CIMdata®

The CIMdata Simulation & Analysis Market Analysis Report

Comprehensive Information and Analysis Critical to Sound Business Decisions

Products across many industry sectors are enhanced by applying Simulation & Analysis (S&A) early and often in the product lifecycle. The application of S&A has progressed far beyond its use as an analog of physical testing for final product and manufacturing validation.

S&A represents a significant and rapidly growing segment of Product Lifecycle Management (PLM) covered in CIMdata's annual PLM Market Analysis Report (MAR) Series, which provides detailed information and in-depth analysis of the worldwide PLM market.

CIMdata's global PLM market analyses cover many segments, but none so dynamic and rapidly growing over the last several decades as S&A. S&A solution and service providers are delivering high value offerings throughout the product lifecycle, and it is shown in their market results.

The CIMdata S&A MAR

The CIMdata S&A MAR builds upon the methodology and data from the global PLM MAR series, and leverages the expertise and research of the CIMdata Simulation-Driven Systems Development Consulting Practice. S&A includes a wide range of technologies and related services, including:

- 3D modeling, meshing, results, visualization, analysis platforms
- Linear statics, structural analysis, 2D/3D strength, stiffness, durability

- Structural dynamics, acoustics & vibro-acoustics analysis
- Implicit non-linear FEA structural analysis
- Explicit non-linear FEA structural analysis, impact, crash, safety, etc.
- Multi-body dynamics, motion simulation, mechanisms with rigid & flexible bodies
- General purpose math-based calculations
- 0D-1D systems modeling & simulation, controls & co-simulation
- CFD, thermal & flow, thermal multi-physics
- Electro-magnetics low to high frequency interference analysis
- Simulation process and data management (SPDM): includes SDM & process orchestration & automation across multiple simulation domains & tools
- Design optimization & 3D topology optimization, design of experiments (DOE), multi-disciplinary analysis & optimization, robust design
- Materials & manufacturing process data, materials characterization, material data libraries, laminates, plastics, and additive materials
- Other niche physics & miscellaneous apps, optics, fatigue/failure analysis, test data acquisition & analytics, test/analysis

correlation, mission analysis, vertical apps, UQ, data interfaces, chemical reactions, etc.

These solutions are designed to enable engineers to simulate real-world product performance in terms of reliability, durability, and functionality via digital modeling and simulations, to run through "what-if" scenarios, explore new designs and technology, evaluate multiple concept alternatives, and gain deeper insight into product behavior.

The S&A MAR includes discussions of trends in the market and how S&A solution providers are responding. The report documents CIMdata's estimates for the global S&A market for the previous calendar year, including revenue results and revenue forecasts for the next five years. It includes an extensive set of tables and charts, including S&A historical revenue and forecasts, revenues by industry segment, and revenues by geography. S&A market leaders profiled in the S&A MAR include:

- Altair
- Ansys
- Autodesk
- BETA CAE Systems
- Cadence Design Systems
- COMSOL Group
- Cybernet Systems
- Dassault Systèmes
- Hexagon
- Gamma Technologies
- MathWorks
- Maya HTT (Heat Transfer Technologies) Ltd.
- PTC
- Siemens Digital Industries Software
- Simulations Plus, Inc.

The report includes charts that highlight the market leaders' total revenues, splits by software and services, customer size, and geography, as well as estimates for the relative sizes of application segments of the overall S&A market.

Additionally, the report covers the role of the smaller S&A solution providers in developing and offering unique and emerging technologies to meet major trends identified in the S&A domain, as well as solution providers in the rapidly emerging domain of model-based systems engineering (MBSE).

Who Should Buy This Report?

This S&A market analysis is valuable to a range of audiences. CIMdata MAR data is can be used to support strategic planning, sales planning, and marketing, as well as to make S&A investment decisions.

The report can be purchased for US$4,995. Purchasers of the S&A MAR may also purchase that report's data and charts in an MS Excel workbook for an additional $3,500. For more information, please visit www.CIMdata.com or call +1 734.668.9922.

About CIMdata

CIMdata, a global strategic management consulting firm, provides services designed to maximize an enterprise's ability to design, deliver, and support innovative products and services. For more than forty years, CIMdata has provided industrial organizations, providers of digital technologies and services, and investment firms with world-class insight, expertise, and best-practice methods on a broad set of product lifecycle management (PLM) topics and the digital transformation they enable. CIMdata also offers research, subscription services, publications, and education through certificate programs and international conferences. To learn more, visit www.CIMdata.com or email info@CIMdata.com.