

# Spreadsheet Software - Theory

Unit R012 - Understanding tools, techniques, methods and processes for technological solutions

# Introduction

- **Spreadsheets** are designed to **store**, **process** and **manipulate numerical** data.
- The **format** of the **data** can be **set** to meet desired objectives.
- **Formulas** and **functions** can be used to **process** the **data** and provide a user with instant recalculation.

# Introduction

- **Spreadsheet modelling** can also be carried out using a spreadsheet. It may be known as '**What If Analysis**'.
- This is used to **answer questions** by **changing different parts** of it.
- **If** a shop employees **1/2/3** extra employees, how much more profit does the shop need to afford them.

# Advantages of Spreadsheets

## Advantages of Spreadsheets

Formulas can automatically recalculate

Modelling and What if investigations can be carried out

Worksheets can be used to separate different data in a workbook

Data can be presented in a graph to make it easier to spot trends

Data types can be chosen to match the data being presented

Columns and rows can be locked to maintain data integrity

Absolute and relative cell referencing can be used.

Data can be imported into other documents.

Data can be saved and backed up.

Data can be shared electronically.

# Disadvantages of Spreadsheets

| Disadvantages of Spreadsheets                           |
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| Model results may not be realistic                      |
| Novice users may struggle with formulas/functions       |
| Formula errors can effect the results                   |
| Text can't be manipulated easily                        |
| Spreadsheets are complex and may take a while to create |
| Manually entered data may contain errors,               |

# Examples of Spreadsheet Use

| Spreadsheet Examples  |
|---|
| Calculating invoices  |
| Finding out the effect of a price change on sales of goods                        |
| Producing a graph to show footfall in a shop                                      |
| Showing annual accounts for a business with each month in a separate sheet        |
| Importing survey/questionnaire data.  |
| Showing formatted financial data to show <b>positive</b> and <b>negative</b> data |
| Mail merge customer contact details into a word processed letter.                 |