

Quantum Computing Market Size, Share & Trends Analysis Report By Offering (System, Services), By Deployment, By Application (Optimization, Simulation, Machine Learning), By End-user, By Region, And Segment Forecast, 2024 - 2030

<https://marketpublishers.com/r/Q8451AF00B39EN.html>

Date: June 2024

Pages: 100

Price: US\$ 4,950.00 (Single User License)

ID: Q8451AF00B39EN

Abstracts

This report can be delivered to the clients within 5 Business Days

Quantum Computing Market Growth & Trends

The global quantum computing market size is anticipated to reach USD 4.24 billion by 2030, registering a CAGR of 20.1% from 2024 to 2030, according to a new report by Grand View Research, Inc. Quantum computing is an emerging field with the potential to revolutionize various industries and computing paradigms. While the market for quantum computing is dynamic and subject to rapid changes, several global growth trends have been shaping up its dynamics.

Investments from governments, tech giants, and venture capitalists in quantum research and development are crucial for the advancement of quantum technology. These investments support research efforts, enable the development of cutting-edge hardware and software, and drive innovation across various industries. Quantum technology is highly complex and requires significant resources for research and development. These investments help accelerate progress by providing funding for experimental work, the recruitment of top talent, and access to advanced research facilities. For instance, in November 2023, the U.S. Defense Advanced Research Projects Agency (DARPA) awarded Phase 2 funding to Rigetti Computing. This potential grant, amounting to USD 1.5 million, is intended to support Rigetti Computing in developing benchmarks for assessing the performance of large-scale quantum

computers in real-world applications.

Quantum hardware, including quantum processors and qubit architectures, has been continuously improving. Researchers are working to increase the number of qubits and improve qubit quality, making quantum computers more powerful and reliable. Moreover, the hybrid approach, combining quantum and classical computing, has gained traction. This approach allows for practical problem-solving by harnessing the strengths of both quantum and classical computers.

Quantum cloud services have become more prevalent, making quantum computing resources accessible to a wider audience. These services offer scalability, convenience, and affordability for researchers and businesses. Quantum cloud services allow users to pay for quantum computing resources on a usage-based model, similar to traditional cloud computing services. This pay-as-you-go approach can be more cost-effective than purchasing and maintaining quantum hardware, especially for organizations that have sporadic or variable quantum computing requirements.

North American tech giants, including IBM, Google, Microsoft, and startups such as Rigetti and IonQ, were actively involved in quantum computing research and development. These companies were competing to develop more powerful quantum hardware and software solutions. Quantum software development was a growing trend in the region. Developers and software companies in the region were actively engaged in creating quantum algorithms, programming tools, and applications for various industries.

Quantum Computing Market Report Highlights

Based on offering, the system segment dominated the market with a revenue share of over 64.2% in 2023. The service segment, on the other hand, is expected to register the fastest CAGR during the forecast period, attributed to the increasing number of startups investing in R&D related to quantum computing technology.

Based on deployment, the cloud segment is projected to account for a larger market share than the on-premises segment from 2024 to 2030

Based on application, the optimization segment held the largest revenue share of 30.8% in 2023. By leveraging the power and speed of quantum computing, an organization can optimize their operation, improve its decision-making, and

reduce costs.

Europe dominated the market with a revenue share of 34.2% in 2023. The region witnessed the emergence of several startup and spinoff companies focused on companies focused on quantum computing

Contents

CHAPTER 1. METHODOLOGY AND SCOPE

- 1.1. Market Segmentation and Scope
- 1.2. Research Methodology
 - 1.2.1. Information Procurement
- 1.3. Information or Data Analysis
- 1.4. Methodology
- 1.5. Research Scope and Assumptions
- 1.6. Market Formulation & Validation
- 1.7. List of Data Sources

CHAPTER 2. EXECUTIVE SUMMARY

- 2.1. Market Outlook
- 2.2. Segment Outlook
- 2.3. Competitive Insights

CHAPTER 3. QUANTUM COMPUTING MARKET VARIABLES, TRENDS, & SCOPE

- 3.1. Market Lineage Outlook
- 3.2. Market Dynamics
 - 3.2.1. Market Driver Analysis
 - 3.2.2. Market Restraint Analysis
 - 3.2.3. Industry Challenge
- 3.3. Quantum Computing Market Analysis Tools
 - 3.3.1. Industry Analysis - Porter's
 - 3.3.1.1. Bargaining power of the suppliers
 - 3.3.1.2. Bargaining power of the buyers
 - 3.3.1.3. Threats of substitution
 - 3.3.1.4. Threats from new entrants
 - 3.3.1.5. Competitive rivalry
 - 3.3.2. PESTEL Analysis
 - 3.3.2.1. Political landscape
 - 3.3.2.2. Economic and Social landscape
 - 3.3.2.3. Technological landscape

CHAPTER 4. QUANTUM COMPUTING MARKET: OFFERING ESTIMATES & TREND

ANALYSIS

4.1. Segment Dashboard

4.2. Quantum Computing Market: Offering Movement Analysis, 2023 & 2030 (USD Million)

4.3. System

4.3.1. System Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

4.4. Services

4.4.1. Services Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

CHAPTER 5. QUANTUM COMPUTING MARKET: DEPLOYMENT ESTIMATES & TREND ANALYSIS

5.1. Segment Dashboard

5.2. Quantum Computing Market: Deployment Movement Analysis, 2023 & 2030 (USD Million)

5.3. On-premises

5.3.1. On-Premises Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

5.4. Cloud

5.4.1. Cloud Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

CHAPTER 6. QUANTUM COMPUTING MARKET: APPLICATION ESTIMATES & TREND ANALYSIS

6.1. Segment Dashboard

6.2. Quantum Computing Market: Application Movement Analysis, 2023 & 2030 (USD Million)

6.3. Optimization

6.3.1. Optimization Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

6.4. Simulation

6.4.1. Simulation Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

6.5. Machine Learning

6.5.1. Machine Learning Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

6.6. Others

6.6.1. Others Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

CHAPTER 7. QUANTUM COMPUTING MARKET: END-USER ESTIMATES & TREND ANALYSIS

7.1. Segment Dashboard

7.2. Quantum Computing Market: End-user Movement Analysis, 2023 & 2030 (USD Million)

7.3. Aerospace & Defense

7.3.1. Aerospace & Defense Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

7.4. BFSI

7.4.1. BFSI Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

7.5. Healthcare

7.5.1. Healthcare Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

7.6. Automotive

7.6.1. Automotive Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

7.7. Energy & Power

7.7.1. Energy & Power Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

7.8. Chemical

7.8.1. Chemical Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

7.9. Government

7.9.1. Government Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

7.10. Others

7.10.1. Others Market Revenue Estimates and Forecasts, 2017 - 2030 (USD Million)

CHAPTER 8. QUANTUM COMPUTING MARKET: REGIONAL ESTIMATES & TREND ANALYSIS

8.1. Quantum Computing Market Share, By Region, 2023 & 2030 (USD Million)

8.2. North America

8.2.1. North America Quantum Computing Market Estimates and Forecasts, 2017 - 2030 (USD Million)

8.2.2. U.S.

8.2.2.1. U.S. Quantum Computing Market Estimates and Forecasts, 2017 - 2030 (USD Million)

8.2.3. Canada

- 8.2.3.1. Canada Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
- 8.3. Europe
 - 8.3.1. Europe Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
 - 8.3.2. U.K.
 - 8.3.2.1. U.K. Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
 - 8.3.3. Germany
 - 8.3.3.1. Germany Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
 - 8.3.4. France
 - 8.3.4.1. France Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
- 8.4. Asia Pacific
 - 8.4.1. Asia Pacific Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
 - 8.4.2. China
 - 8.4.2.1. China Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
 - 8.4.3. Japan
 - 8.4.3.1. Japan Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
 - 8.4.4. India
 - 8.4.4.1. India Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
 - 8.4.5. South Korea
 - 8.4.5.1. South Korea Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
 - 8.4.6. Australia
 - 8.4.6.1. Australia Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
- 8.5. Latin America
 - 8.5.1. Latin America Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
 - 8.5.2. Brazil
 - 8.5.2.1. Brazil Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)
 - 8.5.3. Mexico

8.5.3.1. Mexico Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)

8.6. Middle East and Africa

8.6.1. Middle East and Africa Quantum Computing Market Estimates and Forecasts,
2017 - 2030 (USD Million)

8.6.2. UAE

8.6.2.1. UAE Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)

8.6.3. KSA

8.6.3.1. KSA Quantum Computing Market Estimates and Forecasts, 2017 - 2030
(USD Million)

8.6.4. South Africa

8.6.4.1. South Africa Quantum Computing Market Estimates and Forecasts, 2017 -
2030 (USD Million)

CHAPTER 9. COMPETITIVE LANDSCAPE

9.1. Company Categorization

9.2. Company Market Positioning

9.3. Participant's Overview

9.4. Financial Performance

9.5. Product Benchmarking

9.6. Company Heat Map Analysis

9.7. Strategy Mapping

9.8. Company Profiles/Listing

9.8.1. Accenture Plc.

9.8.2. D-WaveSystem Inc.

9.8.3. Google LLC

9.8.4. IBM Corporation

9.8.5. Intel Corporation

9.8.6. Microsoft Corporation

9.8.7. Quantinuum Ltd.

9.8.8. Rigetti & Co, Inc.

9.8.9. Riverlane

9.8.10. Zapata Computing

List Of Tables

LIST OF TABLES

Table 1 Global Quantum Computing Market by Offering, 2017 - 2030 (USD Million)

Table 2 Global Quantum Computing Market by Deployment, 2017 - 2030 (USD Million)

Table 3 Global Quantum Computing Market by Application, 2017 - 2030 (USD Million)

Table 4 Global Quantum Computing Market by End-user, 2017 - 2030 (USD Million)

Table 5 Global Quantum Computing Market by Region, 2017 - 2030 (USD Million)

Table 6 North America Quantum Computing Market by country, 2017 - 2030 (USD Million)

Table 7 Europe Quantum Computing Market by country, 2017 - 2030 (USD Million)

Table 8 Asia Pacific Quantum Computing Market by country, 2017 - 2030 (USD Million)

Table 9 Latin America Quantum Computing Market by country, 2017 - 2030 (USD Million)

Table 10 MEA Quantum Computing Market by country, 2017 - 2030 (USD Million)

Table 11 Key companies launching new products/services.

Table 12 Key companies engage in mergers & acquisitions.

Table 13 Key companies engaged in Research & development.

Table 14 Key Companies engaged in expansion.

List Of Figures

LIST OF FIGURES

- Fig. 1 Quantum Computing Market segmentation
- Fig. 2 Market research process
- Fig. 3 Information procurement
- Fig. 4 Primary research pattern
- Fig. 5 Market research approaches
- Fig. 6 Value chain-based sizing & forecasting
- Fig. 7 Parent market analysis
- Fig. 8 Market formulation & validation
- Fig. 9 Quantum Computing Market snapshot
- Fig. 10 Quantum Computing Market segment snapshot
- Fig. 11 Quantum Computing Market competitive landscape snapshot
- Fig. 12 Market research process
- Fig. 13 Market driver relevance analysis (Current & future impact)
- Fig. 14 Market restraint relevance analysis (Current & future impact)
- Fig. 15 Quantum Computing Market, Offering outlook key takeaways (USD Million)
- Fig. 16 Quantum Computing Market: Offering movement analysis 2023 & 2030 (USD Million)
- Fig. 17 System market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 18 Services market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 19 Quantum Computing Market: Deployment outlook key takeaways (USD Million)
- Fig. 20 Quantum Computing Market: Deployment movement analysis 2023 & 2030 (USD Million)
- Fig. 21 On-Premises market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 22 Cloud market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 23 Quantum Computing Market: Application outlook key takeaways (USD Million)
- Fig. 24 Quantum Computing Market: Application movement analysis 2023 & 2030 (USD Million)
- Fig. 25 Optimization market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 26 Simulation market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 27 Machine learning market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 28 Others market revenue estimates and forecasts, 2017 - 2030 (USD Million)

- Fig. 29 Quantum Computing Market: End-user outlook key takeaways (USD Million)
- Fig. 30 Quantum Computing Market: End-user movement analysis 2023 & 2030 (USD Million)
- Fig. 31 Aerospace & Defense market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 32 BFSI market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 33 Healthcare market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 34 Automotive market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 35 Energy & Power market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 36 Chemical market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 37 Government market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 38 Others market revenue estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 39 Regional marketplace: Key takeaways
- Fig. 40 Quantum Computing Market: Regional outlook, 2023 & 2030 (USD Million)
- Fig. 41 North America Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 42 U.S. Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 43 Canada Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 44 Europe Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 45 UK Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 46 Germany Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 47 France Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 48 Asia Pacific Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 49 Japan Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 50 China Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 51 India Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)
- Fig. 52 Australia Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)

Fig. 53 South Korea Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)

Fig. 54 Latin America Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)

Fig. 55 Brazil Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)

Fig. 56 Mexico Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)

Fig. 57 MEA Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)

Fig. 58 KSA Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)

Fig. 59 UAE Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)

Fig. 60 South Africa Quantum Computing Market estimates and forecasts, 2017 - 2030 (USD Million)

Fig. 61 Strategy framework

Fig. 62 Company Categorization

I would like to order

Product name: Quantum Computing Market Size, Share & Trends Analysis Report By Offering (System, Services), By Deployment, By Application (Optimization, Simulation, Machine Learning), By End-user, By Region, And Segment Forecast, 2024 - 2030

Product link: <https://marketpublishers.com/r/Q8451AF00B39EN.html>

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/Q8451AF00B39EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below

and fax the completed form to +44 20 7900 3970