Week 1: Toolbox

Keyboard Shortcuts

If a shortcut requires pressing two or more keys at the same time, keys are separated by a + sign. An exhaustive list of shortcuts is available on the Microsoft Office Support pages. Below are a small number of shortcuts that we have selected to improve your speed and efficiency. The list is by no means exhaustive. If different, Mac shortcuts are listed in the second position. For a list of Mac-specific keyboard shortcuts see the Microsoft Office (for Mac) Support page.

NAVIGATING

Go to the top of the worksheet – **CTRL + Home | CMD + Home**

Go to the end of a contiguous range – **CTRL + arrows | CMD + arrows**

Display the Go To dialog box – **F5**

Go to previous/next worksheet – **CTRL + Page Up/Down | CMD + Page Up/Down**

Go to next workbook – **CTRL + Tab | CMD + ~**

Commit cell changes and go to the next cell below – **ENTER**

Commit cell changes and go to the next cell to the right – **Tab**

SELECTING

Select entire row – **Shift + Space**

Select entire column – **CTRL + Space**

Select the entire worksheet (or contiguous dataset) – **CTRL + A | CMD + A**

Select a contiguous range – **CTRL + Shift + arrows**

FORMULAS and FUNCTIONS

Expand or collapse formula bar – **CTRL + Shift + U**

Switch to formula view – **F9**

Insert a function/Open Formula Builder – **Shift + F3**

Select function and open brackets (after typing =) – **Tab**

FORMATTING

Open Format dialogue – **CTRL + 1 | CMD + 1**

Cell format – **Shift + CTRL + !** (Number) or **+ $** (Currency) or **+ %** (Percentage)

Toggle between type of cell reference – **F4**

EDITING

Delete row(s)/column(s) – **CTRL + -**

Add row(s)/column(s) – **CTRL + Shift + +**

DOCUMENTING

Insert/edit comment – **Shift + F2**

Name a cell or cell range – **CTRL + F3 | CMD + F3**

Display the Paste Name dialog box – **F3**

Terminology

Tables

The Table feature in Excel converts a standard range of cells into a cohesive data set. Tables have a number of benefits that achieve a great deal of automation and flexibility. Refer to Intermediate I, Week 5 for more details.

Named Ranges

Also referred to as Defined Names. Named Ranges are a way to give a memorable name to a single cell or range of cells. You can then use a Named Range in formulas where it functions like an absolute cell reference. It can also make your formulas more readable because the name has more meaning than a cell reference. For example,**=N4*Pension_Rate** is more meaningful than **=N4*P2.** Refer to Intermediate I, Week 3 for more details.

Wire-framing

The terminology is often used in website and software design but it is just as relevant for spreadsheet design. A wireframe is a basic diagram of the content, arrangement and hierarchy of elements of your spreadsheet. You can draw it on a piece of paper to start with. Especially with larger projects, this diagramming exercise will be very important to help visualise your ideas, optimise the contents and links between the various elements of your spreadsheet.

Styles

Styles in Excel work similarly to styles in Word. Styles can be used to easily control the formatting across a whole workbook. Once assigned, a cell style controls all formatting aspects of a cell, including font type, size, and colour, number format, borders, fill, etc.

Themes

A theme controls a set of formatting for the entire document, including colors, fonts, and effects. Themes can be customised and shared with collaborators and across other MS Office programs.

Ninja Tips

Whilst there are many different ways of documenting and styling a spreadsheet, consider these tips when you design and build your workbooks:

Accuracy

- Ask yourself at every stage: Does this result actually make sense? Never trust a spreadsheet!
- Choose the best function for the job.
- When using **IF** functions, avoid more than three nested **IF**s! Use ALT+Enter to create a new line inside your formula to improve the readability of your formula.

Flexibility

- Avoid hard-coding values into formulas at all cost.
- Use named ranges and tables where possible.

Responsiveness

- Use tables where possible. Named ranges in tables are super powerful as they will grow along with your data - they are a great way to 'set and forget'
- Avoid using volatile functions. They can seriously affect the performance of your workbook.
- Avoid dual data entry. Not only can this lead to errors and inconsistencies, it also means that your workflow becomes bogged down in having to trace where you need to update the same information more than once.

Easy-to-maintain

- Use styles and themes for your formatting where possible.
- Spend some time on coming up with standard naming conventions that you apply across all of your work. Group named ranges, tables by using prefixes (e.g., tbl_; lkp_; nav;). If you want your named ranges to appear before table and other elements, consider using a prefix like AA.
- Avoid using macros if at all possible. They are great but hard to maintain and there is often a simpler way to do a lot of things in Excel

User-friendly

- Remember that others may have to work with and understand your spreadsheet. Include your future self in that group! You need to be able to understand what you did in six months time!
- Work with a colleague to peer-review your work.
- Use comments and data validation where appropriate.