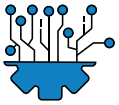


REDEFINE WHAT'S POSSIBLE WITH IOT

HOW TO GET STARTED WITH THE INTERNET OF THINGS



IOT EDGE

In an IoT platform, devices and objects are all connected and sharing big data constantly. What if you were able to integrate data from different devices and apply analytics to share the most valuable information built to address specific needs. This is computing at the Edge.

Edge computing combines the benefits of the edge and the cloud. Thousands of devices are connected together to make it easier to process data. The most relevant information is sent directly to you for efficient decision making. The transportation industry is a great example of the use of edge computing because millions of devices are inside commercial vehicles. These devices process large amounts of data such as the temperature inside the truck, the truck's location, and track the health of the truck's machinery. With edge computing, the analysis and decision-making is performed locally on these devices, and the information needed will be sent directly to fleet managers.



RECEIVE THE MOST
RELEVANT INFORMATION
QUICKLY FOR EFFICIENT
DECISION MAKING.

By moving some or all of the processing functions closer to the end user or data collection point, cloud edge computing can mitigate the effects of widely distributed sites by minimizing the effect of latency on the applications. It is ideal to sort the data at the edge for anomalies and changes, and only report on the data that is relevant to you.

INDUSTRIES AND BENEFITS

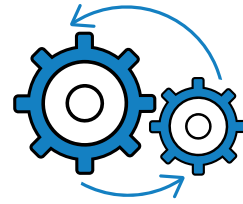
IoT is reshaping entire industries because of the benefits and opportunities it brings. IoT has the potential to benefit every industry from manufacturing, transportation, energy, healthcare, retail, and finance. The actual need of IoT is to help businesses develop new business strategy plans from data collected. IoT is not only for helping your business operate better but also to connect with your customers. With IoT devices connecting to consumers in new ways it increases interactions which will result in greater access to data about your consumers. These devices will be able to track and record patterns of consumer behavior and learn from them to further help you strategize business plans. Here's a look at a few industries that can utilize the Internet of Things:



RETAIL

As technology advances, consumers have higher expectations for their shopping experiences. IoT offers retailers opportunities in areas like customer experience and the supply chain. Retailers are investing in IoT technologies to provide solutions that create more tailored services and experiences as well as monitor inventory.

IoT promises more authentic and meaningful experiences to the individual. IoT can enhance customer experiences through the use of digital signage. Digital signs can be customized in real-time to suit customers and the needs of your business. One of the main challenges for store owners is getting customers into their stores. Without customers walking in to your store, you cannot make any sales.



CREATE MORE
TAILORED SERVICES
AND EXPERIENCES
FOR CUSTOMERS.

With facial detection, digital signage can display offers to an individual based on demographics like gender and age. IoT integrated into digital displays can add interactive elements to increase engagement. Interactive screens can provide customers with personalized information, the ability to check inventory, or speak with an associate. With IoT, retailers can better monitor their inventory using smart shelves integrated with radio frequency identification (RFID) tags. The use of RFID tags allows for retailers to optimize the in-store experience by ensuring faster replenishment, reduced number of slow moving items, adjust pricing real-time and live tracking of inventory to make better informed decisions.



INDUSTRIAL IOT

Businesses in the manufacturing sector have the potential to change the way factories work because they deal with a lot of machinery and equipment that now can have the ability to connect and communicate with each other. The Industrial Internet of Things (IIoT) is the use of smart sensors and actuators to enhance manufacturing and industrial processes. Incorporating IoT into the industrial environments helps optimize operations by connecting machines and advanced analytics. Organizations will be able to connect many different devices, including older equipment, and get them to communicate with each other in a way that they could not before. This results in systems that can monitor, collect, analyze, and provide valuable new insights more easily. By gathering that data from both new and legacy devices, organizations can use that data to improve efficiency and gain a competitive advantage. Equipment will be able to increase productivity by ordering supplies before they go out of stock, self-monitor and predict potential problems, and more.

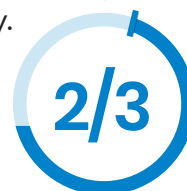
THIS RESULTS IN SYSTEMS THAT
**MONITOR, COLLECT, ANALYZE, &
PROVIDE VALUABLE NEW INSIGHTS**
MORE EASILY.



SMART CITIES

The demand for smarter cities and more efficient and sustainable infrastructure arises from the rapid growth of urbanization. By 2030, it is predicted that two-thirds of the world will live in urban settlements. This growth has increased the need for more developed and enhanced solutions to provide a sustainable lifestyle in these cities. Many cities have already invested in smart city technology while many others are looking into implementing smart solutions. The global market for smart cities is expected to expand 18.9% from 2019 to 2025. Smart cities are beneficial because they provide solution to increase energy efficiency, reduce congestion, decrease maintenance budgets, and

improve the overall quality of life for citizens and visitors. To create a smart city, IoT devices such as connected sensors, lights, and meters can be embedded into city infrastructure to collect and analyze data. For example, adding IoT sensors into a city's lighting system to reduce power consumption. According to the United Nations Human Settlements Program, today cities consume 78% of the world's energy.



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