

Year 11 BTEC Technical Award in Digital Information Technology

Preview Sheet

Exam Board: Pearson

Component 2 Collecting, Presenting and Interpreting Data

Learning Aim A: Investigate the role and impact of using data on individuals and organisations

A1 Characteristics of data and information

- Converting data into information

A2 Representing information

- Creating simple and complex spreadsheets, for example, by
 - Using formula and functions e.g. If, WHATIF, SUM, VLOOKUP
 - Linking multiple spreadsheets
 - Using conditional formatting
 - Using charts to present data

A3 Ensuring data is suitable for processing

- Using validation (range, type, lookup, data type, presence and length)

A4 Data collection

- Using collection methods (primary and secondary), data collection features

A5 Quality of information and its impact on decision making

- Factors affecting quality e.g. collection method, age, accuracy, completeness

A6 Sectors that use data modelling

- Types of sectors, e.g. transport
- Data modelling in decision making, e.g. who to target for advertisements

A7 Threats to individuals

- invasion of privacy and fraud
- targeting vulnerable groups of people

Learning Aim B: Create a dashboard using data manipulation tools

B1 Data processing methods for example

- importing data, e.g. from other files

- formulae, e.g. add, divide
- decision-making functions, e.g. IF
- lookup functions, e.g. VLOOKUP
- absolute and relative cell referencing
- macros, e.g. for automatic navigation
- data validation, e.g. list check, type check, length check
- multiple and linking worksheets, e.g. for dashboard and raw data

B2 Produce a dashboard

- Showing summaries from the data set
- Using appropriate presentation methods

Learning Aim C: Draw conclusions and review data representation methods

C1 Drawing conclusions based on the data

- Drawing conclusions e.g. from trends
- Making recommendations, such as where to advertise or deploy staff

C2 How presentation affects understanding

- Ensuring information is e.g. not bias

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Component 3 Effective Digital working Practices

Learning Aim A: Modern technologies and their impact on organisations

A1 Modern technologies

- Communication technologies such as WiFi and hotspots
- Cloud storage and cloud computing
- How the selection of platforms and services impacts on the use of cloud technologies
- How cloud and 'traditional' systems are used together
- Implications for organisations when choosing cloud technologies

A2 Impact of modern technologies

- Changes to modern teams facilitated by modern technologies
- How modern technologies can be used to manage modern teams
- How organisations use modern technologies to communicate with stakeholders

- How modern technologies aid inclusivity and accessibility
- Positive and negative impacts of modern technologies on organisations
- Positive and negative impacts of modern technologies on individuals

Learning Aim B: Threats to digital systems and how an organisation can manage them

B1 Threats to data

- Why systems are attacked
- External threats (threats outside the organisation) to digital systems and data security
- Internal threats (threats within the organisation) to digital systems and data security
- Impact of security breach

B2 Prevention and management of threats to data

- User access restriction
- Data level protection
- Finding weaknesses and improving system security

B3 Policy

- Defining responsibilities and security parameters
- Disaster recovery policy and actions

Learning Aim C: Responsible, legal and ethical use of data

C1 Responsible use

- How data is shared and environmental considerations

C2 Legal and ethical

- Importance of providing equal access to services and information
- The purpose and use of acceptable use policies
- The law

Learning Aim D: Planning and communication in digital systems

D1 Forms of notation

- Understand why they are used
- Using different forms of notation: flow charts, tables, system diagrams