

SUBJECT: BTEC Tech Award Digital IT

UNIT: Component 3: The wider implications of digital systems



Responsible use

Shared data (location-based data, transactional data, cookies, data exchange between services):

- Benefits of using shared data
- Drawbacks of using shared data
- Responsible use (legal considerations, privacy, ethical use).

Environmental:

- Impact of manufacturing, use, and disposal of IT systems (energy, waste, rare materials)
- Considerations when upgrading or replacing digital systems
- Usage and settings policies (auto power off, power-saving settings, hard copy versus electronic distribution)

Net neutrality and how it impacts on organisations.

- Internet Service Providers (ISPs) should treat all internet traffic equally

Legal and ethical

Importance of providing equal access to services and information:

- benefits to organisations, individuals and society
- legal requirements
- professional guidelines/accepted standards.

The purpose and use of acceptable use policies:

- scope – who the document applies to
- assets – the equipment, documents, and knowledge covered by the policy
- acceptable – behaviours that are expected/required by an organisation
- unacceptable – behaviours that are not allowed by an organisation
- monitoring – description of how behaviour is monitored by an organisation
- sanctions – defining the processes and potential sanctions if unacceptable behaviour occurs
- agreement – acknowledge (sign, click) that an individual agrees to abide by the policy.

Blurring of social and business boundaries:

- use of social media for business purposes
- impact of personal use of digital systems (social media, web) on professional life.

Data protection principles:

- lawful processing
- collected only for specific purpose
- only needed information is collected
- should be accurate
- kept only as long as is necessary
- data subject rights
- protected
- data subject rights not transferred to countries with less protection.

Data and the use of the internet:

- the right to be forgotten
- appropriate and legal use of cookies and other transactional data.

Dealing with intellectual property:

- the importance of intellectual property in organisations
- methods of identifying/protecting intellectual property (trademarks, patents, copyright)
- legal and ethical use of intellectual property (permissions, licensing, attribution).

The criminal use of computer systems:

- unauthorised access
- unauthorised modification of materials
- creation of malware
- intentional spreading of malware.