+357 96 030922
info@marketpublishers.com

India Cloud Based Quantum Computing Market by Component (Hardware, Software, and Services), By Deployment (On-premises, Cloud), By Application (Machine Learning, Optimization, Biomedical Simulations, Financial Services, Electronic material discovery, and Others), By End-User (IT & Telecom, BFSI, Manufacturing, Healthcare, Energy & utilities, and Others) and By Region, Competition, Forecast, and Opportunities, 2029

https://marketpublishers.com/r/I210520FA106EN.html
Date: October 2023
Pages: 71
Price: US$ 3,500.00 (Single User License)
ID: I210520FA106EN

Abstracts

India cloud based quantum computing market is anticipated to grow at a high CAGR during the forecast period. Quantum computing, a revolutionary paradigm based on quantum physics principles, can alter businesses, solve complicated issues, and spur creativity. As quantum technologies evolve around the world, India has emerged as a prominent player in the global quantum computing scene. With its thriving digital sector, strong research institutions, and growing interest in quantum technology, India is primed to push computing to new heights. Cloud-based quantum computing holds enormous promise for democratizing access to quantum resources, encouraging collaboration, and propelling quantum research and development in the country. Recognizing quantum computing's transformative potential, the Indian government has taken strong steps to encourage and expedite quantum research and development. The National Mission on Quantum Technologies and Applications (NM-QTA) aims to position India as a global leader in quantum technologies. These projects provide money, foster academic-industry cooperation, and aid in the development of quantum technology ecosystems. Furthermore, rising investments in cloud data center development will enhance the growth of the India cloud-based quantum computing market during the

+357 96 030922
info@marketpublishers.com

forecast period.

Increasing Investments by Governments in Quantum Computing Technology

Governments are recognizing the immense potential of quantum computing and its impact on various sectors. As a result, they are increasing their investments in quantum computing technology to boost economic growth and maintain a competitive edge. This driver is expected to significantly boost the India cloud-based quantum computing market. Governments hope to stimulate creativity, drive research and development, and attract investment by investing in quantum computing. These investments are critical for the advancement of quantum technologies, such as cloud-based quantum computing systems. The administration has shown a significant commitment to the advancement of quantum technology. Initiatives such as India's National Mission on Quantum Technologies and Applications (NM-QTA) demonstrate the country's proactive commitment to building a quantum technology ecosystem. The government's funding in quantum research and development fosters the rise of cloud-based quantum computing in India. Government financing enables quantum computing research and development activities such as the design and development of quantum computers, algorithms, and software tools. This spurs innovation, improves quantum system performance, and broadens the potential of cloud-based quantum computing platforms. Governments make investments in the creation of quantum research centers, quantum communication networks, and specialized quantum hardware infrastructure. This infrastructure facilitates the expansion of cloud-based quantum computing by providing the required resources and a solid foundation for quantum research and commercialization. Such factors are expected to drive the growth of the India cloud-based quantum computing market during the forecast period.

Increasing Number of Strategic Alliances

In the India cloud-based quantum computing market, strategic collaborations play a crucial role in driving market growth. Companies and organizations are realizing the advantages of partnering up to accelerate innovation, share resources, and manage the complex challenges associated with quantum technology. By promoting the flow of knowledge, insights, and best practices, strategic partnerships encourage collaboration between partners. This fosters innovation and allows for the collective improvement of the field of quantum computing. Local and foreign entities in India cloud-based quantum computing business can benefit from strategic partnerships, facilitating knowledge transfer and ecosystem growth. Partners can expedite the development of quantum computing applications targeted to specific sectors and use cases by collaborating on

+357 96 030922
info@marketpublishers.com

research and development. By combining knowledge and resources, partners can develop unique solutions that address real-world challenges, proving the utility of cloud-based quantum computing and encouraging its adoption in India. Strategic collaborations are critical to the growth of the India cloud-based quantum computing market, as they encourage innovation, establish synergies, extend market reach, and influence legislation. As the industry evolves, strategic collaborations will continue to be important in unlocking the full potential of cloud-based quantum computing in the country.

Access to Quantum Computing Power

Access to quantum computing power is a key driving force behind the growth of the India cloud-based quantum computing market. Quantum computing offers unparalleled computational capabilities that have the potential to revolutionize various industries and solve complex problems. However, developing and maintaining quantum hardware is a highly specialized and resource-intensive endeavor. Cloud-based quantum computing platforms address this challenge by providing remote access to quantum processors and resources, democratizing the power of quantum computing and driving market growth. Quantum computing is now available to a greater number of organizations and researchers in India due to cloud-based platforms. They reduce the need for large investments in constructing and maintaining quantum hardware, making quantum computing accessible to startups, small and medium-sized companies (SMEs), and academic institutions. This democratization encourages creativity, accelerates research, and opens up a larger range of applications across multiple industries. Researchers and developers in India can experiment with and build quantum algorithms because to cloud computing capacity. They can explore novel algorithms, optimize current ones, and tackle complicated computing problems more efficiently by having hands-on experience using quantum processors. This feature propels quantum algorithm advances and adds to the growth of the India cloud-based quantum computing market.

Access to quantum computing capacity via the cloud enables Indian enterprises to investigate and build solutions tailored to their individual requirements. Quantum computing can be used to solve optimization problems, simulate quantum systems, and improve machine learning algorithms in industries such as banking, healthcare, logistics, and materials research. This encourages industry-specific innovation, which creates opportunities for organizations and contributes to the growth of the India cloud-based quantum computing market. Cloud-based quantum computing provides a cost-effective and accessible approach for Indian organizations. Instead of purchasing pricey quantum hardware, they can use the cloud to access quantum resources on a pay-as-

+357 96 030922
info@marketpublishers.com

you-go basis. This lowers the barrier to entry, making quantum computing more economical and accessible to a broader spectrum of customers, pushing market development even further. To summarize, access to quantum computing capacity is a key driver of the India cloud-based quantum computing market. Access to quantum computing power fuels innovation, expands market opportunities, and accelerates the adoption of cloud-based quantum computing in India by democratizing quantum computing, enabling quantum algorithm development, facilitating collaboration and knowledge sharing, supporting scalability and future developments, and driving industry-specific applications.

Increasing Use of Quantum Computing Technology Across Multiple Industries

Quantum computing is increasingly being used in a variety of industries. For example, Accenture Labs and 1QBit teamed with Biogen to create a first-of-its-kind quantum-enabled molecular comparison application that may greatly improve advanced molecular design and speed up drug discovery for complicated neurological disorders such as multiple sclerosis. They partnered to develop a novel application that adds quantum capabilities to Biogen's existing molecular comparison approach. The new program offers fresh insights into the chemical comparison process as well as considerably more detailed contextual information about how, where, and why molecules match. Furthermore, quantum computing is gaining pace in the banking, financial services, and insurance (BFSI) industry, where corporations are speeding up trade activities, transactions, and data processing.

Simulation is one of the potential uses of quantum computing. Quantum computing helps to identify effective and efficient ways to manage financial risks. High-quality solutions’ processing time and costs can increase exponentially if financial institutions use conventional computers.

Market Segmentation

The India cloud based quantum computing market is divided into component, deployment, applications, and end-user. Based on component, the market is divided into hardware, software, and services. Based on deployment, the market is divided into on-premises and cloud. Based on application, the market is divided into machine learning, optimization, biomedical simulations, financial services, electronic material discovery, and others. Based on end-user, the market is divided into IT & Telecom, BFSI, manufacturing, healthcare, energy & utilities, and others.

+357 96 030922
info@marketpublishers.com

Market Players

Major market players of the India cloud based quantum computing market are Tata Consultancy Services, Infosys Limited, Alphabet Inc, Zenith InfoTech Limited, CipherCloud, Ctrls Datacenters Limited, Amazon Web Services, SAP India Pvt. Ltd. and, Microsoft Azure. To achieve good market growth, businesses that are active in the market employ organic tactics such product launches, mergers, and partnerships.

. Report Scope:

In this report, the India cloud based quantum computing market has been segmented into following categories, in addition to the industry trends which have also been detailed below:

India Cloud Based Quantum Computing Market, By Component:

Hardware

Software

Services

India Cloud Based Quantum Computing Market, By Deployment:

On-premises

Cloud

India Cloud Based Quantum Computing Market, By Applications:

Machine Learning

Optimization

Biomedical Simulations

Financial Services

Electronic material discovery

+357 96 030922
info@marketpublishers.com

Others

India Cloud Based Quantum Computing Market, By End User:

IT & Telecom

BFSI

Manufacturing

Healthcare

Energy & utilities

Others

India Cloud Based Quantum Computing Market, By Region:

East India

West India

North India

South India

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the India cloud based quantum computing market

Available Customizations:

India cloud based quantum computing market with the given market data, Tech Sci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

+357 96 030922
info@marketpublishers.com

Company Information

Detailed analysis and profiling of additional market players (up to five).

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

7. SOUTH INDIA CLOUD BASED QUANTUM COMPUTING MARKET OUTLOOK

7.1. Market Size & Forecast
  7.1.1. By Value
7.2. Market Share & Forecast
  7.2.1. By Component
  7.2.2. By Deployment
  7.2.3. By Application
  7.2.4. By End-User

8. WEST INDIA CLOUD BASED QUANTUM COMPUTING MARKET OUTLOOK

8.1. Market Size & Forecast
  8.1.1. By Value
8.2. Market Share & Forecast
  8.2.1. By Component
  8.2.2. By Deployment
  8.2.3. By Application
  8.2.4. By End-User

9. EAST INDIA CLOUD BASED QUANTUM COMPUTING MARKET OUTLOOK

9.1. Market Size & Forecast
  9.1.1. By Value
9.2. Market Share & Forecast
  9.2.1. By Component
  9.2.2. By Deployment
  9.2.3. By Application
  9.2.4. By End-User

10. MARKET DYNAMICS

10.1. Drivers
10.2. Challenges

11. MARKET TRENDS & DEVELOPMENTS

12. POLICY & REGULATORY LANDSCAPE

+357 96 030922
info@marketpublishers.com

13. INDIA ECONOMIC PROFILE

14. COMPANY PROFILES

+357 96 030922
info@marketpublishers.com

(Note: The companies list can be customized based on the client requirements.)

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: India Cloud Based Quantum Computing Market by Component (Hardware, Software, and Services), By Deployment (On-premises, Cloud), By Application (Machine Learning, Optimization, Biomedical Simulations, Financial Services, Electronic material discovery, and Others), By End-User (IT & Telecom, BFSI, Manufacturing, Healthcare, Energy & utilities, and Others) and By Region, Competition, Forecast, and Opportunities, 2029

Product link: https://marketpublishers.com/r/I210520FA106EN.html

Price: US$ 3,500.00 (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/I210520FA106EN.html