Advanced Technology and Robotics Training Centers

Investment Opportunity – TVET

EDUCATION – April 2022

استثمر في السعودية
INVEST SAUDI

EDUCATION

Advanced Technology and Robotics Training Centers

OPPORTUNITY DESCRIPTION: Invest in KSA's education sector by establishing high-quality, Advanced Technology and Robotics TVET centers

OPPORTUNITY OVERVIEW

Sector Overview

Advanced Technology and Robots can be used to supplement/complement human effort across various sectors

NON-EXHAUSTIVE

Potential Fields of Implementation

- Government Administration
- Banking & Finance
- Education
- Defense
- Healthcare
- Oil and gas
- Manufacturing
- Real Estate

Broadly, there are 3 types of jobs related to advanced technology and development

Types of jobs

- Technology design and development: Engineers, scientists, and other trained technical staff who develop blueprints for new and advanced technology
- Operation and implementation: Operators and trained technical staff who will be at the helm of managing and operating the automated hardware
- Technology Maintenance: Technicians responsible for overseeing the maintenance and repair activities for the equipment and machinery

Growth potential

Advanced Technology and Robotics has a huge growth potential in the Kingdom, driven by potential use-cases and increasing government focus on automation in KSA

- Increased productivity
- Cost savings
- Low margin of error
- Improved working conditions
- Workforce optimization

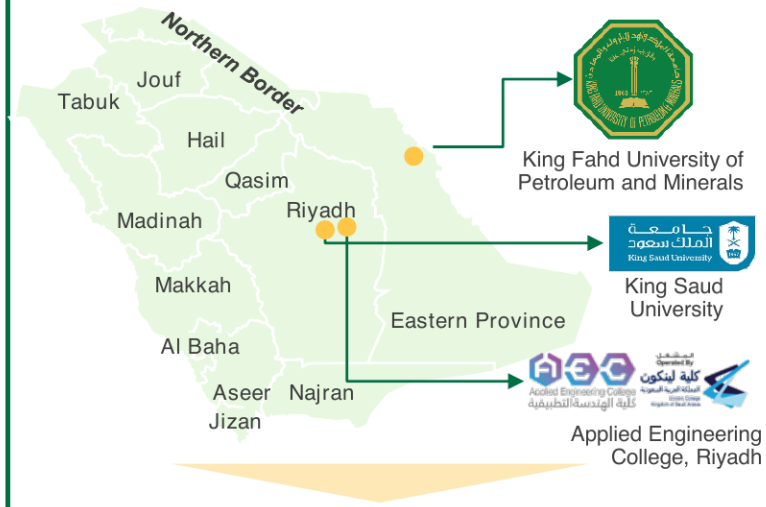
The absence of specialized training in Robotics and related fields indicates an opportunity for private investors to expand the TVET provision in the Kingdom

- Absence of quality training courses specifically in advanced technology and robotics
- Lack of appropriate skill-matching process to map the qualified youth to appropriate job opportunities
- Lack of practical training opportunities in the field due to its novelty and recent uptick in adoption

Current provision in KSA

While the Kingdom has a few providers who offer courses in Robotics and related fields, there is a strong need to improve TVET provision to bridge the skill gap

SAMPLE LIST



~1%

% of electronics, automation, and mechanics graduates among total graduates across all disciplines in KSA (2019) [Formal Higher Ed. KSA]

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KSA ADVANCED TECH AND ROBOTICS MARKET OVERVIEW

Introduction to Advanced Technology and Robotics

Description

Robotics and other advanced technological solutions that can either substitute or complement manual labour / human intervention across various industries

NON-EXHAUSTIVE

Application of adv. technology and automation

- Government Administration
- Banking & Finance
- Education
- Defense
- Healthcare
- Oil and gas
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Growth potential of Advanced Technology and Robotics in KSA

Benefits of technology & automation

- Increased productivity
- Cost savings
- Low margin of error
- Improved working conditions
- Workforce optimization





% of jobs susceptible to automation in Saudi Arabia

With the advent of technology and the growing inclination of the government towards diversification of the KSA economy, the market for advanced technology and robotics will potentially gain traction for implementation across sectors

Vision 2030 and government support for automation

VISION 2030 رؤية المملكة العربية السعودية KINGDOM OF SAUDI ARABIA

National Industrial Development and Logistics Program

~300

Number of initiatives across 4 sectors to complement 4th Industrial Revolution

- Energy
- Industry
- Mining
- Logistics

- One of the key focus areas is to establish advanced machinery and equipment manufacturing industries
- Localizing and enhancing the manufacturing in sectors like automotive, pharma, aviation, military, specialty chemicals, etc.

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velopment and Logistics Program (KSA), Harvard Business Review

Definitions

#	SCORECARD SECTION	DEFINITIONS
1	Market size	Size of market in value/volume in KSA and/or Region (MENA/GCC) covering future projections based on available estimates from published /government sources
2	Business drivers	A select number of factors that will influence future demand for the related product/service
3	Investment highlights	An overview of key financial metrics summarizing the investment opportunity along with the expected return based on the suggested investment size
4	Value proposition	Summary of key differentiators that position KSA as a strategic choice over other regional/global peers
5	Market readiness	An overview of KSA market structure, market maturity and level of participation by local and global players
6	Global trends	Latest business developments within the sector/product category
7	Scalability and localization	Ease of scaling the business across the value chain or into new adjacent products or geographies that would maximize the opportunity's investment returns and the ability and potential to locally manufacture the product and its components
8	Import dependency	An overview of the countries from which Saudi Arabia is importing the product and their value/volume and share in total imports
9	Value chain analysis	The process or activities that would potentially need to be carried out to deliver the underlying product or service
10	Key stakeholders	Government institutions, organizations, and/or authorities that participate or influence the market for the underlying product/service
11	Enablers	Factors that enable investment in the underlying opportunity
12	Cost of doing business in KSA	Key factors that position KSA as a competitive destination for investment in the region. Productivity adjusted wages do not include cost of $1.23/hour towards annual recurring charges including work permit, resident identity (iqama) and health insurance

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