

Model-Based Enterprise Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 125 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

Model-based enterprise market (hereafter referred to as the market studied) was valued at USD 11.84 billion in 2021. It is expected to reach USD 30.54 billion by 2027, registering a CAGR of 16.77% from 2022 through 2027 (hereafter referred to as the forecast period).

Key Highlights

The increasing adoption of 3D technology across multiple industry verticals for catering to the growing demand for emerging applications, ranging from shape analysis, 3D modeling, and many more, has given rise to the development and adoption of model-based enterprise solutions that can gauge product shapes in real-time.

The technology offers many opportunities in the design and production processes and performance of novel architectural forms, construction systems, and many more. It is an innovative, faster, and more agile product development and production method. Digital technologies are being adopted across various manufacturing industries due to the rapidly evolving capabilities of the software, further boosting the market growth.

The industries are witnessing increased adoption of reverse engineering for its rapid prototyping abilities and accuracy for producing new parts. Reverse engineering requires a strong and robust image acquisition system that can acquire data with high accuracy. The deployment of 3D technology and solutions could enable manufacturers to achieve such objectives, thus, boosting market growth.

The objective for migrating from a traditional on-premise enterprise data warehouse to the cloud is cost savings. The total cost includes owning or licensing data center equipment and third-party service costs, maintenance and management, training, and policy. These indirect costs can account for a large amount of the price of operating on-premise data centers.

Further, space, construction, energy, air conditioning, hardware procurement, operating systems, networking, physical security, and more are required to maintain on-premise computing infrastructure. Instead, model-based enterprise vendors are outsourcing

these expenses to a cloud service provider and saving costs. Many companies that have data infrastructure on their premises are concerned about security. Having a data center within the perimeter gives rise to challenges in terms of safety and control, thus, resulting in a shift to cloud model-based enterprise platforms.

The COVID-19 pandemic increased digitalization across end-use verticals with a more significant deployment of Machine Learning, Artificial Intelligence, and the Internet of Things, which has caused applications and data to spread across multiple clouds progressively. Thus, increased adoption of cloud model-based enterprise platforms across various end-user verticals primarily focuses on rationalizing the data stored on multiple clouds.?

Model-based Enterprise Market Trends

Automotive Segment Expected to Hold Largest Market Share

Automobiles are an essential part of human lives as a primary mode of transportation. There are over 1.3 billion motor vehicles on the road globally, which is expected to rise to 1.8 billion by 2035. Passenger cars comprise roughly 74% of these statistics, while light commercial vehicles and heavy trucks, buses, coaches, and mini-buses make up the remaining 26% (Source: Worldometers).

The model-based design allows enhanced design, faster releases, and better reliability in automotive embedded systems. Also, software modeling and simulation tools can improve automotive systems if they continue demonstrating benefits and becoming more common in the industry.

Moreover, globally, automobile manufacturers are increasingly adopting model-based design to develop vehicle electronics, ranging from the transmission and engine controllers to the body controllers and battery management modules. Further, the automotive sector is currently in flux with rapidly emerging technology and blurring boundaries between stakeholders, rapidly transforming the industrial landscape. Moreover, the industry's significant challenges are the increasing demand for personalized products and rich experiences, increasing quality standards, and the reduction of operating costs. Several players in the market are facing an ongoing challenge primarily to remain competitive and set themselves apart to move ahead of competitors. Automotive manufacturers can currently adopt technology and improve their business processes, thus, driving the market.

North America Expected to Hold a Significant Market Share

North American region is anticipated to hold a significant share of the overall model-based enterprise market, primarily due to various major players in the area, including GE, PTC, Autodesk, and Aras, among others. These companies have adopted different growth strategies focusing on strengthening their market position.

Moreover, institutes such as the Digital Manufacturing and Design Innovation Institute (DMDII) possess the ability, innovative spirit, and collaborative expertise that is being used to transform the American manufacturing sector by aiding organizations and helping in the digital revolution.

Modern manufacturing facilities in the US have relied on newer technologies and innovations to produce high-quality products faster and at lower costs. Owing to the early adoption of these advanced technologies, such as IoT, big data, 3D modeling, DevOps, and mobility, manufacturers in the country have been integrating these advanced technologies to streamline their processes and use their deeper insights.

The US is also one of the biggest automotive markets globally and is home to more than 13 major automotive manufacturers. Automotive manufacturing has been one of the largest revenue generators for the country in the manufacturing sector, further helping the market's growth in the region.

Scotts International, EU Vat number: PL 6772247784

Canada is a major country taking significant steps toward implementing Industry 4.0 and is expected to contribute to the market growth during the forecast period.

As stated by the Canadian government, the country aims to increase manufacturing sales by 50%, to reach USD 1 trillion by 2030, and exports by 50%, reaching USD 540 billion by 2030. This is expected to boost the manufacturing sector; therefore, the penetration of advanced automated technologies is set to boost market growth.

Model-based Enterprise Market Competitor Analysis

The model-based enterprise market is competitive owing to the presence of several large players operating in the domestic and international markets. The market appears to be moderately concentrated, with the major players in the market adopting strategies like product innovation, mergers, and acquisitions, and strategic partnerships primarily to enhance their product offerings, extend their geographical reach, and stay ahead of the competition. Some of the major players in the market are Siemens AG, Dassault Systemes SE, SAP SE, and Autodesk Inc., among others.

In February 2022, Siemens Digital Industries Software launched the latest release of its industry-leading NX software, part of the Xcelerator portfolio of software and services. The new NX Topology Optimizer helps create parts based purely on functional and design space requirements, resulting in fully editable convergent bodies that would be almost impossible to design and engineer manually.

In November 2021, in Formnext 2021, GE Electric Company announced the Amp process management software platform. From mid-November 2021, the company also announced a limited release of print models, simulations, and corrections for the first two modules for the Concept Laser M2 machine. A broader release is planned for the second quarter of 2022. In November 2021, iBASEt, an Indian company, announced the launch of a Model-based Enterprise (MBE) offering that could accelerate a manufacturer's Industry 4.0 journey. Based on Solumina iSeries i050, the first version provides a way for manufacturers to start operating as a "Validated, Model-Centric" enterprise.

Additional Benefits:

The market estimate (ME) sheet in Excel format 3 months of analyst support

Table of Contents:

- 1 INTRODUCTION
- 1.1 Study Assumptions and Market Definition
- 1.2 Scope of the Study
- 2 RESEARCH METHODOLOGY
- 3 EXECUTIVE SUMMARY
- 4 MARKET INSIGHTS
- 4.1 Market Overview
- 4.2 Industry Attractiveness Porter's Five Force Analysis
- 4.2.1 Threat of New Entrants
- 4.2.2 Bargaining Power of Buyers

Scotts International, EU Vat number: PL 6772247784

- 4.2.3 Bargaining Power of Suppliers
- 4.2.4 Threat of Substitute Products
- 4.2.5 Intensity of Competitive Rivalry
- 4.3 Assessment of the Impact of COVID-19 on the Market

5 MARKET DYNAMICS

- 5.1 Market Drivers
- 5.1.1 Evolving Software Capabilities
- 5.1.2 Rising Adoption of IoT and Cloud-based Platforms
- 5.2 Market Restraints
- 5.2.1 Slow Transition from On-premise to Cloud-based Platform

6 MARKET SEGMENTATION

- 6.1 By Offering
- 6.1.1 Solutions
- 6.1.2 Services
- 6.2 By Deployment Mode
- 6.2.1 On-premise
- 6.2.2 Cloud
- 6.3 By End User
- 6.3.1 Aerospace and Defense
- 6.3.2 Automotive
- 6.3.3 Construction
- 6.3.4 Power and Energy
- 6.3.5 Retail
- 6.3.6 Other End Users
- 6.4 By Geography
- 6.4.1 North America
- 6.4.2 Europe
- 6.4.3 Asia-Pacific
- 6.4.4 Latin America
- 6.4.5 Middle-East

7 COMPETITIVE LANDSCAPE

- 7.1 Company Profiles
- 7.1.1 Siemens AG
- 7.1.2 General Electric Company
- 7.1.3 PTC Inc.
- 7.1.4 Dassault Systemes SE
- 7.1.5 SAP SE
- 7.1.6 Autodesk Inc.
- 7.1.7 HCL Technologies Limited
- 7.1.8 Oracle Corporation
- 7.1.9 Aras Corporation
- 7.1.10 Anark Corporation

8 INVESTMENT ANALYSIS

Scotts International. EU Vat number: PL 6772247784



Scotts International. EU Vat number: PL 6772247784



To place an Order with Scotts International:

Model-Based Enterprise Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 125 pages | Mordor Intelligence

□ - Complete the relevant blank fields and sign □ - Send as a scanned email to support@scotts-international.com ORDER FORM: Select license	- Print this form					
ORDER FORM: Select license License Price Single User License \$4750.00	☐ - Complete the relevant blank fields and sign					
Select license License Price Single User License \$4750.00	- Send as a scanned email to support@scotts-international.com					
Select license License Price Single User License \$4750.00						
Single User License \$4750.00	ORDER FORM:					
	Select license	License			Price	
Team License (1-7 Users) \$5250.00		Single User License			\$4750.00	
		Team License (1-7 Users)			\$5250.00	
Site License \$6500.00		Site License				
Corporate License \$8750.00		Corporate License			\$8750.00	
VAT						
Total				Total		
*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.	*Please circle the relev	vant license ontion. For any questions nle	ase contact support@sc	otts-international com or 0048 603 3	94 346	
** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numl						
The first state of the first sta	_	a. 25 / 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0	20 2000 00.			
Email* Phone*	Email*		Phone*			
First Name* Last Name*	First Name*		Last Name*			
Job title*	Job title*					
Company Name* EU Vat / Tax ID / NIP number*	Company Name*		EU Vat / Tax ID / NIP number*			
Address* City*	Address*		City*			
Zip Code* Country*	Zip Code*		Country*			
Date 2025-06-25			Date	2025-06-25		

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com www.scotts-international.com

Signature

r	
l	

Scotts International. EU Vat number: PL 6772247784