



## **Business English News 36 - Internet of Things**

### **Discussion Questions**

- 1. How many smart devices do you own? How do they affect your daily life?
- 2. Do you prefer to be connected or disconnected from the IoT?
- 3. What types of products do you feel are most positively (or negatively) affected by internet-connected devices?

## **Transcript**

If you're a fan of technology, you've likely come across the term **Internet of Things**, or **IoT**. It's the connection of everyday **devices** to the Internet and has already started to change the way we interact with each other and the online world, and as Business Insider explains, it's just getting started:

The Internet of Things has been **labeled** as "the next **Industrial Revolution**" because of the way it will change the way people live, work, entertain, and travel, as well as how governments and businesses **interact** with the world. In fact, the revolution has already started.

**Coined** by Kevin Ashton in 1999, the phrase "Internet of Things" has since been applied to a **bewildering** range of ideas and technologies by companies **eager** to sell products. As The National explains:

IoT **hinges on** a very simple idea: "things" should be able to collect and communicate **relevant** data to the objects and humans around them. This data is often **acted upon** by the objects themselves but can also be **analyzed** to better understand a system – to learn, for example, about the **routines** of the humans using it.

Humans can interact with the **gadgets** to set them up, but the devices do most of the work on their own without **human intervention**. These "things" could be anything from a **Radio-Frequency Identification chip** on a milk bottle, to the engine in your car; the key idea is that they are able to interact via the **always-online** nature of our home and business networks. From How Stuff Works:

This technology allows for a level of **real-time information** that we've never had before. We can monitor our homes and families **remotely** to keep them safe. Businesses can improve processes to increase productivity and reduce **material waste**, while other gadgets can monitor changing environmental conditions and warn us of **impending disasters**.

There are examples of IoT at work when we consider our **daily commute** as well. As B2C notes, companies including GM, BMW, and others have **teamed up** with AT&T to put **LTE** high speed internet in their vehicles, which is changing the way people travel.

Now is just the beginning of what LTE-enabled cars can offer drivers: real-time traffic information, real-time vehicle **diagnostics**, and more. Soon drivers will be able to **tap into** every element of the streets they drive on to analyze traffic patterns and make choices that reduce traffic jams.

The potential of IoT goes much further than that, though, with a **wide-ranging impact** on **healthcare** as well. We've already seen an increasing movement towards fitness tracking **wearables** over the last few years, but imagine a world where your **vital signs** were being constantly monitored and **fed back** to your healthcare professional. From the LA Times:

If someone has **congestive heart failure**, if the monitor indicates they are gaining weight - even a little bit of weight in a day or two - that is a very serious **indicator** of possible fluid build-up in the heart. That would **trigger an alert** for somebody to make an **intervention**.

As consumers continue to **embrace** the Internet of Things in their homes, cars, and other aspects of their daily life, businesses are **intrigued** by the potential profits IoT solutions can generate. The number of connected devices is expected to reach 6.4 billion this year, and we could see nearly 21 billion connections by the year 2020. From Machine2Machine Magazine:

While the interest and **buzz** around the Internet of Things has grown steadily in recent years, the **seemingly endless** market promise continues to become reality. According to new research from IDC, a **transformation** is **underway** that will see the worldwide market for IoT solutions grow from \$1.9 trillion in 2013 to \$7.1 trillion in 2020.

Though it all seems extremely **futuristic** today, it's clear that the Internet of Things is here to stay. With ever-growing **predictions** about the number of items that will be connected in the next decade, analysts are looking to **figure out** how it is going to change **mankind's** future. As TechCo concludes:

Soon, the Internet of Things, and **connectivity** in general, is going to be so **commonplace**, we won't even think about it. It will just be part of life and the benefits and technology that **wow** us right now will **cease** to be memorable.

#### **Vocabulary**

Internet of Things (IoT): A network of physical objects, devices, vehicles, buildings and other items, embedded with electronics, software, sensors, and network connectivity that enables these objects to collect and exchange data.

Device: An object or machine that has been invented for a particular purpose; "Many companies have implemented bring your own device (BYOD) programs because employees are more comfortable with their own technology."

To label: A name or phrase that is classified to a person or thing; "Because of his strong tactics when negotiating, Denis has been labeled 'The Closer' among his colleagues."

Industrial revolution: A period or event, originally in the 18<sup>th</sup> and 19<sup>th</sup> century, of significant change in both society and economy which is characterized by rapid development.

To interact (with): To communicate or be involved directly; "After years of working in a restaurant, I'm comfortable interacting with the public."

To coin: To invent a new word or phrase; "Researchers have determined that Shakespeare coined more than 1,700 words."

Bewildering: Confused, indecisive, or puzzled; "I find it bewildering that Thierry would just refuse to attend such an important meeting. Maybe something is wrong?"

(To be) eager: Strongly wanting to do or have something; "I've been out of the job market here for many years, so I'm eager to get back to work."

To hinge on: A situation where the first thing depends on the second or is significantly influenced by it; "The merger hinged on the results of last year's balance sheet."

Relevant: Connected with what is happening or being discussed; "I understand your concerns, but I honestly don't see how it's relevant to this discussion."

To act upon: to act in accordance with; "Tim acted upon my advice and invested in the same company when they were still in their start-up phase."

To analyze: To examine carefully and in detail in order to identify causes, key factors, or possible results; "Our marketing team is analyzing the purchasing habits of more than 1,250 customers so we can send them more accurate offers by email."

Routine: A usual, normal, or fixed way of doing things; "In our company, we don't really have a routine; every day is completely different."

Gadget: Technological device.

Human intervention: The involvement or participation of people in a certain process.

Radio-Frequency Identification chip (RFID): Technology that uses electronic tags placed on objects, people, or animals to relay information to an electronic reader by using radio waves.

Always-online: Always connected to the internet.

Real-time information: Information or news that is collected and transmitted instantaneously or as it happens.

Remotely: In a remote or distant way; "Thanks to software like Skype or Facetime, more and more people are starting to work remotely."

Material waste: Excess chemicals, products, raw materials, or other substances used in manufacturing that must be discarded; "Reducing material waste means greater resource efficiency, less pollution and more profits."

Impending disaster: A natural event such as a hurricane or earthquake will occur very soon.

Daily commute: The daily trip from one's home to their place of work; "My daily commute takes nearly 90 minutes door-to-door."

To team up (with): To join another person or group in order to form a team; "Apple teamed up with a local charity in order to raise money for cancer research."

LTE: A 4G mobile communications standard, also known as 'long term evolution'.

Diagnostic: A test, check, or analysis of something, usually an electronics device; "After running a complete diagnostic on my MacBook Pro, I realized that the problem was because of my new battery."

To tap into: To establish a connection with or have access to; "We may need to tap into our emergency funds if we want to replace the equipment that we lost in the fire."

Wide-ranging impact: The outcome or consequence of a product or process that affects a large segment of a population.

Healthcare: The providing of medical services, usually by a government; "The quality of healthcare is one of the most important factors when deciding to move to a new country."

Wearable: Wearable technology such as fitness trackers and smartwatches; "The wearables market is projected to reach over \$30 billion by the year 2020."

Vital sign: The heart rate, blood pressure, body temperature, and rate of breathing of a person.

To feed back: To send or relay information or data to someone; "Once the results were fed back to our control center, we were able to ship the products within an hour."

Congestive heart failure: A medical condition in which the heart doesn't pump enough blood to the rest of the body; "After his third surgery in four years to correct his congestive heart failure, young Elias was finally able to live a healthy and normal life."

Indicator: A signal or sign that shows the condition or existence of something; "KPIs, or Key Performance Indicators, are used by many companies to determine whether or not their staff have reached their specific targets."

To trigger an alert: Something that initiates a process, reaction, or warning.

Intervention: To become involved or interfere with a process or situation; "After the intervention of the HR manager, we were able to solve a lot of conflicts between the staff."

To embrace: To accept, acknowledge, or agree to something; "If we're going to be a successful company, we must embrace change in both the economy and our daily lives."

To be intrigued by: To be very interested by something and wanting to know more about it; "I'm very intrigued by his story and experience, and I think he'd make an excellent addition to our team. Let's bring him in for a second interview."

Buzz: Excitement or enthusiasm for something; "If a marketing campaign is going to be successful, it needs to create a lot of buzz on the Internet among their potential customers."

Seemingly endless: Appearing to be without any end; "After a seemingly endless speech, the CFO finally announced the disappointing results of last year."

Transformation: A change, alteration, or modification; "Mobi Inc spent nearly a year to complete their transformation from a consumer mobile company to a network provider."

Underway: Already started or happening; "Some analysts say that a recession is already underway in Canada due to the low price of oil."

Futuristic: Related to the future; "A lot of the technology we see on Star Trek seems very futuristic, but some of it is actually available today."

Prediction: A statement about what you think will happen in the future; "A company's mid-term plan is really just a prediction based on the past 12 months."

To figure (something) out: To find a solution to a problem or issue; "I was finally able to figure out why my computer kept crashing; I didn't have enough RAM."

Mankind: All human beings, the human race; "Unless we make a global effort to stop climate change, mankind may be doomed."

Connectivity: The ability to connect to or communicate with another computer or computer system; "One of the benefits of global connectivity is that we can share real-time information to anyone in the world at any time."

Commonplace: Normal, ordinary, or routine; "If you work or travel around Europe, meeting people who can speak four or more languages is commonplace."

To wow: To impress or surprise; "Federica certainly knows how to wow an audience! Her presentation left everyone speechless!"

To cease to be: To stop, discontinue, or become obsolete; "In the beginning, the train and transportation strikes were quite effective, but they ceased to be successful after it became easier for people to work from home."

## **Language Review**

#### A. Collocations

Match words from each column to make collocations found in the article.

1. Material	a. online	
2. Daily	b. revolution	
3. Real-time	c. impact	
4. Impending	d. waste	
5. Seemingly	e. commute	
6. Industrial	f. disaster	
7. Wide-ranging	g. information	
8. Always	h. endless	

### **B. Vocabulary Quiz**

1.	"If we can't	out how t	o solve	this	problem	with	the	union,	we're
	going to have a lot of	very ang	y empl	oyee	es."				

- a. figuring
- b. figure
- c. figured
- d. figures
- 2. Which of the following words best describes a situation that changes significantly?
  - a. intervene
  - b. connection
  - c. predictable
  - d. transformative
- 3. "So, Tyler... Do you feel that you have the \_\_\_\_\_ experience to be successful in this role?"
  - a. relevant
  - b. relevance
  - c. relevantly
  - d. irrelevant

4.	"Our success tomorrow on our ability to work together as a team today."  a. hinging b. hinge c. hinges d. hinged
5.	Which of the following most accurately describes the data collected by your smartwatch and sent to your computer after you exercise?  a. human intervention b. futuristic c. trigger an alert d. connectivity
6.	"By into the Chinese market, we're able to secure a significant amount of global market share."  a. teaming b. tapping c. acting d. interacting
7.	"As much as we this offer, we simply don't have the liquidity to dedicate to a project of this size."  a. are intrigued by b. cease to be c. embracing d. would like to feed back
8.	Which of the following words is closest in meaning to the term "gadget"?  a. indicator  b. futuristic  c. device  d. buzz
9.	"Replacing the entire first line of management is such a decision. I just can't see the logic behind it."  a. commonplace b. routine c. remote d. bewildering
10	. "She absolutely everyone during her interview. They offered her the job on the spot!"  a. analyzed  b. wowed  c. labeled  d. coined

#### **Answers**

#### A. Collocations

- Material Waste
   Daily Commute
   Real-time Information
   Impending Disaster
- 5. Seemingly Endless
- 6. Industrial Revolution
- 7. Wide-ranging Impact
- 8. Always Online

# **B. Vocabulary Quiz**

Answers: 1/b, 2/d, 3/a, 4/c, 5/d, 6/b, 7/a, 8/c, 9/d, 10/b