LifeTec™
towards easier living

SMART EVERYDAY TECHNOLOGIES

Smart devices use a range of mechanisms to gather, analyse and communicate information. Smart technologies can, to some extent operate autonomously.

Many also use these mechanisms to customise information and responses to the specific needs of the user. Smart devices are generally connected to, and interact with, other local devices (using Bluetooth or WiFi) or remote locations (via the internet).

## What type of sensors do smart technologies use?

Sensors can gather information independently as in the case of a smoke detector or in combination with other sensors for example, falls detection relies on a matrix of position, orientation and speed to define a fall.

- Proximity / Motion
- Sound
- Touch
- Pressure
- Light
- Smoke / Gas
- Speed Velocity
- Temperature
- Orientation
- Altitude
- Item recognition
- Location
- Face/finger recognition
- Text/voice recognition
- Biometric Sensors

What happens to this information?

Once information is gathered, it then triggers a response in a local or remote device or communicates information for further analysis by a dedicated program or application.

The information from the sensor is communicated in one of three ways. In its simplest form, a sensor activates a direct response from within a device or communicates with another device in the same location via Bluetooth, radiofrequency or infrared. Sensor information can be sent via phoneline or the internet to a specified call centre or network of contacts (closed loop). Finally, this information can be sent to the cloud for analysis and retrieval anywhere, by anyone who has been provided with a username and password.

THE CLOUD

DEVICE
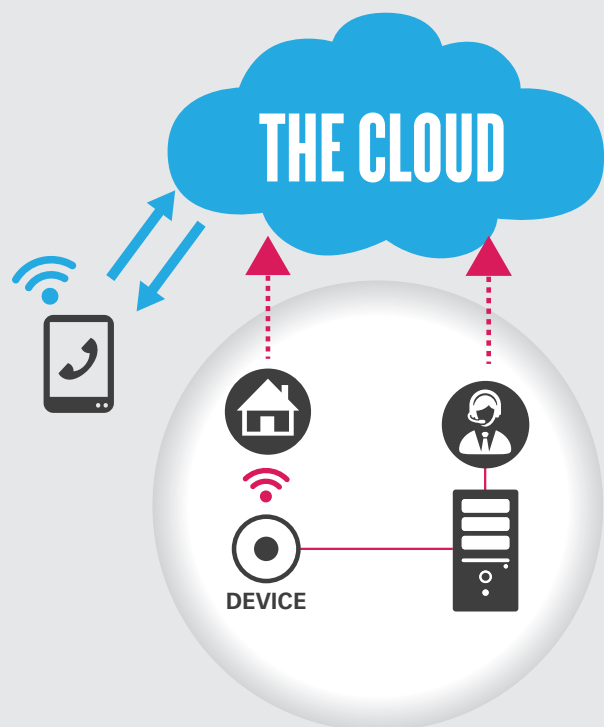
SENSE ➡ MONITOR ➡ PROVIDE FEEDBACK ➡ ANALYSE ➡ RESPOND

TYPES OF SMART TECHNOLOGIES

Home Control & Security

There are a range of technologies that allow you to control, customise and automate various aspects of your home environment such as lighting, temperature, and security. Some can respond automatically to changes or activity in the environment.

Automated Appliances

A growing range of appliances can be programmed to run autonomously or in response to identified conditions such as off peak periods. Others connect with smart phones and tablets to allow remote monitoring or control.

Health Management

Health can be promoted and managed using a range of smart devices that prompt and monitor health activity, dispense medication or monitor symptoms and vital signs such as blood pressure, glucose level etc. These devices can assist you to understand and maintain your health and wellbeing and access professional supports as required.

Real Time Prompts

Time and location based activity prompts, readily available in many mainstream smart devices and apps, can be used to assist you complete activities independently and navigate environments. These technologies guide you through an activity by providing prompts appropriate to the time, location or stage various activity.

Safety Monitoring Devices

Safety devices use a variety of personal and environmental sensors to continuously monitor activity or identify hazardous events. Once an event has been identified, an alert is then sent to pre-identified supports for action.
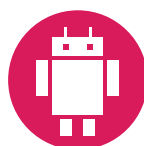
Assistive Robots

An assistive robot is a mechanical or intelligent device that can sense and process information to perform actions automatically or with guidance. Robot technologies are designed to complete an activity (or part thereof) independently. Alternatively, these intelligent devices can provide assistance by supporting or accommodating difficult or unsafe actions.

Considerations

Costs – Is funding available for this type of device? Are there any ongoing service charges or operating costs?

Power – Does the device need to be hard wired into my home/office? Does it need a power outlet? Does it have a rechargeable battery, if so how long does it last? How often does it need to be recharged?

Portability - Can this technology be used out and about in the community or moved to another location?

Adaptability - Can this technology be customised to my specific needs? Can I adjust it as my needs change?

Operating environment – Does this device require dedicated software/hardware? Do I need to download an app from iTunes; Google Play or Windows store?

Accessibility – Can I read the information provided on the screen and access the controls?

Training – Where can I access training on how to use the device?

Ongoing Support – Does the supplier provide ongoing support?

Usability – Is the device easy to use?

Reliability – Is this device reliable?

Durability - How long is the device likely to last?

Quality – Does it provide quality sound and visual output?

Communication Requirements/Connectivity – How does the device communicate information? WiFi, Bluetooth, 2, 3 or 4G?

How do I decide what I need?

Firstly identify the situation or problem you need to address or determine what you want to be able to do.

Talk to LifeTec to discuss your individual needs / goals to assist in determining the most suitable technology device or system for you or your service.

LifeTec is the leader in smart AT application and service delivery; we can work with community organisations to plan and deliver smart AT services to their clients.

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Please contact LifeTec for details on how we can help

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