

Internet of Everything



Cambridge TECHNICALS LEVEL 3

IT

Unit 17
Internet of Everything

H/507/5020
Guided learning hours: 60
Version 2 - revised May 2016
changes indicated by black vertical line

Cambridge TECHNICALS 2016

ocr.org.uk/it

Please watch the following clips on the Internet of Everything. They explain how it works and methods devices connected to the Internet can be used. The last clip is about cybersecurity issues that need to be considered .

Overview

<https://www.youtube.com/watch?v=c-Ekz2kK7J4>

How it works

<https://www.youtube.com/watch?v=QSIPNhOiMoE>

Use in a Car

<https://www.youtube.com/watch?v=HuuC4uu9Wlk>

Further detail on how the technology works and its costs

https://www.youtube.com/watch?v=mzy84Vb_Gxk

Security issues

https://www.youtube.com/watch?v=mzy84Vb_Gxk

**After watching the clips,
over to you.....**

From the next 5 slides pick an area of lifestyle or the environment to develop an Internet of Everything device. In the past we've had gaming chairs, security devices, road pot hole sensors, smart contact lenses and even a diagnostic toilet!

body/health, e.g.:

- sensors, e.g. wearable thermometer
- social safety wearables
- Wi-Fi mattress cover
- Bluetooth stethoscope
- biometric patch
- running analytics
- Bluetooth weather sensor
- Bluetooth maps for visually impaired
- Bluetooth sunglasses



home/garden, e.g.:

- smart air conditioner
- Bluetooth tape measure
- smart locks
- smart lights
- smart batteries
- global location devices
- Bluetooth measurement jars
- Bluetooth flower pots
- wireless water shutoff
- Wi-Fi shopping lists
- solar powered window blinds
- Wi-Fi gas and carbon monoxide detectors



city/neighbourhood, e.g.:

- **real-time air traffic**
- **smart signage**
- **bicycle barometer**
- **city dashboard**
- **intelligent street lights**
- **taxi locator**
- **surveillance systems**
- **wearable air quality sensor**
- **smart urban furniture**
- **connected car safety devices**



industry, e.g.:

- industrial smart helmet
- smart glasses for warehouses
- wireless pest monitoring
- smart paving capturing kinetic energy
- intelligent packaging
- smart luggage/cargo
- workforce driving monitors
- connected e-paper displays
- Wi-Fi cold storage monitoring
- smart noise sensors
- smart bottle labels



the environment, e.g.:

- environmental monitoring
- wildlife tracking
- flood detection network
- illegal deforestation monitoring
- landslide detection systems



Your Challenge



Make a sales pitch presentation for your own idea for a future technological development to join the 'Internet of Everything'

A link to a Dragon's Den Pitch
for a SMART bath

<https://www.youtube.com/watch?v=dl7yH9xa2nY>

INCLUDE IN YOUR SALES PITCH:

- ❖ What is the device?
- ❖ A drawn design/image for the device
- ❖ Who are your target market (e.g. age, lifestyle, disposable income)?
- ❖ Why would they want to buy your device?
- ❖ What technology/hardware would you device use (e.g. sensors, Bluetooth, wi-fi, GPS, etc.)
- ❖ An estimate of how much your device would cost based on the technology/hardware used
- ❖ Would you have any competitors in the market?
- ❖ How will you market your device?
- ❖ What potential security issues would your device have?
- ❖ How would you protect against these?

You should aim to have at least 12 slides in PowerPoint to pitch your device to the rest of the class. Also create speaker's notes to support your delivery. In these speaker's notes reference information sources you have used to get facts and figures (e.g. website addresses)

