9 Best Internet of Things Design Principles

Think of security in advance

Privacy and security issues are the key challenge for IoT products. Incorrect or insecure software may open a network to hackers' attacks and data leakage.

Test in the real environment

The IoT fleet interacts with the environment which makes it vulnerable to all kinds of physical effects like hits, rapid temperature drops, pests, etc.

Apply UX in device and application development

UX aims to provide a positive experience and helps to meet user needs and requirements. UX-based IoT design brings great value to the final user and the IoT system.

Provide the autonomy of devices during connection loss

The Internet of Things is about connectivity. However, there will be a time when the device will disconnect from the network.

Place getaways close to the maximum number of devices

The location of gateways should be as close to the IoT fleet as possible. It's necessary to provide a lower latency in their communication.

The system should be easily scalable

The future growth of the IoT system directly depends on its opportunities to scale efficiently and stay robust when the volume of data and the number of devices increase.

Build trust in your system

Since the Internet of Things often deals with sensitive information, you need to build trust in your system to acquire more users. Trust should become one of the core values.

Deploy only working products

Once the connected devices are deployed, their replacement with a newer version will be an almost impossible task to accomplish because of high costs.

Data management and analysis should be effective

IoT systems generate enormous volumes of information. This data will be useless until the system learns how to transform data streams into valuable insights.