

# Digital Twins Report

Part of the AI & Intelligent Automation  
Service Area Package

**Aditya Kaul, Research Director**  
**Keith Kirkpatrick, Principal Analyst**

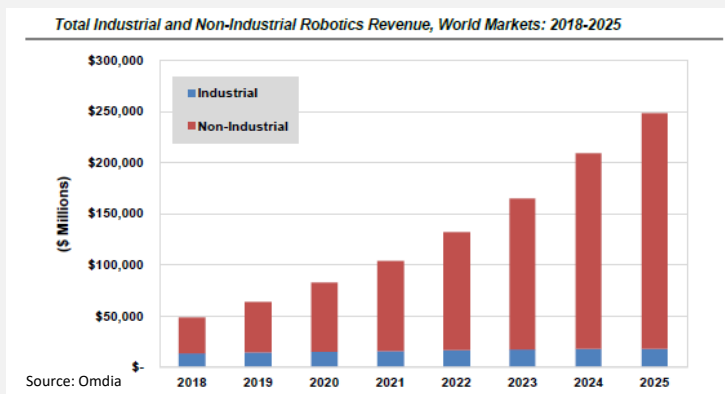
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## Global Market Demand Across Manufacturing, Aerospace, Connected Vehicles, Smart Cities, Retail, Healthcare, Industrial IoT, and Other Industries

A digital twin is a digital representation that provides the elements and dynamics of how a device or ecosystem operates and lives throughout its life cycle. Digital twins are useful for simulating the capabilities of machine tools in a safe and cost effective way, as well as identifying the root causes of problems occurring in physical tools or infrastructure. If a physical machine tool breaks down or malfunctions, engineers can evaluate the digital traces of the digital twins' virtual machines for diagnosis and prognosis.

The digitization of nearly every industry type is helping to fuel the demand for twinning platforms, as is the desire to monitor, control, and model the future behavior of real-world equipment, systems, and environments. However, like any technology, digital twins must be understood and accepted by several different stakeholders, from the operations workers up to the C-suite. Meanwhile, vendors are highlighting their expertise in analytics and demonstrating domain expertise with specific industry verticals. Some are also spotlighting their experience with incorporating artificial intelligence (AI) and machine learning (ML) technologies, which can provide the ability to model future behavior via digital twins. These technologies are anticipated to drive the functionality of digital twins beyond simply being enhanced analytics tools. Global revenue for digital twins is expected to increase to \$9.4 billion in 2025, up from \$2.4 billion in 2018.

This report examines 28 use cases for digital twins across industry groups, including manufacturing, aerospace, connected vehicles, smart cities, retail, healthcare, industrial Internet of Things (IoT), and other industries. The report discusses the drivers and barriers related to digital twins, with insight into the growing use of IIoT networks, machine learning technology, and 3D visualization technology. Market forecasts, segmented by world region, use case, and industry, extend through 2025. The study also analyzes the technologies and applications for digital twins and provides profiles of key industry players.



# Report Coverage

KEY ISSUES ADDRESSED	COVERAGE	APPLICABLE TO
<ul style="list-style-type: none"> <li>What are the primary use cases for digital twins that will see the fastest growth through 2025?</li> <li>Which industries will utilize digital twins extensively throughout the forecast period?</li> <li>Which regions of the world will see the highest utilization of digital twins?</li> <li>Which key technologies will enable the use of digital twins?</li> <li>Which vendors are actively working with customers to bring digital twins to the market?</li> <li>What are the key market drivers that have led to the evaluation and use of digital twins?</li> <li>What hurdles or barriers to adoption exist in the market, and how are they being overcome?</li> </ul>	<p><b>Digital Twin Revenue and Software, World Markets: 2018 - 2025</b></p> <ul style="list-style-type: none"> <li>Digital Twin Revenue           <ul style="list-style-type: none"> <li>By Region</li> </ul> </li> <li>Digital Twin Software Revenue           <ul style="list-style-type: none"> <li>By Industry</li> <li>By Use Case               <ul style="list-style-type: none"> <li>In Manufacturing</li> <li>In Aerospace</li> </ul> </li> </ul> </li> <li>Total Digital Twin Revenue           <ul style="list-style-type: none"> <li>By Product Type</li> </ul> </li> <li>Top 10 Digital Twin Use Cases</li> </ul>	<p><b>Industries</b></p> <ul style="list-style-type: none"> <li>Manufacturing</li> <li>Aerospace</li> <li>Connected Vehicles</li> <li>Smart Cities</li> <li>Retail</li> <li>Healthcare</li> <li>Industrial IoT</li> <li>Others</li> </ul> <p><b>Technologies</b></p> <ul style="list-style-type: none"> <li>On-Asset Sensors</li> <li>Ambient Data Sensors</li> <li>External Data Sources</li> <li>IoT Networks</li> <li>Artificial Intelligence/ Machine Learning</li> <li>Computer Vision</li> <li>Natural Language Processing</li> <li>Reinforcement Learning</li> <li>3D/Visualization Technologies</li> </ul> <p><b>Regions</b></p> <ul style="list-style-type: none"> <li>North America</li> <li>Europe</li> <li>Asia Pacific</li> <li>Latin America</li> <li>Middle East and Africa</li> </ul> <p><b>Applicable To</b></p> <ul style="list-style-type: none"> <li>Global, regional, and local enterprise companies</li> <li>AI platform and algorithm development companies</li> <li>Industrial IoT platform developers and marketers</li> <li>Digital representation software vendors</li> <li>Digital twin product companies and market planners</li> <li>Professional services companies</li> <li>Investor community</li> </ul>

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