

UNIT 2 LO5 KNOWLEDGE ORGANISER

Understand the process flow of information

5.1 INFORMATION SOURCES AND DATA TYPES

Internal source (e.g. internal financial reports, market analysis)

External source (e.g. supplier price lists, financial report from a third party)

Primary data (e.g. reports direct from employees, foot measurements taken in a shoe shop)

Secondary data (e.g. survey results received from a market research organisation, interest rate charged on a loan from a bank)

Qualitative data (e.g. the colour of products, the names of employees)

Quantitative data (e.g. expiry date of medicines, the number of staff working in an organisation)

Purpose



Organisations might need data from both internal and external sources. For example, a company might produce annual reports for shareholders. They may also use secondary, third-party data - for example **MINTEL** (Market **INTELLIGENCE**) reports. Specialised data like this can be very expensive to access.



Primary data can be collected in numerous ways; for example focus groups and surveys can be used to obtain information from customers while time-motion studies and interviews could be used to obtain information from employees. Such processes can be expensive and a suitable **sample size** is important to ensure the validity of the data.

EXAMPLE - Data sources and types for a restaurant



| | QUALITATIVE | QUANTITATIVE |
|-----------|---|--|
| PRIMARY | Customer comments on the quality of service | Number of customers eating in the restaurant in one week |
| SECONDARY | A market report about national taste trends | The value of the UK take-away food market |

5.2 DATA FLOW DIAGRAMS (DFD'S)

External entities

Processes

Data stores

Data flows

Standard symbols used

Connectivity rules for drawing Level 1 DFDs

- ◆ at least one input or output for each external entity
- ◆ data flows only in one direction
- ◆ every data flow is labelled
- ◆ every data flow connects to at least one process
- ◆ at least one input data flow and/or at least one output data flow for each process

Impacts affecting the flow of information in information systems

DATA FLOW DIAGRAM SYMBOLS

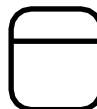
ENTITY The source /destination of the data outside the system
For example, a customer



DATA STORE The means used to store the data
For example, an order form or an invoice



PROCESS The actions that turn the data input, into an output
For example, a customer order is placed and processed



DATA FLOW The direction in which the data travels
Data can only flow ONE WAY through a DFD



DFD's are **NOT** flowcharts - they show how data flows through the system NOT how the system works. You need to be able to interpret and draw a **LEVEL 1 DFD**. A LEVEL 0 DFD shows the system as a whole, while a LEVEL 1 DFD breaks the system down into sub-processes.

