ARTIFICIAL INTELLIGENCE

Investment Opportunity Brief
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1ST GLOBAL RANKING
DUBAI RANKED FIRST IN FDI TECHNOLOGY TRANSFER FOR AI & ROBOTICS

3RD GLOBAL RANKING
DUBAI RANKED THIRD IN THE TOP GLOBAL FDI LOCATIONS FOR AI & ROBOTICS
A GAME-CHANGER FOR BUSINESS

Artificial intelligence – applied via robotics and autonomous vehicles, computer vision, natural language processing, virtual agents, machine learning, and much more – is being seen as a game-changer for business, by improving productivity, lowering costs, unlocking job expansion, and creating growth opportunities.
USD 114.22 MILLION INVESTMENT IN AI IMPLEMENTATIONS IN THE REGION BY 2021

20.3% HARDWARE (CAGR from 2017 = 23.8%)

35.0% IT AND BUSINESS SERVICES (CAGR from 2017 = 49.0%)

44.7% SOFTWARE (CAGR from 2017 = 27.7%)

Source: IDC
The UAE is the first country in the world to have an AI strategy. It is also the first to have a government minister dedicated to AI, H.E. Omar bin Sultan Al Olama, was appointed in October 2017 to develop legislation and frameworks to regulate the use of technologies in government and federal institutions. The ministry will also work on enhancing AI awareness and training, provide guidance to business and industry, guide the workforce through the transition to AI, and attract the best skills in the UAE and from across the world.

The AI strategy covers development and application in nine sectors: transport, health, space, renewable energy, water, technology, education, environment, and traffic.

Global tech giants including Google and Baidu have spent USD 20 billion to USD 30 billion on AI in 2016, focusing primarily on R&D and deployment and partially on acquisitions. VC and PE financing, grants, and seed investments have grown quickly to USD 9 billion. Spending on AI in the Middle East and Africa in 2017 has been estimated at USD 37.49 million.

The global market value for the AI sector is estimated at USD 15.7 billion in 2030. In the wider Middle East, its potential impact is expected to be USD 320 billion by 2030, with the UAE leading the race.

The UAE is an ambitious entrant into the technologies of the Fourth Industrial Revolution. The country has invested heavily in creating a viable ecosystem for companies committed to AI. The UAE artificial intelligence strategy targets a 35 percent increase in AI’s contribution to the UAE’s GDP.
AI WILL IMPACT EVERY SINGLE SECTOR. WE WANT TO BE THE HUB FOR AI AND THE USE CASE FOR AI IN GOVERNMENT GLOBALLY... WE WANT TO BE THE PROVING GROUND FOR THE TECHNOLOGY. OUR SOCIETY IS READY AND WILLING TO BE A PART OF THE FUTURE.

H.E. OMAR BIN SULTAN AL OLAMA
UAE MINISTER OF STATE FOR ARTIFICIAL INTELLIGENCE
OUR FOCUS WITH SMART DUBAI OFFICE WILL HELP ACCELERATE THE DEVELOPMENT OF THE IT SKILLS AND SERVICES IN THE EMIRATE AND ENABLE GOVERNMENT ENTITIES IN DUBAI TO BEGIN THEIR COGNITIVE JOURNEY. STUDENTS WILL ALSO HAVE ACCESS TO A PLATFORM FOR INNOVATION, RESOURCES AND TECHNOLOGY EXPERTISE TO HELP ENSURE THAT TODAY’S GRADUATES HAVE THE KNOWLEDGE AND WORKFORCE SKILLS TO HELP FUEL ECONOMIC GROWTH.

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AMR REFAAT
GENERAL MANAGER
IBM Middle East and Pakistan
"THE DIGITAL ERA CANNOT BE TRULY EMBRACED WITHOUT THE FULL SUPPORT AND BACKING OF COUNTRY, CITY AND ORGANIZATIONAL LEADERS. I AM PROUD TO SAY THAT WE HAVE SEEN A KEEN WILLINGNESS IN DUBAI TO ADOPT THE LATEST THINKING – NOT JUST FROM A TECHNOLOGY PERSPECTIVE, BUT ALSO FROM A BUSINESS MODEL, HUMAN CAPITAL AND OPERATIONAL POINT OF VIEW."

SHUKRI EID
MANAGING DIRECTOR
East Region, Cisco Middle East
THE OPENING OF A STATE OF THE ART DIGITAL HUB IN DUBAI THAT HAS NOW EMPLOYED MORE THAN 400 CLOUD SALES PROFESSIONALS, IS SOLID EVIDENCE OF ORACLE’S COMMITMENT TO CONTINUOUSLY INVEST IN ENHANCING OUR LOCAL CAPABILITIES AND SERVICE OFFERINGS IN THE UAE.

Oracle Press Statement

ARUN KHEHAR
SENIOR VICE PRESIDENT
Business Applications, EC MEA
OPPORTUNITIES ACROSS MULTIPLE SECTORS

AI opportunities span the gamut of the private and public sectors, with the government partnering with AI companies to enhance performance, efficiency, and resilience.

GROWTH AREAS

SMART DUBAI STRATEGY
to implement innovation and digital transformation. An AI smart lab was launched in 2017 to train public and private sector employees in implementing AI in their fields.

DUBAI 3D PRINTING STRATEGY
to disrupt construction, medical products, and consumer products sectors with the goal of 25 percent of buildings in Dubai constructed using 3D printing technology by 2030.

DUBAI AUTONOMOUS TRANSPORTATION STRATEGY
to cut transportation costs by 44 percent, carbon emissions by 12 percent and accidents by 12 percent by transforming 25 percent of all transportation in the city to autonomous modes by 2030.

SECTORS IN FOCUS

EDUCATION
REDUCE COSTS AND ENHANCE THE DESIRE TO LEARN

TRANSPORTATION AND TRAFFIC MANAGEMENT
REDUCE ACCIDENTS AND OPERATIONAL COSTS

RENEWABLE ENERGY
FACILITIES MANAGEMENT AND SMART CONSUMPTION

SPACE
ACCURATE TESTING AND REDUCTION OF COSTLY ERROR RATES

TECHNOLOGY
RAISE THE PERCENTAGE OF PRODUCTION AND COMMUNICATION EFFECTIVENESS

WATER
CONDUCT ANALYSIS AND STUDIES TO PROVIDE WATER SOURCES

ENVIRONMENT
INCREASE THE RATE OF FORESTATION

HEALTH
MINIMIZE CHRONIC AND DANGEROUS DISEASES
SUPPORT FOR AI ENTREPRENEURS AND LEADERS

Smart Dubai, the agency leading Dubai’s AI roadmap, is working with a network of partners from the public and private sectors to explore innovative technological solutions to create a more efficient, seamless, safe, and impactful city.

A 10-member council has been formed in March 2018 to oversee AI integration in government departments and the education sector.

The One Million Arab Coders initiative announced in October 2017 by the Mohammed Bin Rashid Al Maktoum Global Initiatives (MBRG1) will provide free training in developing computer code. It will also reward top students and tutors with incentives of more than USD 1 million (AED 3.67 million).

The USD 1 million UAE AI & Robotics Award for Good, launched in 2015, aims to encourage research and applications of innovative solutions in AI and robotics to meet existing challenges in three key categories:

– Health
– Education
– Social services

Individuals, teams, universities, and companies are eligible to participate in both the National and International competitions.

Dubai Police announced in December 2017 that by 2031, AI will be used in all operations, including security, crime forecasting, and accident response.
AI GIANTS AND START-UPS TAP INTO THE DUBAI OPPORTUNITY

Oracle and the Higher Colleges of Technology announced in January 2018 that they will begin training the first 500 Emirati men and women in AI.

AI start-ups such as QueNext, Avalon AI, Gramlabs, and Market IQ have found an investment partner in Dubai Future Accelerators.

Deprexis MS, German company GAIA’s AI-based digital therapy software has been enlisted by the UAE’s Ministry of Health and Prevention in January 2018 to treat multiple depressive disorder, associated with multiple sclerosis patients.

UK-based Kinteract, an educational portfolio and real-time assessment platform, has been chosen in November 2017 by Dubai education major GEMS, which has a network of over 70 schools in a dozen countries, to implement AI-driven learning.

IBM and Cognit partnered with Smart Dubai in September 2017 to launch a smart center to deliver personalized AI services for 14 government departments under one roof.

IBM and Cognit have partnered with Smart Dubai Office and Dubai Economy to launch Saad, the city’s first government service utilizing AI. The service enables entrepreneurs and investors to ask questions related to setting up a business in Dubai, and to get real-time responses on various topics, including business licensing requirements and registration processes.

Votek, a Dubai Internet City-based developer of speech recognition software that collaborates with regional governments and companies to provide Arabic voice recognition services and intelligent assistants, won USD 1 million in seed funding led by the Elder-Marini Group in May 2017.
AI ATTRACTED USD 26-39 BILLION IN INVESTMENTS GLOBALLY 2016

Sources: McKinsey & Company and Gartner

- USD 6-9 BILLION WORTH of investments were made in AI startups as VC, PE, or other external funding
- USD 20-30 BILLION worth of internal corporate investment was made by global tech giants
- 90% R&D
- 10% M&A

AI’S EFFECTS ON THE WORKFORCE
2020

- 2.3 MILLION JOBS GENERATED BY AI
- 1.8 MILLION JOBS ELIMINATED DUE TO AI

Sources: McKinsey & Company and Gartner
SPENDING ON COGNITIVE AND AI SYSTEMS IN THE MIDDLE EAST AND AFRICA

USD 100 MILLION
2021

USD 37.5 MILLION
2017

32%
GROWTH RATE

Source: PwC
USEFUL LINKS

The UAE Artificial Intelligence Strategy

His Excellency Omar Bin Sultan Al Olama, Minister of State for Artificial Intelligence

UAE AI and Robotics Award for Good

One Million Arab Coders

Smart Dubai Strategic Plan

Dubai Autonomous Transportation Strategy

Dubai 3D Printing Strategy