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**Topic:internet of things.**

**Application explicauion:** The **Internet of things** (**IoT**) is a system of interrelated computing devices, mechanical and digital machines provided with unique [identifiers](https://en.wikipedia.org/wiki/Identifiers) (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

The definition of the Internet of things has evolved due to the convergence of multiple technologies, real-time [analytics](https://en.wikipedia.org/wiki/Analytics), [machine learning](https://en.wikipedia.org/wiki/Machine_learning), [commodity](https://en.wikipedia.org/wiki/Commodity) [sensors](https://en.wikipedia.org/wiki/Sensors), and [embedded systems](https://en.wikipedia.org/wiki/Embedded_system).[[1]](https://en.wikipedia.org/wiki/Internet_of_things#cite_note-Linux_Things-1) Traditional fields of [embedded systems](https://en.wikipedia.org/wiki/Embedded_system), [wireless sensor networks](https://en.wikipedia.org/wiki/Wireless_sensor_network), [control systems](https://en.wikipedia.org/wiki/Control_system), [automation](https://en.wikipedia.org/wiki/Automation) (including [home](https://en.wikipedia.org/wiki/Home_automation) and [building automation](https://en.wikipedia.org/wiki/Building_automation)), and others all contribute to enabling the Internet of things. In the consumer market, IoT technology is most synonymous with products pertaining to the concept of the "[smart home](https://en.wikipedia.org/wiki/Smart_home_technology)", covering devices and [appliances](https://en.wikipedia.org/wiki/Home_appliance) (such as lighting fixtures, [thermostats](https://en.wikipedia.org/wiki/Thermostats), home [security systems](https://en.wikipedia.org/wiki/Security_systems) and cameras, and other home appliances) that support one or more common ecosystems, and can be controlled via devices associated with that ecosystem, such as [smartphones](https://en.wikipedia.org/wiki/Smartphone) and [smart speakers](https://en.wikipedia.org/wiki/Smart_speaker).

# The main concept of a network of smart devices was discussed as early as 1982, with a modified Coca-Cola vending machine at Carnegie Mellon University becoming the first Internet-connected appliance, able to report its inventory and whether newly loaded drinks were cold or not Mark Weiser's 1991 paper on ubiquitous computing, "The Computer of the 21st Century", as well as academic venues such as UbiComp and PerCom produced the contemporary vision of the IoT.[7][8] In 1994, Reza Raji described the concept in IEEE Spectrum as "[moving] small packets of data to a large set of nodes, so as to integrate and automate everything from home appliances to entire factories".[9] Between 1993 and 1997, several companies proposed solutions like Microsoft's at Work or Novell's NEST. The field gained momentum when Bill Joy envisioned device-to-device communication as a part of his "Six Webs" framework, presented at the World Economic Forum at Davos in 1999.

These devices use Internet protocol (IP), the same protocol that identifies computers over the world wide web and allows them to communicate with one another. The goal behind the Internet of things is to have devices that self report in real-time, improving efficiency and bringing important information to the surface more quickly than a system depending on human intervention.

The Internet of Things promises to transform a wide range of fields. In medicine, for example, connected devices can help medical professionals monitor patients inside and outside of a hospital setting. Computers can then evaluate the data to help practitioners adjust treatments and improve patient outcomes.







