

# **Global Finite Element Analysis Market Size study & Forecast, by Component (Software, Services), By Deployment (Cloud, On-Premises), By Enterprise Size (Large Enterprises, Small & Medium Enterprises), By End-Use Industry (Aerospace & Defense, Automotive, Electrical & Electronics) and Regional Analysis, 2022-2029**

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## **Abstracts**

Global Finite Element Analysis Market is valued at approximately USD 4.67 billion in 2021 and is anticipated to grow with a healthy growth rate of more than 10 % over the forecast period 2022-2029. Finite Element Analysis can be defined as the use of calculations, models, and simulations to predict and evaluate how an object might behave under different real-world conditions. Moreover, FEA is used by designers & engineers to find vulnerabilities in their design prototypes. . FEA simulation software is used for conducting Finite Element Analysis. FEA is created by a mesh of millions of smaller elements that combine to create the shape of the structure, each of these small elements is then subjected to various calculations. The increasing adoption of cloud applications & services and growing smartphone industry as well as strategic initiatives from leading market players are key factors accelerating the market growth.

The increasing adoption of cloud applications is contributing to the growth of the Global Finite Element Analysis Market. For instance, according to Statista- in 2021, the global cloud applications market was valued at USD 133.6 billion, and the market is projected to grow to USD 168.6 billion by 2025, representing a compound annual growth rate of 4.8 percent. Another key factor driving the market space is growing construction industry, as FEA is used in structural design. For instance, as per Statista – in 2021, the global construction market was valued at USD 7.3 trillion, and the market is projected to

grow to USD 14.4 trillion by 2030. Also, growing integration in manufacturing & defense industry coupled with rising advancements in FEA Software would create a lucrative growth prospectus for the market over the forecast period. However, availability of freeware & open-source software stifles market growth throughout the forecast period of 2022-2029.

The key regions considered for the Global Finite Element Analysis Market study include Asia Pacific, North America, Europe, Latin America, and Rest of the World. North America dominated the market in terms of revenue, owing to the presence of leading software vendors and increasing use of finite element analysis across the industries in the region. Whereas Asia Pacific is expected to grow with the highest CAGR during the forecast period, owing to factors such as rising expansion of automobile industry, and defense industry coupled with increasing integration of FEA analysis in defense & construction industry.

Major market players included in this report are:

Altair Engineering Inc.

Ansys Inc.

Aspen Technology

Autodesk Inc.

Fidelis Engineering Associates

Comsol Inc.

Dassault System SE

Esi Group

Msc Software Corporation

Siemens Digital Industries Software

Recent Developments in the Market:

In May 2021, Cenoss LLC launched a new Antenna Design simulation software. This new finite element method-based software enables engineers to speed up radio frequency antenna design. Moreover, this new software is designed to handle high Q, multi-port simulations with arbitrary 3D structures.

Global Finite Element Analysis Market Report Scope:

Historical Data 2019-2020-2021

Base Year for Estimation 2021

Forecast period 2022-2029

Report Coverage Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered Component, Deployment, Enterprise Size, End-Use Industry, Region

Regional Scope North America; Europe; Asia Pacific; Latin America; Rest of the World  
Customization Scope Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope\*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Component

Software

Services

By Deployment

Cloud

On-Premises

By Enterprise Size

Large Enterprises

Small & Medium Enterprises

By End-Use Industry

Aerospace & Defense

Automotive

Electrical & Electronics

Region:

North America

U.S.

Canada

Europe

UK  
Germany  
France  
Spain  
Italy  
ROE  
Asia Pacific  
China  
India  
Japan  
Australia  
South Korea  
RoAPAC  
Latin America  
Brazil  
Mexico  
RoLA  
Rest of the World

## Contents

### **CHAPTER 1. EXECUTIVE SUMMARY**

- 1.1. Market Snapshot
- 1.2. Global & Segmental Market Estimates & Forecasts, 2019-2029 (USD Billion)
  - 1.2.1. Finite Element Analysis Market, by Region, 2019-2029 (USD Billion)
  - 1.2.2. Finite Element Analysis Market, by Component, 2019-2029 (USD Billion)
  - 1.2.3. Finite Element Analysis Market, by Deployment, 2019-2029 (USD Billion)
  - 1.2.4. Finite Element Analysis Market, by Enterprise Size, 2019-2029 (USD Billion)
  - 1.2.5. Finite Element Analysis Market, by End-Use Industries, 2019-2029 (USD Billion)
- 1.3. Key Trends
- 1.4. Estimation Methodology
- 1.5. Research Assumption

### **CHAPTER 2. GLOBAL FINITE ELEMENT ANALYSIS MARKET DEFINITION AND SCOPE**

- 2.1. Objective of the Study
- 2.2. Market Definition & Scope
  - 2.2.1. Scope of the Study
  - 2.2.2. Industry Evolution
- 2.3. Years Considered for the Study
- 2.4. Currency Conversion Rates

### **CHAPTER 3. GLOBAL FINITE ELEMENT ANALYSIS MARKET DYNAMICS**

- 3.1. Finite Element Analysis Market Impact Analysis (2019-2029)
  - 3.1.1. Market Drivers
    - 3.1.1.1. Increasing adoption of cloud applications & services
    - 3.1.1.2. Growing construction industry
    - 3.1.1.3. Strategic initiatives from leading market players
  - 3.1.2. Market Challenges
    - 3.1.2.1. Availability of freeware & Open-Source software
  - 3.1.3. Market Opportunities
    - 3.1.3.1. Growing integration in Manufacturing & defence industry
    - 3.1.3.2. Rising advancements in FEA Software

### **CHAPTER 4. GLOBAL FINITE ELEMENT ANALYSIS MARKET INDUSTRY**

## **ANALYSIS**

- 4.1. Porter's 5 Force Model
  - 4.1.1. Bargaining Power of Suppliers
  - 4.1.2. Bargaining Power of Buyers
  - 4.1.3. Threat of New Entrants
  - 4.1.4. Threat of Substitutes
  - 4.1.5. Competitive Rivalry
- 4.2. Futuristic Approach to Porter's 5 Force Model (2019-2029)
- 4.3. PEST Analysis
  - 4.3.1. Political
  - 4.3.2. Economical
  - 4.3.3. Social
  - 4.3.4. Technological
- 4.4. Top investment opportunity
- 4.5. Top winning strategies
- 4.6. Industry Experts Prospective
- 4.7. Analyst Recommendation & Conclusion

## **CHAPTER 5. RISK ASSESSMENT: COVID-19 IMPACT**

- 5.1. Assessment of the overall impact of COVID-19 on the industry
- 5.2. Pre COVID-19 and post COVID-19 Market scenario

## **CHAPTER 6. GLOBAL FINITE ELEMENT ANALYSIS MARKET, BY COMPONENT**

- 6.1. Market Snapshot
- 6.2. Global Finite Element Analysis Market by Component, Performance - Potential Analysis
- 6.3. Global Finite Element Analysis Market Estimates & Forecasts by Component 2019-2029 (USD Billion)
- 6.4. Finite Element Analysis Market, Sub Segment Analysis
  - 6.4.1. Software
  - 6.4.2. Services

## **CHAPTER 7. GLOBAL FINITE ELEMENT ANALYSIS MARKET, BY DEPLOYMENT**

- 7.1. Market Snapshot
- 7.2. Global Finite Element Analysis Market by Deployment, Performance - Potential

## Analysis

7.3. Global Finite Element Analysis Market Estimates & Forecasts by Deployment  
2019-2029 (USD Billion)

7.4. Finite Element Analysis Market, Sub Segment Analysis

7.4.1. Cloud

7.4.2. On-premises

## **CHAPTER 8. GLOBAL FINITE ELEMENT ANALYSIS MARKET, BY ENTERPRISE SIZE**

8.1. Market Snapshot

8.2. Global Finite Element Analysis Market by Enterprise Size, Performance - Potential  
Analysis

8.3. Global Finite Element Analysis Market Estimates & Forecasts by Enterprise Size  
2019-2029 (USD Billion)

8.4. Finite Element Analysis Market, Sub Segment Analysis

8.4.1. Large Enterprises

8.4.2. Small & medium Enterprises

## **CHAPTER 9. GLOBAL FINITE ELEMENT ANALYSIS MARKET, BY END-USE INDUSTRIES**

9.1. Market Snapshot

9.2. Global Finite Element Analysis Market by End-Use Industries, Performance -  
Potential Analysis

9.3. Global Finite Element Analysis Market Estimates & Forecasts by End-Use  
Industries 2019-2029 (USD Billion)

9.4. Finite Element Analysis Market, Sub Segment Analysis

9.4.1. Aerospace & Defense

9.4.2. Automotive

9.4.3. Electrical & Electronics

## **CHAPTER 10. GLOBAL FINITE ELEMENT ANALYSIS MARKET, REGIONAL ANALYSIS**

10.1. Finite Element Analysis Market, Regional Market Snapshot

10.2. North America Finite Element Analysis Market

10.2.1. U.S. Finite Element Analysis Market

10.2.1.1. Component breakdown estimates & forecasts, 2019-2029

- 10.2.1.2. Deployment breakdown estimates & forecasts, 2019-2029
- 10.2.1.3. Enterprise Size breakdown estimates & forecasts, 2019-2029
- 10.2.1.4. End-Use Industries breakdown estimates & forecasts, 2019-2029
- 10.2.2. Canada Finite Element Analysis Market
- 10.3. Europe Finite Element Analysis Market Snapshot
  - 10.3.1. U.K. Finite Element Analysis Market
  - 10.3.2. Germany Finite Element Analysis Market
  - 10.3.3. France Finite Element Analysis Market
  - 10.3.4. Spain Finite Element Analysis Market
  - 10.3.5. Italy Finite Element Analysis Market
  - 10.3.6. Rest of Europe Finite Element Analysis Market
- 10.4. Asia-Pacific Finite Element Analysis Market Snapshot
  - 10.4.1. China Finite Element Analysis Market
  - 10.4.2. India Finite Element Analysis Market
  - 10.4.3. Japan Finite Element Analysis Market
  - 10.4.4. Australia Finite Element Analysis Market
  - 10.4.5. South Korea Finite Element Analysis Market
  - 10.4.6. Rest of Asia Pacific Finite Element Analysis Market
- 10.5. Latin America Finite Element Analysis Market Snapshot
  - 10.5.1. Brazil Finite Element Analysis Market
  - 10.5.2. Mexico Finite Element Analysis Market
  - 10.5.3. Rest of Latin America Finite Element Analysis Market
- 10.6. Rest of The World Finite Element Analysis Market

## **CHAPTER 11. COMPETITIVE INTELLIGENCE**

- 11.1. Top Market Strategies
- 11.2. Company Profiles
  - 11.2.1. Altair Engineering Inc.
    - 11.2.1.1. Key Information
    - 11.2.1.2. Overview
    - 11.2.1.3. Financial (Subject to Data Availability)
    - 11.2.1.4. Product Summary
    - 11.2.1.5. Recent Developments
  - 11.2.2. Ansys Inc.
  - 11.2.3. Aspen Technology
  - 11.2.4. Autodesk Inc.
  - 11.2.5. Fidelis Engineering Associates
  - 11.2.6. Comsol Inc.



- 11.2.7. Dassault System SE
- 11.2.8. Esi Group
- 11.2.9. Msc Software Corporation
- 11.2.10. Siemens Digital Industries Software

## **CHAPTER 12. RESEARCH PROCESS**

- 12.1. Research Process
  - 12.1.1. Data Mining
  - 12.1.2. Analysis
  - 12.1.3. Market Estimation
  - 12.1.4. Validation
  - 12.1.5. Publishing
- 12.2. Research Attributes
- 12.3. Research Assumption

## List Of Tables

### LIST OF TABLES

TABLE 1. Global Finite Element Analysis Market, report scope

TABLE 2. Global Finite Element Analysis Market estimates & forecasts by Region  
2019-2029 (USD Billion)

TABLE 3. Global Finite Element Analysis Market estimates & forecasts by Component  
2019-2029 (USD Billion)

TABLE 4. Global Finite Element Analysis Market estimates & forecasts by Deployment  
2019-2029 (USD Billion)

TABLE 5. Global Finite Element Analysis Market estimates & forecasts by Enterprise  
Size 2019-2029 (USD Billion)

TABLE 6. Global Finite Element Analysis Market estimates & forecasts by End-Use  
Industries 2019-2029 (USD Billion)

TABLE 7. Global Finite Element Analysis Market by segment, estimates & forecasts,  
2019-2029 (USD Billion)

TABLE 8. Global Finite Element Analysis Market by region, estimates & forecasts,  
2019-2029 (USD Billion)

TABLE 9. Global Finite Element Analysis Market by segment, estimates & forecasts,  
2019-2029 (USD Billion)

TABLE 10. Global Finite Element Analysis Market by region, estimates & forecasts,  
2019-2029 (USD Billion)

TABLE 11. Global Finite Element Analysis Market by segment, estimates & forecasts,  
2019-2029 (USD Billion)

TABLE 12. Global Finite Element Analysis Market by region, estimates & forecasts,  
2019-2029 (USD Billion)

TABLE 13. Global Finite Element Analysis Market by segment, estimates & forecasts,  
2019-2029 (USD Billion)

TABLE 14. Global Finite Element Analysis Market by region, estimates & forecasts,  
2019-2029 (USD Billion)

TABLE 15. Global Finite Element Analysis Market by segment, estimates & forecasts,  
2019-2029 (USD Billion)

TABLE 16. Global Finite Element Analysis Market by region, estimates & forecasts,  
2019-2029 (USD Billion)

TABLE 17. U.S. Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD  
Billion)

TABLE 18. U.S. Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 19. U.S. Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 20. Canada Finite Element Analysis Market estimates & forecasts, 2019-2029  
(USD Billion)

TABLE 21. Canada Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 22. Canada Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 23. UK Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD  
Billion)

TABLE 24. UK Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 25. UK Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 26. Germany Finite Element Analysis Market estimates & forecasts, 2019-2029  
(USD Billion)

TABLE 27. Germany Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 28. Germany Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 29. France Finite Element Analysis Market estimates & forecasts, 2019-2029  
(USD Billion)

TABLE 30. France Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 31. France Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 32. Italy Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD  
Billion)

TABLE 33. Italy Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 34. Italy Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 35. Spain Finite Element Analysis Market estimates & forecasts, 2019-2029  
(USD Billion)

TABLE 36. Spain Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 37. Spain Finite Element Analysis Market estimates & forecasts by segment  
2019-2029 (USD Billion)

TABLE 38. RoE Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD

Billion)

TABLE 39. RoE Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 40. RoE Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 41. China Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 42. China Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 43. China Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 44. India Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 45. India Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 46. India Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 47. Japan Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 48. Japan Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 49. Japan Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 50. South Korea Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 51. South Korea Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 52. South Korea Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 53. Australia Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 54. Australia Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 55. Australia Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 56. RoAPAC Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 57. RoAPAC Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 58. RoAPAC Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 59. Brazil Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 60. Brazil Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 61. Brazil Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 62. Mexico Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 63. Mexico Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 64. Mexico Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 65. RoLA Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 66. RoLA Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 67. RoLA Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 68. Row Finite Element Analysis Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 69. Row Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 70. Row Finite Element Analysis Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 71. List of secondary sources, used in the study of global Finite Element Analysis Market

TABLE 72. List of primary sources, used in the study of global Finite Element Analysis Market

TABLE 73. Years considered for the study

TABLE 74. Exchange rates considered

List of tables and figures and dummy in nature, final lists may vary in the final deliverable

## List Of Figures

### LIST OF FIGURES

- FIG 1. Global Finite Element Analysis Market, research methodology
  - FIG 2. Global Finite Element Analysis Market, Market estimation techniques
  - FIG 3. Global Market size estimates & forecast methods
  - FIG 4. Global Finite Element Analysis Market, key trends 2021
  - FIG 5. Global Finite Element Analysis Market, growth prospects 2022-2029
  - FIG 6. Global Finite Element Analysis Market, porters 5 force model
  - FIG 7. Global Finite Element Analysis Market, pest analysis
  - FIG 8. Global Finite Element Analysis Market, value chain analysis
  - FIG 9. Global Finite Element Analysis Market by segment, 2019 & 2029 (USD Billion)
  - FIG 10. Global Finite Element Analysis Market by segment, 2019 & 2029 (USD Billion)
  - FIG 11. Global Finite Element Analysis Market by segment, 2019 & 2029 (USD Billion)
  - FIG 12. Global Finite Element Analysis Market by segment, 2019 & 2029 (USD Billion)
  - FIG 13. Global Finite Element Analysis Market by segment, 2019 & 2029 (USD Billion)
  - FIG 14. Global Finite Element Analysis Market, regional snapshot 2019 & 2029
  - FIG 15. North America Finite Element Analysis Market 2019 & 2029 (USD Billion)
  - FIG 16. Europe Finite Element Analysis Market 2019 & 2029 (USD Billion)
  - FIG 17. Asia Pacific Finite Element Analysis Market 2019 & 2029 (USD Billion)
  - FIG 18. Latin America Finite Element Analysis Market 2019 & 2029 (USD Billion)
  - FIG 19. Global Finite Element Analysis Market, company Market share analysis (2021)
- List of tables and figures and dummy in nature, final lists may vary in the final deliverable

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