations spanning government agencies, healthcare systems, pharmaceutical companies, NGOs, CSR departments, and impact-driven enterprises. Survey questions evaluated use-case development, deployment stage, strategic planning maturity, leadership ownership, budget allocation, collaboration patterns, and risk mitigation approaches.

This report was compiled by startAD, January 2026. The findings, interpretations, and conclusions expressed herein are based on primary survey data collected by startAD and do not constitute financial, legal, or investment advice. startAD makes no representations or warranties regarding the accuracy or completeness of the information contained in this report and accepts no liability for any decisions made in reliance upon it. This report was developed with the assistance of AI tools for drafting, editing, and data analysis support. All findings, interpretations, and conclusions were reviewed and validated by the startAD team.

