

Gain the Edge: 7 Edge AI Insights to Fuel Innovation

Let's take a look at why edge AI—the process of running artificial intelligence (AI) algorithms on devices at the edge of the network, instead of the cloud—can be a game changer for businesses.

Key Edge AI Market Stats You Should Know:

\$143.6Bn

Estimated market value of edge AI by 2032

Source: Market.us

\$227.6Bn

Estimated smart sensor market size by 2032

Source: scoop.market.us/smart-sensors-statistics

40%

the cost savings edge AI is anticipated to drive in data transmission and cloud computing expenses for IoT by 2025.

Source: McKinsey Global Institute - The Internet of Things: Mapping the Value Beyond the Hype

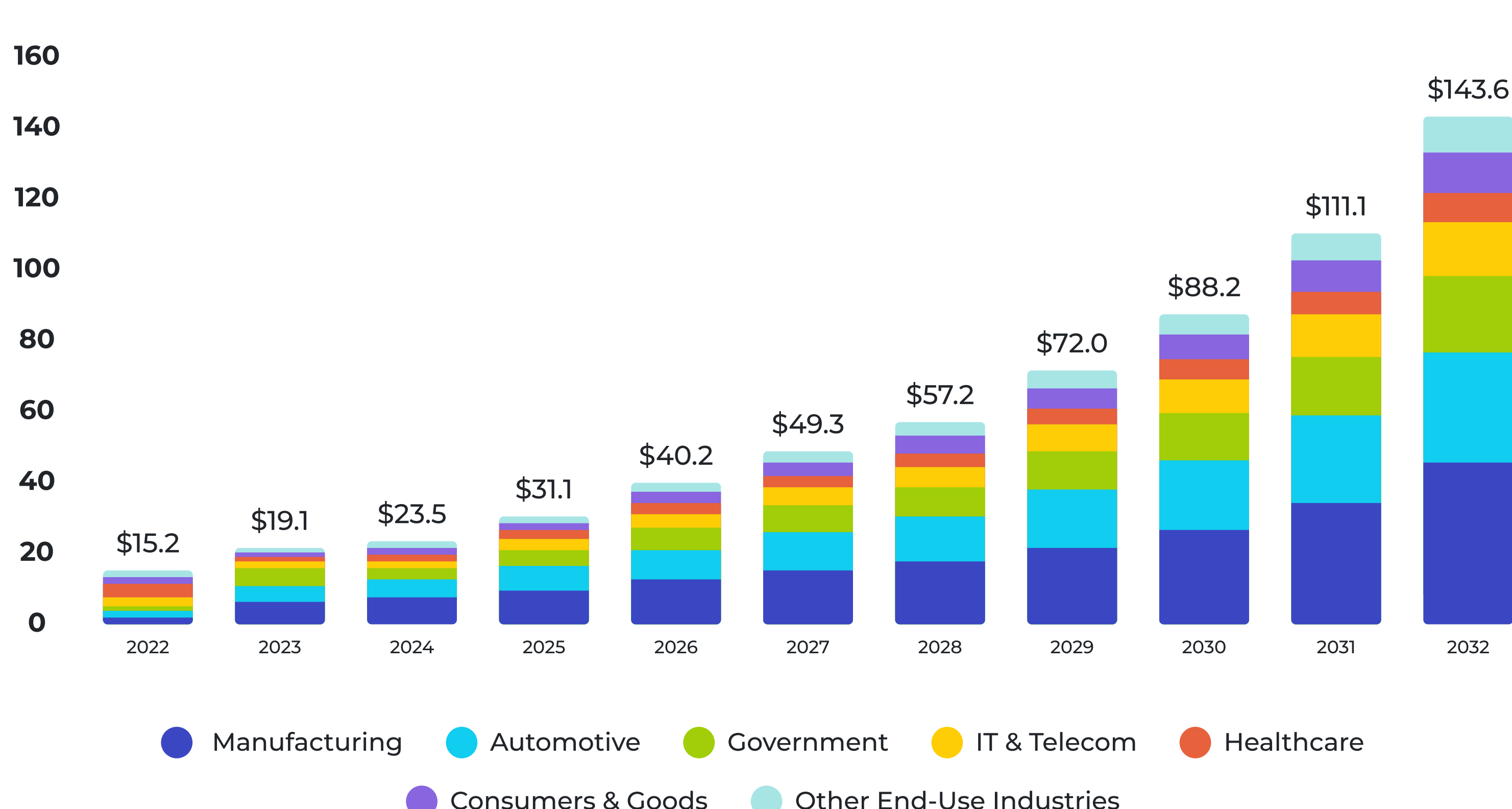
50%

estimate of organizations looking to adopt edge AI for anomaly detection and condition monitoring by the end of 2024.

Source: Market.us Scoop

Global Edge AI Market

Size, by industry, 2022-2032 (USD Billion)



The Market Will Grow At the CAGR of: **25.9%** The Forecasted Market Size for 2032 in USD: **\$143.6Bn** market.us ONE STOP SHOP FOR THE REPORTS

7 Advantages of Accelerating Edge AI Adoption

1 **Less bandwidth required**
By running algorithms on-device, you avoid sending sensor data to the cloud, reducing the level of connectivity required.

2 **Faster response times**
On-device algorithms can be much more responsive, since there's no round-trip to the cloud required, leading to lower latency.

3 **Cost reduction**
Reduced connectivity demand can save on both BOM and network communications costs, and removing the need for cloud-hosted AI systems can lower recurring spend —achieving significant economic savings over time.

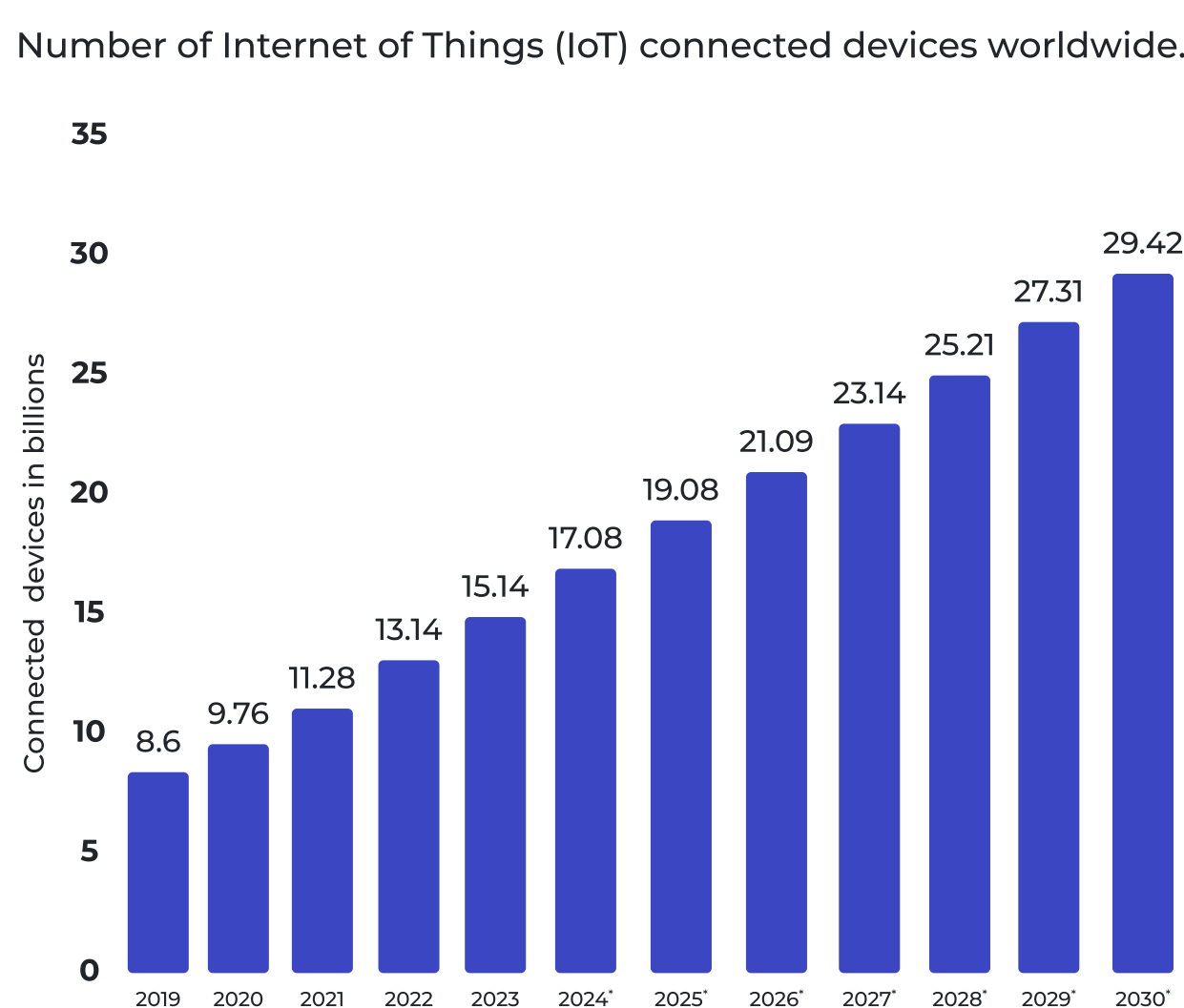
4 **Increased reliability**
By removing the reliance on connectivity and communication, on-device AI systems are potentially more reliable than those in the cloud, which is essential for applications where safety and user experience are critical.

5 **Enhanced privacy**
Edge AI allows you to benefit from AI without data leaving the device, ensuring user privacy.

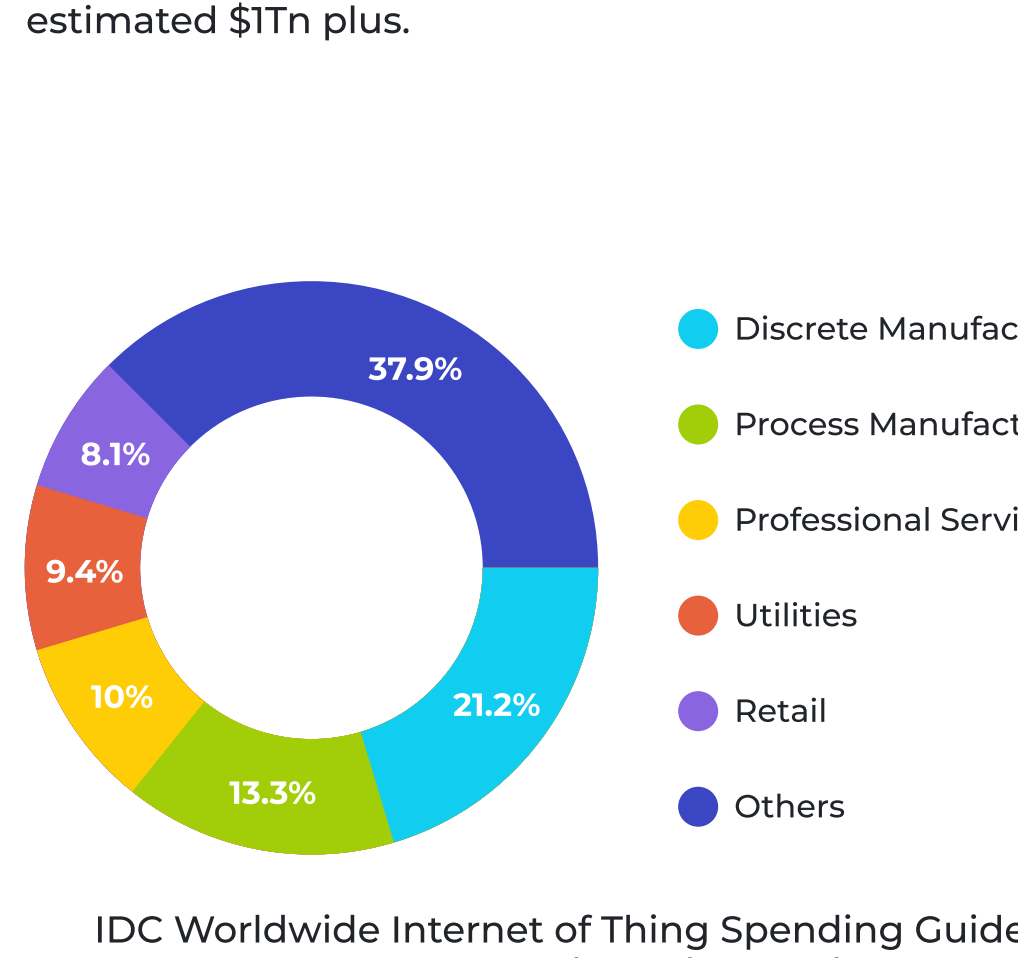
6 **Rapid growth & opportunities**

The proliferation of IoT devices is fueling edge AI growth.

Number of Internet of Things (IoT) connected devices worldwide.

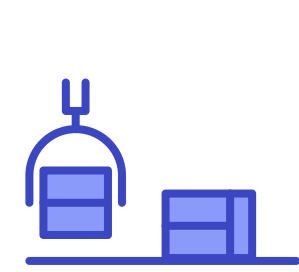


Worldwide IoT spending in 2023: \$805.7Bn and 2026: estimated \$1Tn plus.



7 **Fast adoption across multiple industries**

Top applications and use cases for edge AI include:



Industrial & Manufacturing
Enhances predictive maintenance, quality control, and process optimization in manufacturing plants



Healthcare
Facilitates remote patient monitoring, medical imaging analysis, and personalized treatment recommendations



Retail
Customer behavior analysis, inventory management, and personalized shopping experiences



Smart cities
Enables intelligent traffic management, public safety monitoring, and safer roads

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Sign up for our **free trial** and learn how Edge Impulse can help you run AI at peak performance on any edge device with unmatched speed and ease.

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