

How IoT Technology is Transforming Mining Industry

Your Company Name

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How IoT technology is transforming mining industry



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Introduction to IoT mining and features

The following slide showcases glimpse of Internet of Things (IoT) mining and its major characteristics. The slide covers information about large-scale data processing, real-time analytics, data mining strategies, predictive analytics, industry-specific applications, and security considerations.

Overview

IoT mining is technique of gathering important knowledge, patterns, and key insights from large volume of data generated by Internet of Things (IoT) devices

Large-Scale Data Processing

Mining companies generally use IoT devices to manage and process big data to extract key insights

Real-Time Analytics

IoT devices are used to gather data in real-time in order to support real-time decision making

Data Mining Techniques

Clustering and classification are some of the major techniques used by companies to identify trends within IoT data

Predictive Analytics

Future events can be predicted using IoT mining strategies and by evaluating past data

Industry-Specific Use Cases

IoT mining techniques are applied across multiple industries (Transportation, agriculture, healthcare) to extract valuable information

Privacy Considerations

Mining companies usually faces major challenge in protecting massive data collected by IoT devices

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Key benefits of using IoT in mining industry

The following slide showcases major advantages of using Internet of Things (IoT) technology in mining industry. The advantages are associated with remote monitoring, improve workers safety, optimizing logistics, automated fleet management, and cost reduction.



Remote Monitoring

- o IoT allow real-time monitoring of various mining devices and operations from centralized location
- o Remote monitoring can assist mining companies in reducing downtime by **3** hours
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Improve Safety

- o IoT devices significantly improve workers safety by using wearable devices
- o Mining companies can detect potential hazards such as toxic gases
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Supply Chain Optimization

- o IoT devices track and analyze movement of raw material in real-time
- o Mining companies can ensure timely delivery of materials
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Automated Fleet Management

- o GPS and telematics can be used to enhance vehicle movement on mining sites
- o Fleet productivity can be increased by **50%**
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Cost Optimization

- o IoT devices in mining can be used to monitor consumption of fuel, electricity or water
- o **\$5000/month** can be reduced by companies with IoT mining strategies
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Process of IoT mining to make data driven decisions

The following slide showcases the eight step process of Internet of Things (IoT) mining to make data driven decisions in real time. The process begins with deployment of IoT devices, data collection, data transmission, data storage, real-time analytics, visualization, decision-making, and continuous evaluation.



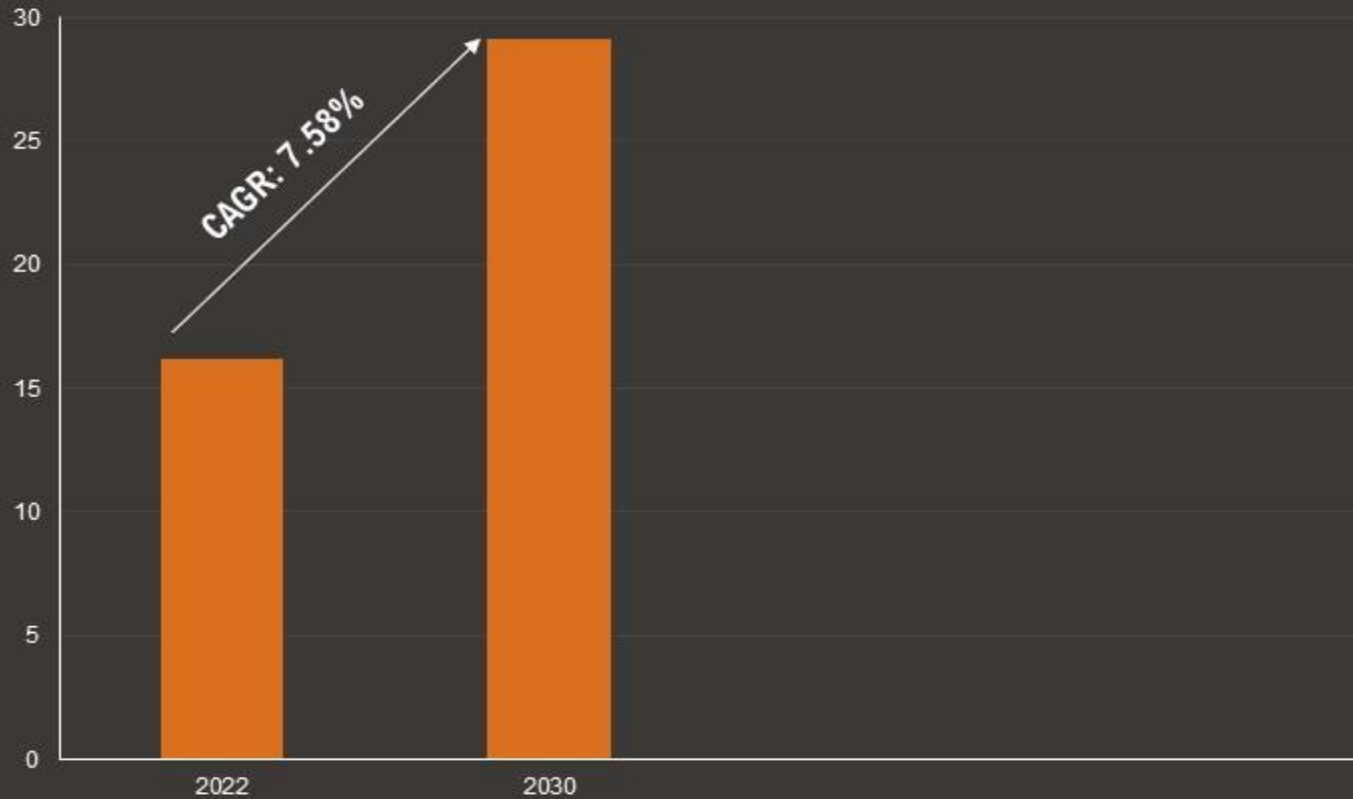
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Global market size of IoT mining

The following slide showcases statistical representation of Internet of Things (IoT) mining market size. Information covered in this slide is related to Compound Annual Growth Rate (CAGR) for period of 2023 to 2030 along with key intakes.

IoT Mining Market Size Worldwide (in USD bn)



This graph/chart is linked to excel, and changes automatically based on data. Just left click on it and select "Edit Data".

Key Takeaways



- Internet of Things (IoT) mining market size across globe is projected to reach **\$29.1 bn** in 2030 with CAGR of **7.58%**
- Advancement in AI & data analytics, and higher investment in IoT cybersecurity are some of the major reasons which are driving market growth
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Latest trends associated with IoT mining

The following slide showcases global trends related to Internet of Things (IoT) mining. Information covered in this slide is related to continuous use of private networks, investment in IoT security, continuous use of digital twins, and higher usage of drones.

01



Continuous Use of Private Networks and 5G

- Companies are continuously using 5G networks and private LTE networks at mining site
- High speed and low-latency network enhance seamless communication across mining operations
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02



Higher Investment in IoT Cybersecurity

- Mining companies across globe are increasing their investment in IoT security to protect their network infrastructure
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Digital Twins in Gaining Popularity Among Mining Companies

- Mining companies are continuously using digital twins framework to replicate physical assets in virtual world
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04



Higher Usage of Drones

- Smart drones are used by companies for inspecting and surveying mining sites
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