

AI Graduate Employment Landscape in the UAE: Trends & Opportunities

A KEY INSIGHTS REPORT

About MBZUAI

Mohamed bin Zayed University of Artificial Intelligence (MBZUAI) is a graduate, research-focused university in Abu Dhabi, and the first university dedicated entirely to the advancement of science through AI.

The university empowers the next generation of AI leaders, driving innovation and impactful applications of AI through world-class education and interdisciplinary research. MBZUAI has five academic departments including:

Computer Vision, Machine Learning, Natural Language Processing, Computer Science and Robotics

MBZUAI offers a Bachelor of Science in Artificial Intelligence and a Master's in Applied AI, attracting top global talent and distinguished faculty.

The number of enrolled students at MBZUAI increased to 365 in 2024, representing 49 nationalities. Some 213 students have graduated from the University's master's and Ph.D. programs to date (with over 75% of graduates deciding to remain within the UAE to enter industry or continue with PhD studies). In addition, 203 graduates from the MBZUAI Executive Program (MEP), and 32 from the inaugural MBZUAI Executive Program - Accelerated (MEP-A).

MBZUAI is ranked 10th globally across the combination of AI, computational biology, computer science, computer vision, machine learning, natural language processing, and robotics, according to the latest CS Rankings.



About TQ Consulting

TQ Consulting is a locally rooted firm offering a broad spectrum of services—from corporate training, management consulting, and research to market analysis, leadership coaching, and technology-driven solutions. While our focus is firmly on local needs, our strategic partnerships with international organizations enable us to deliver globally informed insights and best practices. Over the years, we have built extensive capabilities and refined strategic collaborations that allow us to provide top-tier consulting, tailored development programs, and cutting-edge technology solutions. By partnering with TQ Consulting, organizations gain access to research-driven strategies, world-class training, and internationally recognized expertise—empowering them to boost productivity, maintain a competitive edge, and achieve tangible success in both local and regional markets.

Our commitment to quality and continuous improvement is evident through our ISO certification and periodic audits by recognized authorities, ensuring the highest standards across all our services.

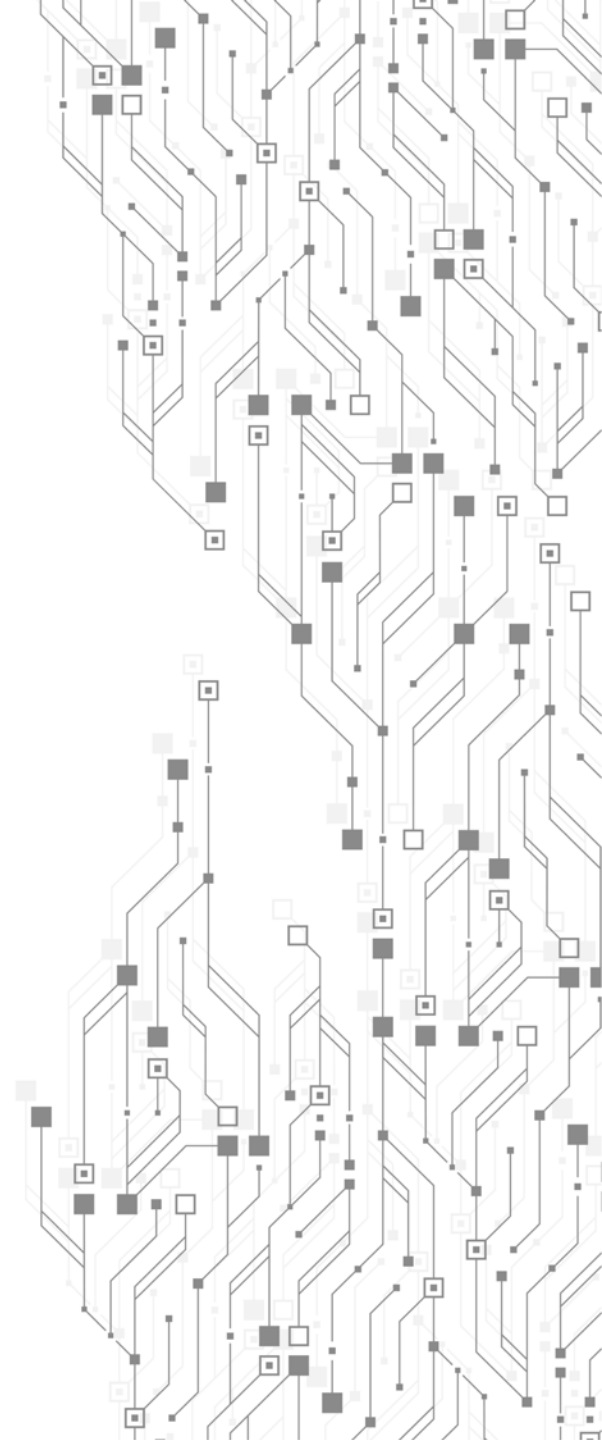


Executive Summary

Artificial Intelligence is rapidly reshaping industries worldwide, and the UAE is positioned at the forefront of this transformation. Recognizing this evolving landscape, Mohamed bin Zayed University of Artificial Intelligence (MBZUAI) launched a comprehensive study in collaboration with TQ Consulting to assess AI-related job opportunities for master's and PhD graduates across government and private sectors.

A dual research approach combined secondary data, gathered from in-depth reviews of industry publications and job postings, with primary insights from surveys and interviews conducted with employers and AI stakeholders. This methodology ensured a well-rounded analysis, identifying not only overarching industry trends but also pinpointing existing skill gaps and determining current and future skill requirements, highlighting the most in-demand AI roles and any specific hiring preferences. This also ensured alignment to realities by addressing the real challenges of deploying AI solutions at scale. By doing so, MBZUAI seeks to ensure that graduates acquire the expertise and competencies needed in a rapidly evolving AI ecosystem, and explore opportunities for promoting collaboration among academia, industry and government entities.

The findings reveal that strong government-led strategies and substantial investment have positioned the UAE as an emerging global AI hub, stimulating rapid growth of AI-focused startups and specialized firms. Cross-industry adoption extends beyond basic process automation to strategic decision-making, particularly in sectors like aviation, banking, healthcare, education, and logistics.



Published Reports on AI in the UAE

Artificial Intelligence is reshaping industries worldwide, and the UAE is making major strides in this field, making it essential for academic institutions to align with evolving market demands.



Trends of the AI Job Market in the UAE

1.

Rapid Growth in AI Market and Job Demand

- The UAE AI market is expected to grow at a CAGR of 43.9%, reaching \$44.34B by 2030, leading to a substantial rise in demand for AI talent.
- Key sectors driving this growth include finance, healthcare, tourism, education, and construction, with AI integration projected to significantly boost GDP across these industries.



1,102% increase in generative AI course enrollments on platforms like Coursera, reflecting a shift toward developing advanced, specialized skills

2.

Persistent Talent and Skills Gap

- Despite a 13.4% YoY increase in AI hiring, there is a low skill penetration rate (0.98%), indicating a shortage of qualified AI professionals.
- Employers cite challenges in sourcing skilled talent in data science, AI, and cybersecurity, compounded by a slow recruitment process and high salary expectations.

3.

Emerging Focus Areas: Generative AI and AI Ethics

- There is a growing demand for professionals skilled in generative AI, AI ethics, governance, and prompt engineering.
- Education trends show a 1,102% increase in generative AI course enrollments on platforms like Coursera, reflecting a shift toward developing advanced, specialized skills

4.

Investment in Upskilling and Training

- Around 57% of companies have implemented AI training initiatives, and an additional 35% plan to do so within the next 15 months.
- Programs such as SAP's Young Professionals Program and partnerships with platforms like Coursera aim to bridge the skill gap by focusing on AI and data science education.

5.

Increasing Gender and Experience Gaps

- Women represent only a marginal portion of the AI workforce, with AI skill penetration rates of 1.14% for men and 0.43% for women.
- Most AI jobs are at the mid-level (1-5 years of experience), followed by senior-level roles, highlighting a limited focus on entry-level opportunities

Main UAE Economic Sectors Seeking Talents with AI Qualifications

The growth will span multiple sectors, including finance, healthcare, government, and others, driving demand for AI talent across diverse industries and domains.

FINANCE



14% increase in GDP by 2035 is expected to yield from full adoption of AI technologies in the financial sector

HEALTHCARE



AI in the Healthcare market size to expand at a CAGR of ~42% reaching a value of over AED 3B by 2029

TOURISM



Tourism & hospitality is expected to generate an estimated output increase in current prices of AED 3B by 2030

RETAIL



Retail is expected to be in the top five movers benefiting from the AI revolution

EDUCATION



Education is expected to continue its transformation in the UAE with the integration of e-learning tools by 2030

GOVT. SERVICES



Ranked 18th Oxford AI Readiness Index 2021 out of 160 countries

AGRICULTURE



AI is expected to generate an additional AED 2B for agriculture upon automation by 2030

CONSTRUCTION



Construction output is set to add AED 39B into the UAE economy upon integration of AI tools by 2030

ICT



ICT's out is on the trajectory to boost an excess of AED 14B in UAE's GDP by 2030 upon integration of AI

TRANSPORT & STORAGE



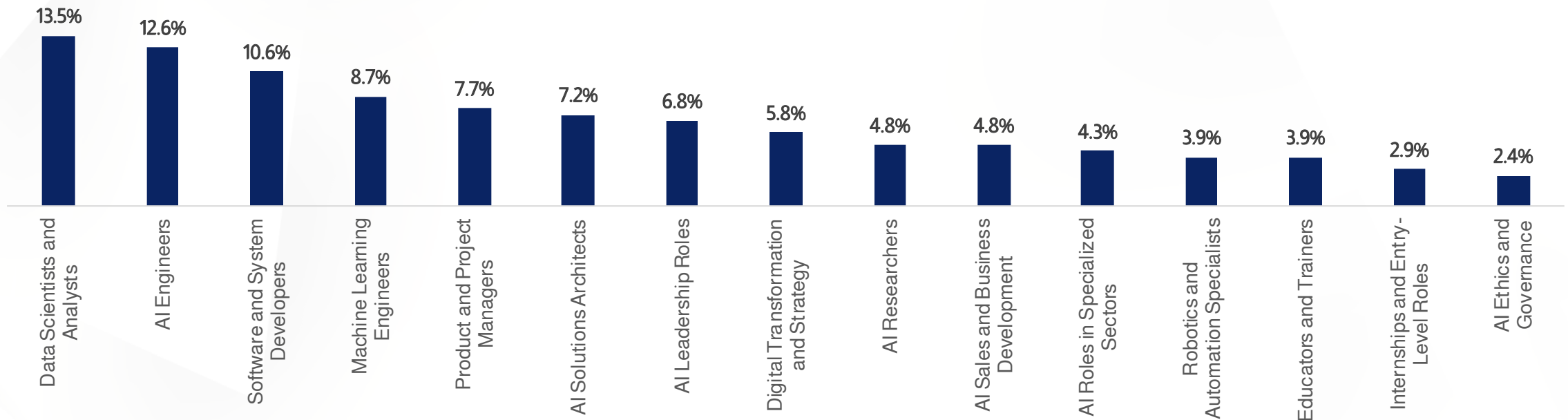
US\$19B increase in annual gross value added (GVA) by 2035

Source: [DOE, The State of AI, Sectoral Report](#) [Report, Published by UAE Ministry of State for AI]; [Accenture](#)

Main AI Job Categories by UAE Employers Seeking AI Talents

The largest share of AI-related job opportunities in the UAE falls under Data Scientists and Analysts (13.5%), AI Engineers (12.6%), and Software and System Developers (10.6%), reflecting the region's focus on data-driven decision-making and AI system integration. Roles in Machine Learning Engineers (8.7%) and Product and Project Management (7.7%) are also prominent, indicating a demand for specialists who can operationalize and manage AI solutions. This highlights the UAE's strategic emphasis on both technical expertise and leadership in AI-driven projects.

Top AI-related job titles – based on current openings (as of Oct 2024)



n = 207

Source: Based on LinkedIn Job Data Scrapping

Key Insights and Conclusions from published reports

Key Insights



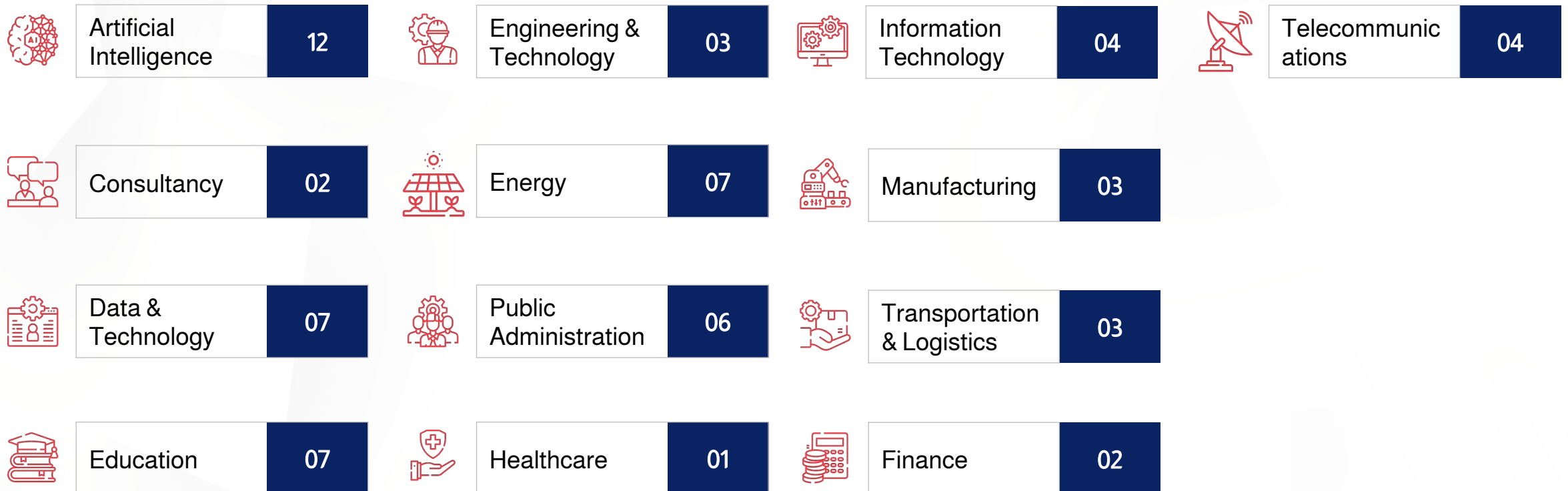
Conclusion

- Explosive Market Growth:** The UAE AI market is growing at a CAGR of 43.9%, projected to reach \$44.34B by 2030.
 - Sectoral Impact:** AI adoption is driving growth across finance, healthcare, logistics, education, and construction, boosting GDP significantly.
 - Talent Demand Surge:** 84% of UAE companies plan to hire AI professionals within 15 months, focusing on data science, machine learning, and cybersecurity skills.
 - Skills Gap:** The 0.98% AI skill penetration rate highlights a major shortage of qualified professionals.
 - Upskilling Initiatives:** 57% of companies are already implementing AI training programs, with additional plans to expand them further.
 - Generative AI Focus:** Registrations for generative AI courses have grown by 1,102%, reflecting strong interest in emerging AI technologies.
 - Gender Imbalance:** Women hold only 0.43% AI skill penetration, significantly lower than men (1.14%).
 - Mid-Level Experience Demand:** Most AI roles target professionals with 1-5 years of experience, leaving fewer opportunities for entry-level candidates.
 - National AI Strategy:** The National AI Strategy 2031 is a driving force behind AI integration, focusing on homegrown talent, governance, and cross-industry applications.
 - Retention Challenges:** Retaining AI professionals is tough due to high global demand, salary expectations, and competitive recruitment costs.
- The UAE is solidifying its position as a global AI hub, leveraging robust government initiatives and strategic investments.
 - AI integration is revolutionizing industries, contributing significantly to economic growth and technological transformation.
 - Addressing the skills gap through upskilling and education is vital to meet the rising demand for AI talent.
 - Continued focus on generative AI, ethics, and governance is essential for sustainable and responsible AI development.
 - Promoting gender diversity in AI roles can unlock untapped potential and ensure inclusivity in the workforce.
 - Expanding entry-level opportunities can nurture young talent and create a steady **pipeline** of professionals.
 - Companies must prioritize retention strategies, offering competitive salaries and growth opportunities to reduce talent loss.
 - Investments in AI research and development will position the UAE as a leader in cutting-edge AI technologies.
 - The public and private sectors must collaborate to foster a thriving AI ecosystem and reduce reliance on foreign expertise.
 - With strategic execution, the UAE can achieve its vision of becoming a global leader in AI by 2031, driving innovation and economic diversification.

Survey and Interviews

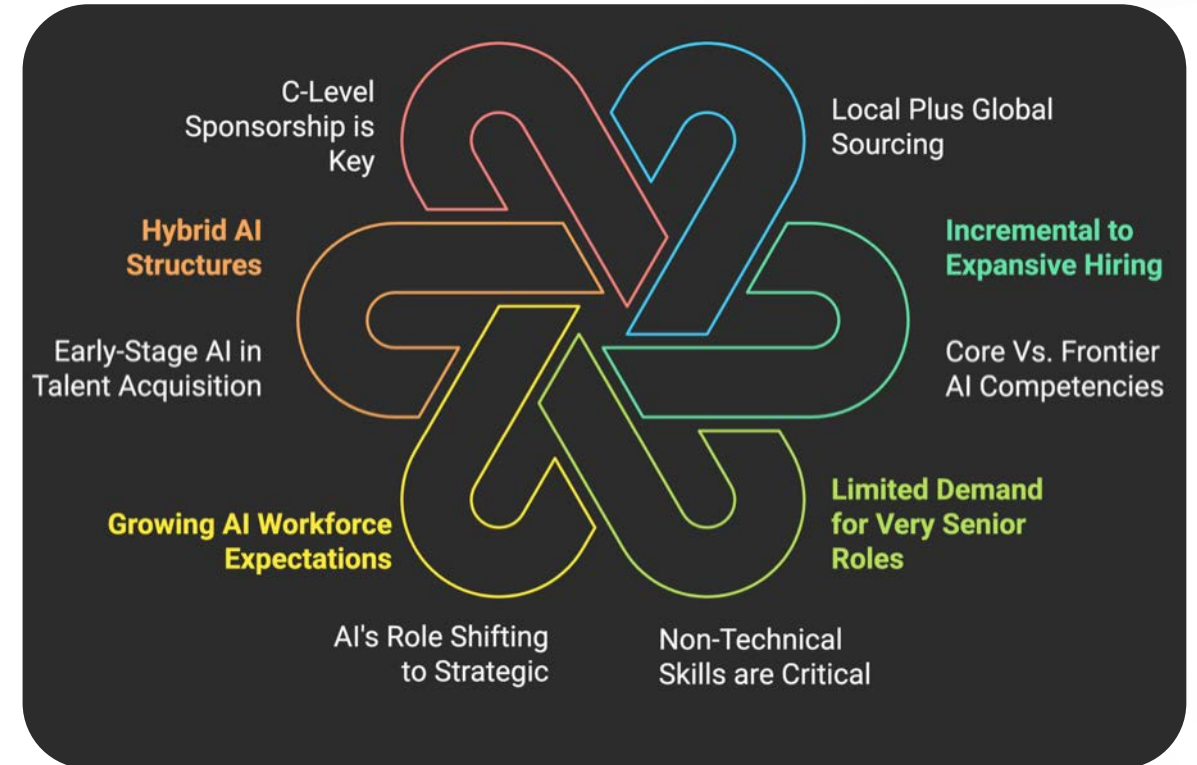
Sectors of Organizations Approached

Below are the sectors that have been covered in the project together with the number of organization approach for the primary research in each sectors.



Survey Key Insights

- 1. AI Becomes Core Business Driver:** Companies are rapidly moving beyond using AI as a supportive tool, positioning it instead as a central element of strategy and decision-making.
- 2. Significant Talent Expansion Ahead:** Although most firms have only a small AI-skilled workforce now, nearly half expect over 50% of employees to be AI-qualified within three years.
- 3. Hybrid Structures and C-Level Ownership:** Many organizations have both a dedicated AI department and embedded AI roles, with leadership often residing at the CEO or CTO level.
- 4. Foundational Skills First, Advanced Skills Rising:** Data science and ML are deemed essential, while emerging competencies (e.g., LLMs, multimodal AI) are increasingly in demand but not yet universal.



Interviews Key Insights



AI Influence on UAE market

1. The UAE stands as a rapidly evolving market for AI, propelled by robust governmental initiatives and a receptive private sector.
2. While practical AI applications abound—ranging from automated customer service to predictive maintenance—further efforts are required to address research output, SME readiness, and public perception to fully realize AI's transformative potential.
3. As adoption accelerates, AI is likely to underpin next-generation services, from predictive maintenance to personalized customer journeys, positioning the UAE as a hub for digital excellence.
4. The UAE's AI ecosystem continues to expand, with strong governmental support, growing market demand, and evolving business strategies.
5. AI's role is transitioning from being primarily informational or operational to a core strategic capability driving competitiveness and innovation.

Challenges in adopting AI in the UAE

6. Adopting AI in the UAE presents both **Exciting Opportunities** and **Significant Challenges**.
7. **Main skill shortages** highlighted by interviewees were: **data analysis and management, algorithms development, and programming with 1-3 years experience**.
8. While strong government support, ambition, and market demand fuel AI initiatives, organizations strive to overcome hurdles related to **Talent and Skill Shortages Data Quality and Infrastructure, Ethical and Regulatory Frameworks, Technological Maturity, and Financial and Operational Constraints**.
9. Addressing these areas—through improved educational pipelines, clearer regulations, robust data governance, and well-rounded AI strategies—will be vital for the UAE to fully realize AI's transformative potential and sustain its role as a regional and global innovator.

Roles played by AI companies in the UAE

10. Companies embracing AI in the UAE fulfill multiple **interconnected roles**, ranging from **advisory and upskilling to solution development and platform creation**.
11. While large enterprises collaborate on strategic government initiatives and build their own AI platforms, **startups** innovate in targeted areas, providing agile solutions.
12. Meanwhile, **consulting firms** and **systems integrators** ensure that technology adoption aligns with broader **digital transformation** goals.
13. Collectively, these players are shaping a vibrant AI ecosystem that balances **technical excellence, business strategy, and ongoing education** to accelerate the UAE's leadership in artificial intelligence.

Interviews Key Insights (Contd.)

Hiring and developing AI talent in the UAE

14. Hiring and developing AI talent in the UAE involves **navigating a dynamic interplay** of local and global talent pools, competitive compensation, and the need for both **technical expertise** and **business acumen**.
15. Companies and government entities alike recognize the strategic importance of AI professionals, offering premium salaries and flexible work arrangements.
16. Yet challenges—such as high living costs, retention difficulties, and the emerging nature of local AI ecosystems—require **creative solutions: robust in-house upskilling, university-industry collaboration, government incentives, and strategic global recruiting**.
17. Over time, this cohesive approach can help build a **sustainable AI talent pipeline** and further solidify the UAE's reputation as a regional hub for innovation.



By combining strong foundational knowledge, technical mastery, practical experience, and business acumen, AI professionals can fully harness emerging AI opportunities in the UAE and beyond.

AI skillsets and competencies

18. **Math, Stats & Algorithmic Foundations:** A fundamental must-have for understanding and innovating in AI.
19. **Technical Skills (ML, DL, NLP, CV, MLOps):** Proficiency in frameworks and cloud platforms is crucial for building, deploying, and scaling AI solutions.
20. **Soft Skills & Domain Expertise:** Business acumen, ethics, stakeholder management, and domain-specific knowledge amplify AI's impact.
21. **Real-World Application vs. Theory:** Employers emphasize practical experience. Certifications can help but should be paired with hands-on projects.
22. **Future Outlook:** AI roles will increasingly merge with software engineering and domain specialization. Prompt engineering, generative AI, and robotics continue to gain prominence.
23. Meanwhile, **short courses, specialized certifications, and university-led conversion programs** offer stepping stones to keep pace with this rapidly evolving field.

Conclusions

Conclusions

1. UAE as a Global AI Hub

The UAE's strong government-led strategies and investments position it as an emerging global AI powerhouse, reinforcing national priorities and aligning closely with Vision 2031. The rapid growth of AI-focused startups and specialized firms supports this drive, enabling both public and private sectors to stay competitive on the world stage.

2. Cross-Industry Transformation and Economic Impact

AI implementation is evolving from process augmentation to strategic decision-making, bringing transformative benefits across multiple sectors (aviation, banking, healthcare, education, logistics). The focus is shifting from basic operational efficiencies to broader value creation, innovation, and sustainable economic growth.

3. Workforce Evolution, Skills Gap, and Gender Diversity

Organizations are struggling to recruit sufficiently skilled AI professionals while demand for specialized roles (e.g., machine learning engineers, data scientists, AI product managers) grows. A multidimensional approach—upskilling existing staff, formal AI certifications, and targeted educational programs—helps close this gap. At the same time, prioritizing gender diversity and expanding entry-level opportunities can enhance inclusion and unlock untapped talent.

4. Generative AI, Ethics, and Governance

Generative AI and advanced machine learning techniques are increasingly central to both transactional services and strategic operations. Rapid adoption heightens the need for stronger ethical standards, responsible governance frameworks, and transparent guidelines to mitigate misuse and ensure public trust.



Conclusions (Contd.)

5. Talent Retention and Competitive Compensation

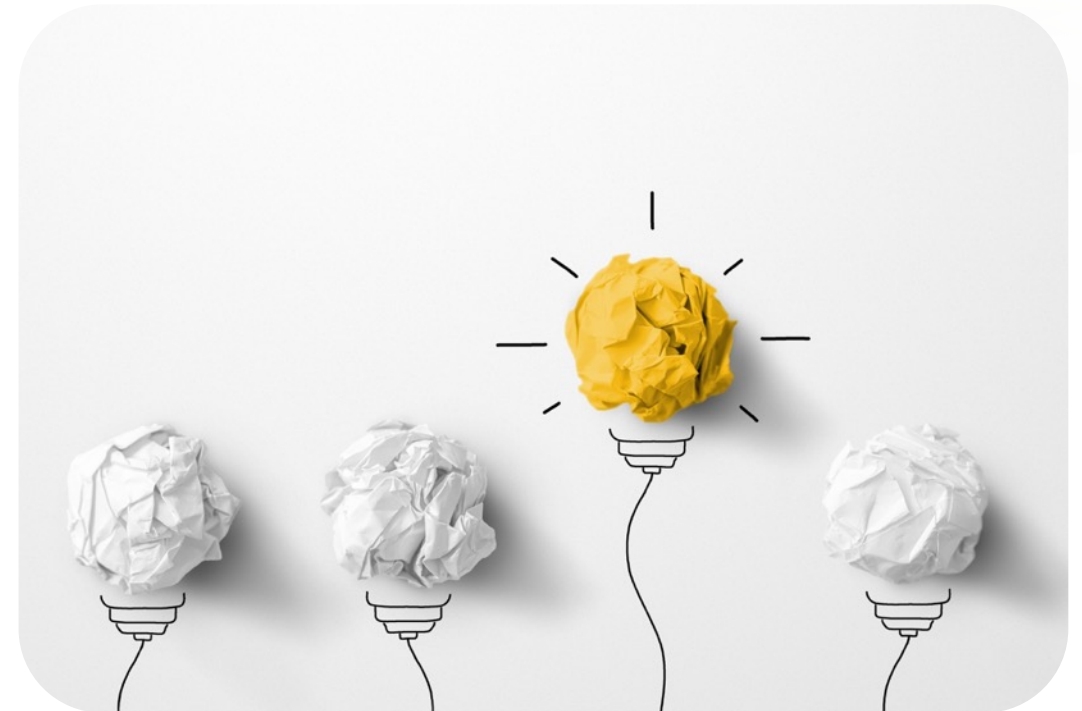
High demand for AI expertise is driving organizations to offer competitive salaries and attractive career paths. However, balancing premium pay with equitable workforce policies is key to minimizing turnover. An emphasis on continuous professional development and growth opportunities further aids long-term talent retention.

6. Integration into Organizational Frameworks

AI should be woven seamlessly into every level of an organization. Shifting job roles, from decision-support to decision-making, requires that AI tools become part of day-to-day responsibilities rather than standalone functions. Embedding AI capabilities across departments also ensures that employees focus on higher-value tasks like designing, interpreting, and overseeing AI-driven systems.

7. Research, Development, and Collaboration

Investment in AI R&D, in partnership with educational institutions and industry, is vital for breakthrough innovations and to reduce overreliance on external expertise. Collaborative initiatives—both interorganizational and cross-sector—help drive sustainable progress, accelerate learning, and stimulate the local AI ecosystem.



8. Vision 2031 and Strategic Execution

By continuing to advance the National AI Strategy, the UAE can further strengthen its position as a global leader. Strategic execution—supported by ethical guidelines, robust governance, and comprehensive upskilling—will ensure AI remains integral to economic diversification, innovation, and the country’s long-term competitive advantage.

TQ Consulting Project Team



Fadi Al Attas

Project Manager

A seasoned leader with expertise in strategic management. His collaborative approach builds strong partnerships & drives the successful execution of our services, ensuring alignment with our commitment to excellence.



Dr. Zeyad Naji

Research Team Leader & Head of Primary Research

A seasoned expert in organizational excellence and leadership development. Dr. Naji brings thirty years of experience in Consulting & Academia. He empowers organizations through tailored coaching & workshops, leveraging research expertise to drive growth & performance across diverse sectors.



Mohammed Dabwan

Senior Project Coordinator

A professional with a Master's in HR fueling growth. Leveraging extensive L&D expertise, Mohammed excels in managing projects, crafting tailored solutions, & measuring ROI, ensuring impact for government and private entities across the MENA region.



Ravi Singh

Head of Secondary Research

A senior research expert delivering incisive insights & data-driven strategies for tangible results, Ravi leverages a decade of industry experience to excel in advanced market intelligence while identifying opportunities & crafting tailored solutions to meet clients' evolving objectives.



Aamir Siddiqui

Employer Liaison & Survey Coordinator

A dedicated Employer Liaison & Survey Coordinator driving growth & cultivating strategic partnerships. Leveraging a background in training & certifications, Aamir manages projects while identifying opportunities & crafting solutions to meet clients' needs & objectives.



Kabeer Mohammed



Multimedia Designer and Client Liaison

A key player in ensuring operations stay on track, Kabeer is the heart of the team, expertly balancing creative design with client communication while fostering strong relationships to drive project success and enhance overall organizational effectiveness.

6.2: TQ Consulting Clients





 +971 2 666 7153  +971 56 553 3714  info@tqconsulting.co

Abu Dhabi, United Arab Emirates

