

Immature

3D Printing for Industrial, Automotive, Healthcare, Aerospace

INVESTMENT OPPORTUNITY SCORECARD

ICT

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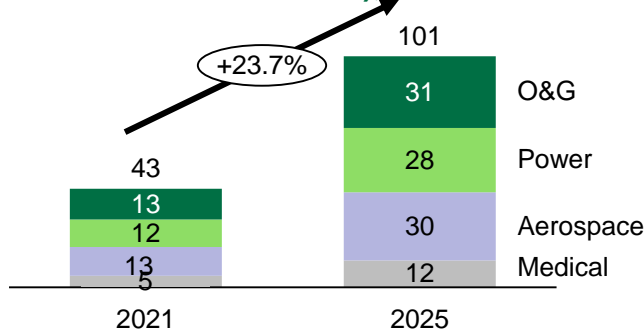


3D PRINTING for Industrial , Automotive , Health care, Aerospace

OPPORTUNITY'S DESCRIPTION: Attract global 3D printing companies to set up a regional HQ in KSA instead of using traditional manufacturing parts to reduce time, waste and increase efficiency.

DEMAND

KSA MARKET SIZE FOR 3D PRINTING(ADDITIVE MANUFACTURING), USD MN



INVESTMENT HIGHLIGHTS

- Opportunity to consider different operating models – FDI with 100% ownership or joint venture with local private sector player(s)
- KSA is expected to lead the MENA in 3DP with a 30-35% of the market IN 2025(ARAMCO)

INVESTMENT OVERVIEW

VALUE PROPOSITION

- KSA is supporting a digitally-enabled industrial revolution for projects in mining, industry, logistics, military industries and energy through a \$453Bn fund
- KSA has 40+ industrial cities which contain over 7,600 factories highlighting the importance for digital transformation across sectors
- Government-led initiatives and programs aimed to enhance human capital required for digital transformation through specialized university programs, the Saudi Digital Authority (SDA) initiatives
- Support from Saudi Industrial Development Fund (SIDF) which dedicated a \$28Bn fund and offers programs such as Tanafusiya, a program that provides consulting and financing services to enable digital transformation

KEY DEMAND DRIVERS

- Prominent industrial companies make up 60% of local demand, with plans to increase reliance on local content. For example; Saudi Aramco planned to increase its localization from 40% in 2016 to 75% by 2030
- Local spending on additive manufacturing is estimated at approximately USD 27 Mn, and components related to pumps, valves, and compressors is expected to reach USD 65.3 Bn by 2030, as these parts have a great potentials to be manufactured locally
- Technology maturity is also driving development of a broad 3D ecosystem.

MARKET OVERVIEW

MARKET READINESS AND COMPETITOR ANALYSIS

- The few companies existing in KSA dose not match the S&D of the markets nor the potential impact of 3DP on the local Industry, Medical, Automotive, Aerospace & consumer products sectors .
- Construction 3DP Market is set for 16% growth , one of the largest inaugurated projects in the city of Taif with 4,775 housing units. using 3D technology, houses being built in a matter of hours.
- The market is ready for new entrants who can develop tailored solutions to Saudi businesses

GLOBAL TRENDS

- Global market size for 3D Printing in 2021 estimated to be USD 13 Bn with a CAGR of 21% during 2021-2028 and a growth rate of 26% between 2022-2024
- Industry 4.0 has significant implications for the global economy as it spans across industries representing 62% of GDP among G20 nations, including manufacturing and utilities sectors
- Global Bioprinting market alone was valued at 1.4 Bn in 2020 .



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SUPPLY

SCALABILITY AND LOCALIZATION

Grade: Low Medium High

- An increase in the proportion of domestic spending is expected in the coming years, specifically in power related 3D printing (additive manufacturing) .
- 30% of local manufacturing is estimated to be related to the manufacturing of components for pumps, valves, and compressors in the near future
- There is opportunity to scale by tapping into the wider MENA region by taking the initiative to lead the booming MENA markets .

ENABLING FACTORS

ENABLERS

- MODON offers admin support and subsidized lands
- MoF & SIDF offer financing support
- CITC launched National Center for Information Security to enhance cyber security and provide healthy environment for electronic transactions and attract FDI

ECOSYSTEM ANALYSIS

Provider / Potential partners



3DP sector beneficiaries



End-users



- Industrial
- Healthcare/Medical
- Automotive & Aerospace

- Industry Sectors (Factories including G&O sector)
- Medical sectors (Doctors & Surgeons)
- Constructions and Housing Sector (Residence)

COST OF DOING BUSINESS IN KSA

Factor	Ranking Amongst Regional Peers
Patent application (#/\$PPP, 2016)	
Software spending (% GDP, 2016)	
ICT Access Index (1 – 10)	
ICT Use Index (1 – 10)	
Government online services (0 – 1)	

KEY STAKEHOLDERS



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	Demand 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	Competitor analysis	List of the local & international players manufacturing the underlying product in Saudi Arabia and their market share
7	Global trends	Latest business developments within the sector/product category
8	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
9	Import dependency	An overview of the countries from which Saudi Arabia is importing the product and their value/volume and share in total imports
10	Value chain analysis	The process or activities that would potentially need to be carried out to deliver the underlying product or service
11	Key stakeholders	Government institutions, organizations, and/or authorities that participate or influence the market for the underlying product/service
12	Enablers	Factors that enable investment in the underlying opportunity
13	Cost of doing business in KSA	Key factors that position KSA as a competitive destination for investment in the region

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