

IoT Apps: Internet of Things vs Internet of Behaviors

By Ingenia

Jun /15/ 2022

Scroll down



IoT applications can include internet of things (IoT) and internet of behaviors (IoB). Learn the differences between these here.

Did you know that the global IoT market is expected to be worth over **a trillion dollars** in the next five years?

IoT applications play a crucial role in the growth of a business. They use Machine Learning (ML) and Artificial Intelligence (AI) to gather and create business insights. IoT applications are used both by enterprise-level businesses and normal, everyday people.

IoT applications can include the internet of things (IoT) and the internet of behaviors (IoB). Learn the differences between these here.

What Is IoT?

The Internet of Things is the connection of smart devices and other electronics together through the internet. These devices share data and information. This shared data and information gets used to make decisions on how to further expand business sales and marketing.

There are well over **10 billion devices** connected to the IoT.

Data Collection

Devices connected to the IoT collect data through sensors. These sensors constantly update in real-time and get drawn from at any time. An enormous amount of data is collected from devices, with over 500 zettabytes of information collected every year.

Data Transformation

The data pulled from the IoT tells businesses how they are performing in real-time. This data gets transformed into valuable insight that businesses use to increase efficiency, reduce waste, and boost customer experience.

For example, manufacturers use the IoT to manage their supply chain and keep track of inventory. Because the data is collected in real-time, managers are aware of when and where inventory goes at all times. Managers can now spend their time being more productive in other areas without worrying about the loss of inventory.



What is IoB?

The Internet of Behaviors is an extension of the IoT. The IoB gathers behavioral data and analytics like customer preferences, habits, and tendencies. These data and analytics get used to further personalize and target a customer base.

Behavioral Data

Whether we know it or not, our smart devices carry a ton of our personal information. Let's take smartphones as an example.

Smartphones function as our digital wallets which contain our identification, banking information, and more. Each time we make a purchase or sign on to a digital account with our smartphones, metadata gets left behind. This metadata is personalized to us individually and paints a picture of our likes, dislikes, tendencies, and habits.

Targeted Marketing

With this information in hand, companies perform **behavioral data analysis** to come up with the most specific and effective way of targeting customers. Companies like Amazon, Facebook, and Google use the IoB to drive sales and deliver a more personalized customer experience.

It's not just purchasing and personal financial data that get used for targeted advertising. For example, it has recently been discovered that Amazon uses **Alexa voice data** to develop targeted ads for their customers.

Security Concerns

For all the good that the IoB does for businesses, there are some security concerns.

All data created and exchanged on the internet is subject to attack. A company that utilizes personal data can have that data leaked or stolen by hackers. Smart devices and electronics are also often compromised during cyberattacks.

Data breaches **are common** and affect millions of people at once. For this reason, it's important that companies care about protecting personal data just as much as using it.



What Are IoT Applications?

As mentioned previously, the IoT collects data through devices that have sensors. The data captured on these sensors is analyzed and visualized with IoT applications.

IoT applications are SaaS business tools that use machine learning and artificial intelligence to provide real-time data insights. Some examples of IoT application technologies are Amazon Web Services (AWS), Oracle IoT, IBM Watson IoT, and the Google Cloud IoT.

Logistics

Simply put, the biggest reason IoT applications are used is for their ability to track and monitor. Freight companies and non-profits use IoT applications to manage physical assets and prepare in advance for any potential hazards.

For example, shipping companies like UPS install sensors on the back of their delivery trucks. Combined with IoT applications, these sensors give managers the ability to see what moves drivers are making at all times. These constant updates keep drivers and customer packages safe.



Wearables

One of the most popular uses for IoT applications are wearables. Wearables are sensor-based objects placed on the body to track health. Some examples include smartwatches, fitness trackers, and blood pressure monitors.

Medical professionals use wearables to track the health profile of patients.

For example, a patient with heart issues may be told by their doctor to wear a smart monitor. Heart rate data is then recorded in real-time over a fixed period of time. Their doctor evaluates the data and comes to a conclusion based on what they see.



How the IoT and IoB Come Together

The IoT, IoT applications, and the IoB all have an established workflow. Let's explore that workflow step-by-step.

1. User

All sources of data start with a single user. Everyone who owns and uses a smart device connected to the internet is a participant in the IoT.

2. IoT

Data and information from users gets shared amongst the vast interconnected network of the IoT. This shared network is the source from which all data-driven decisions are made.

3. IoT Applications

Data from the IoT gets captured in real-time, transformed, and analyzed using enterprise-level business applications. These data are stored in databases on IoT platform technologies.

4. IoB

Analyzed data from the IoT is examined through a behavioral lens to gain customer insights. Strategies get developed based on these insights to further business sales and reach.

5. Action

Targeted advertisements and marketing campaigns are made with the use of combined data from the IoT and IoB. These strategies are highly personalized with a high success rate.

Expand Your Business With the IoT

The IoT offers businesses the ability to grow exponentially. Consider using IoT applications and IoB technologies in your business, today.

Are you interested in growing the marketing presence of your business? We're here to help. Come **book a meeting** with us for more information!

PREVIOUS POST
Organic vs. Paid Reach:
Why Your Business
Needs Both

