

The [Internet of Things, commonly referred to as IoT](#), is the network of physical objects that contain embedded technology to communicate and sense or interact with their internal states or the external environment. IoT objects have the ability to transfer data over a network without human interaction. More simply stated, it is the concept of connecting any object to the internet and to each other. Essentially any object can be turned into an IoT object, from cell phones, washing machines and wearable devices to television sets and security systems. The list goes on and on.

The [concept of IoT has been around since the early 1980s](#) with the invention of a Coke machine at Carnegie Melon University. Programmers figured out how to connect the machine to the internet to check its status and determine whether or not the drink they wanted would be awaiting them, should they decide to make the trip down to the machine. The IoT concept was officially named in 1999 in a presentation to Proctor & Gamble by Kevin Ashton, co-founder and executive director of the Auto-ID Center at MIT.

IDC expects U.S. IoT revenues to experience a [compound annual growth rate of 16.1%](#) over the 2015-2019 forecast period, reaching more than \$357 billion in 2019, with [IoT spending topping out at \\$1.29 trillion by 2020](#).



Arrow partners should start to learn as much as possible about IoT to be prepared for what's ahead. IoT will provide the opportunity to expand and grow your business, and it is here today.

-Adam Catbagan, Arrow senior systems engineering manager

There are countless ways IoT will impact our lives in the future:

- [Healthcare](#) – One example is wearable technology, which can have sensors so emergency teams can locate an injured or disabled person at the same time they are receiving information regarding their vitals. With this information in hand, they can route the person to the best available hospital for treatment.
- Smart homes – Practically everything inside and out of your home can be connected and easily controlled either on premises or from a remote location. While you are away on vacation, you can turn sprinkler systems on and off, turn your air conditioning on so you return to a cool home, monitor your home for security purposes and more. ([Smart homes can also help solve crimes... kind of.](#))
- Smart vehicles – Let's face it. Cars are getting smarter and smarter. Adding sensors to a vehicle and combining it with GPS and historical data will allow a car to get from point A to point B in a safe and efficient manner, no matter if the "driver" is 16 or 95.

IoT will undoubtedly change our lives and the way we do business. There will be virtually endless opportunities that we haven't even thought of today. And with these opportunities will come the challenge for companies to figure out how to store, track, analyze and make sense of the huge amounts of data that will be generated. If you would like additional information about IoT, please contact [Michelle Zant](#).