

# Ethical, Legal, Cultural and Environmental Concerns

When considering the **ethical implications** of technology, you need to consider it from different sides of the argument and take into account different possible points of view. Identify the different groups involved and think of the advantages and disadvantages to each of those groups.



## Stakeholders

Stakeholders can be any group of people who are interested in the way computing technology evolves, the impact it has on them and what it can do for them.

- Customers / end-users
- Businesses / employers
- Manufacturers
- Suppliers / sellers

## Environmental impacts

Consider the environmental impacts of the following:

- Gathering the raw materials to create the technology
- Manufacturing impacts on the environment
- Transportation of the technology including fuel and packaging
- Using the technology including constant charging
- Disposing of the technology once it is at the end of its life



## Cultural implications

Cultural issues cover a broad range of topics including race, religion, ethnicity, culture, sexual orientation, and/or disability.

A "Digital Divide" is when people are discriminated against because they do not have the same access to technology as other cultural groups.

## TYPES OF SOFTWARE



**Open source software** = source code is freely available on the Internet and others can use it without having to pay a license fee.

**Proprietary software** = legally remains the property of the organisation, group or individual who created it.

## PRIVACY ISSUES

People value their privacy and do not like it when governments and security services have too much access. If private data that is collected about you by the government (your bank details, tracking the journeys in your car, your private telephone conversations) is stored then it is also possible that this data could be cracked and could get into the hands of people who should not have that data.

## The Data Protection Act 1998

Developed to provide protection for individuals on how data that collected, processed and stored about them.

- Processed fairly and lawfully
- Obtained only for one or more specified purposes
- Data shall be adequate, relevant and not excessive
- Data shall be accurate and kept up to date.
- Not be kept for longer than is necessary
- Actions taken to protect against accidental loss, destruction or damage to data.
- Shall not be transferred to a country with lower data protection laws

## The Copyright, Designs and Patents Act 1988

Gives the person who originally created the work some rights over how that work is used and distributed by others.

## Creative Commons Licensing

A standardised way to grant copyright permissions to a creative work without giving away all the rights of the original creator. This is used when creators want to allow other to be able to use their works but with some limitations.



## The Computer Misuse Act 1990

Makes it illegal to gain unauthorised access to a computer system.

## The Freedom of Information Act 2000

Provides public access to information held by public organisations such as the local councils, national parks, art galleries, museums, health services, schools, police, armed forces etc.