Financial Modelling with Style!

White Paper

By Jeff Robson

About the Author

JEFF ROBSON

Qualifications and Background

B.Comm (Accounting & Information Systems), CISA, AFin, AIMM, Excel Expert

Jeff Robson is the Principal Consultant of Access Analytic Solutions, a Perth-based consulting company that provides financial modelling services in model development, audit/review, and training.

Jeff holds a Certified Information Systems Auditor from the Information Systems Audit and Control Association. He has 15 years experience with Microsoft Excel, 6 years experience in Information Systems Audit, and worked for 4 years in external audit.

He has been involved in many Excel development projects for clients around the world including sophisticated financial modelling, auditing and review, and advanced macro programming.

Access Analytic is the Information Systems audit partner for a number of chartered accounting firms in Perth and performs IT system reviews, Information Systems audit and control reviews, and systems selection and implementation for a wide variety of clients.

Direct: +61 8 6210 8500 or +61 4 1258 1486 (0412 581 486 in Australia)
jrobson@accessanalytic.com.au

Financial Modelling with Style!

INTRODUCTION

When developing a financial model, standards will often communicate the importance of developing a style guide to enhance the presentation and readability of a financial model for those who are external to its initial development. The use of a distinct style should help to enhance the presentation, simplify ongoing model audit, and add a level of consistency and professionalism to the overall build of the model.

Standardising styles will always be a difficult, as each model developer will have his/her own preferences with regards to the various style components. To engage in best practice, the most important thing is to be consistent within your model stakeholders, that is ensuring consistency in approach between those who are commonly affected, or can be affected by your financial modelling.

If you have standards that are clear and understandable, and you follow them consistently, the source of the standards is less important. It may be easier to adopt standards from an established source, but it's rare that only one set of standards is widely available: you typically end up choosing from a list of standards and then modifying them based on your particular needs and preferences.

So if the existing cell style set doesn't suit your taste, you're left with creating a custom cell style set, and in this article we look at simplifying the process of creating a customised financial modelling cell style set to improve the adoption of a standardised style by model developers. Currently Excel has one built in pre-defined set of 'Data and Model' cell styles shown in Figure 1 below:
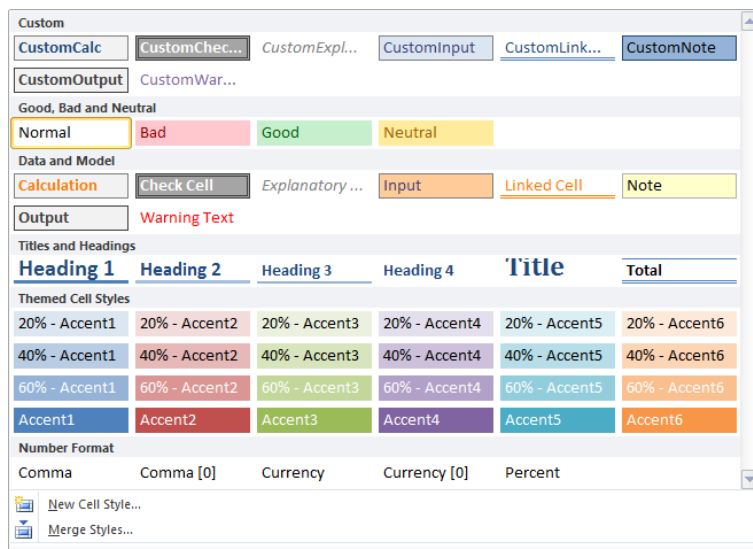

Figure 1: The Cell Style Sets that are pre-existing within Excel.

ACCESS ANALYTIC

It is generally considered good practice, when you are creating a model, to include a style guide whereby someone reviewing your model for the first time can use this sheet to develop an understanding of the flow of the model in terms of its components. To encourage the use of cell styles, the aim is to make the development and use of cell styles an efficient process whereby the application of styles to the financial model is not a burden. With this in mind, the example below, introduces an approach to developing custom financial modelling cell style set, which is easy to set-up and apply as the model is being constructed.

STEP 1 – DEVELOP A STYLE TEMPLATE

By establishing a style template, this sets a clear guide as to the format of the model for anyone who is required to use it. Cell styles are also workbook specific, i.e. if you open a new workbook the custom cell styles will not be available. So if you create custom cell styles, make sure these are applied to the style template which can be copied across to any workbook to ensure the custom styles you have created will be available.

For the purpose of this exercise, the name you intend to call each cell style should be placed within the cell style you have chosen. Not only will this text function as the name of your cell style, but it also visually displays the text settings you have applied to each style.

In addition, each cell style name MUST be different to the default cell style names or it can't be created.

Figure 2: Creating your Template

ACCESS ANALYTIC

STEP 2 – SETTING UP THE VBA MACRO

Once the template has been set up, the idea is to have a way to efficiently apply the newly created formats to the custom cell styles menu. The VBA macro that has been created automates and simplifies this otherwise manual process.

The VBA macro can be copied to your Personal Macro Workbook so that it is available at all times. If your Personal Macro Workbook does not yet exist, the easiest way to create it is to record a macro to it (Figure 3).
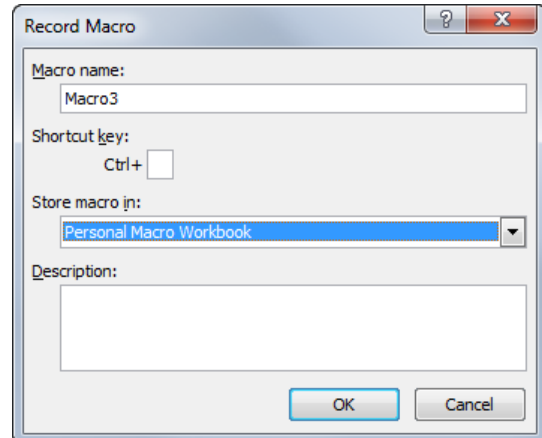

Figure 3: Creating a Personal Macro Workbook

Once the personal macro workbook has been created, we can add the macro to it by doing the following:
- Alt-F11 (Open the Visual Basic Editor)
- Click the + next to the VBAProject (PERSONAL.XLS)
- Click the + next to Modules
- Click on Module1
- Click on the View Code icon at the top of the Project Explorer

Add the code on the following page:

ACCESS ANALYTIC

```vba
Sub customStyleAdd()
'Add custom styles to your workbook by selecting a range of formatted cell styles
'Also calls customStyleDelete if the user wants to delete all pre-existing custom cell styles

    Dim cellStyles As Range
    Dim rngCell As Range
    Dim strMsg As String
    Dim answer As Variant

    strMsg = "The following cell styles have been created:" & vbCrLf

'Delete pre-existing custom cell styles

    answer = MsgBox(Prompt:="Do you wish to delete existing custom cell styles?", _
            Buttons:=vbYesNo + vbQuestion, _
            Title:="Delete Existing Cell Styles?")

        If answer = vbYes Then
            Call customStyleDelete
        End If

    On Error Resume Next

'Select range (or use preselected range) as the source of the preformatted cell styles

    Set cellStyles = Application.InputBox _
            (Prompt:="With you mouse, select the custom cell style set you wish to create.", _
             Title:="Cell Style Range", _
             Default:=Selection.Address, _
             Type:=8)

        If IsNull(cellStyles.FormulaArray) = False Then
        On Error GoTo 0
            MsgBox "Please ensure your selection contains:" _
            & vbCrLf & vbCrLf & _
            "- More than one cell" _
            & vbCrLf & vbCrLf & _
            "- Includes preformatted cell styles with labels"
            Exit Sub
        End If

        If cellStyles Is Nothing Then
            On Error GoTo 0
            MsgBox "No range selected."
            Exit Sub
        End If

    For Each rngCell In cellStyles

        If rngCell.Value = "" Then
            GoTo nextcell
        Else
            ActiveWorkbook.Styles.Add Name:=rngCell.Value, BasedOn:=rngCell
            strMsg = strMsg + vbCrLf + vbCrLf + Chr(149) + " " + rngCell.Value
        End If

nextcell:
    Next
    MsgBox strMsg
End Sub

Sub customStyleDelete()
'Deletes all preexisting custom cell styles.

Dim xStyle As Style

    For Each xStyle In ActiveWorkbook.Styles
        If xStyle.BuiltIn = False Then
            xStyle.Delete
        End If
    Next
End Sub
```

Figure 4: VBA Code that automatically applies the Custom Cell Styles

ACCESS ANALYTIC

STEP 4 – RUNNING THE MACRO

Once the template and macro have been initially set up, we can run the macro which will create custom cell styles based on the formatting and names that you have used in your template.

This can be done without the macro manually, however it has to be done for each style repeatedly, and the macro also provides the option to delete pre-existing custom cell styles if so desired.
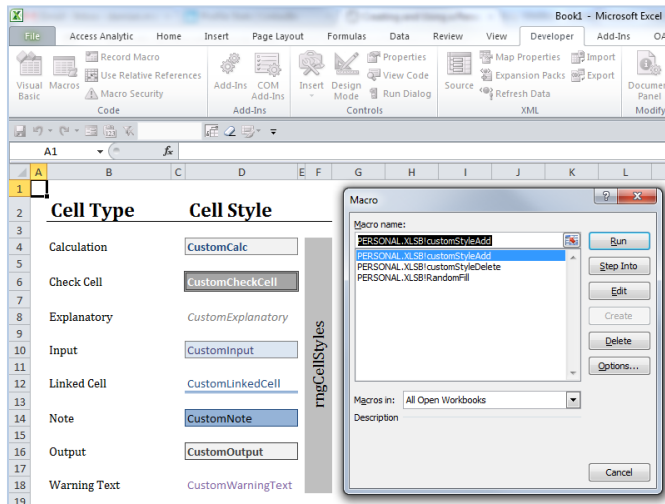

Figure 5: Running the macro

To run the macro:

Click on the 'Developer' tab → 'Macros' → 'PERSONAL.XLSB!customStyleAdd' → 'Run'.

You will be prompted to select whether you wish to delete the existing custom cell styles, and then more importantly to select the range of cells from which your Custom Cell Style Set will be generated. Cells with no label will be excluded as part of the Custom Set.
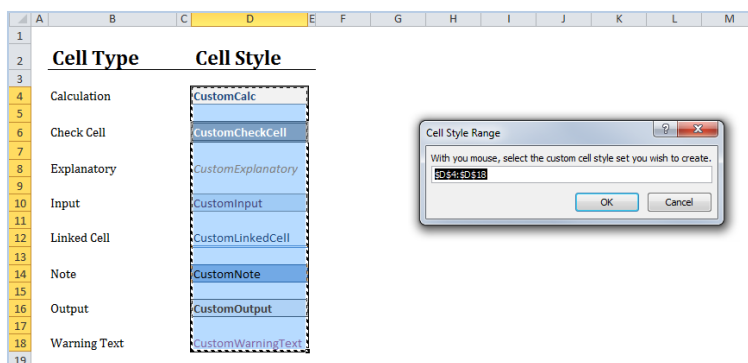

Figure 6: Selecting the cell style range.

Once the macro has been successfully run, we can go to Home → Styles → Cell Styles to view the newly created custom cell style set.
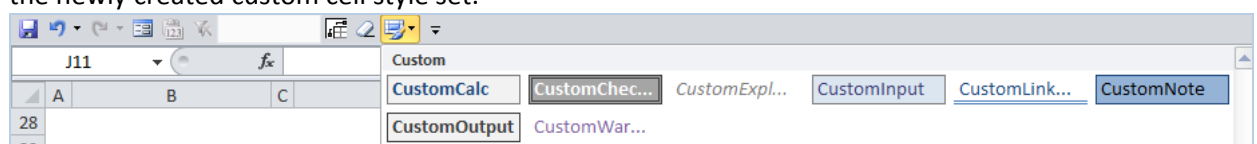

Figure 7: The custom cell style set.

ACCESS ANALYTIC

STEP 5 – ADDING TO THE QUICK ACCESS TOOLBAR

The final step involves adding the 'Cell Styles' button to the quick access toolbar. If you click on 'Cell Styles button' to display the various styles and then subsequently right click towards the bottom of the open area you have the option to 'Add to the Quick Access Toolbar' (see
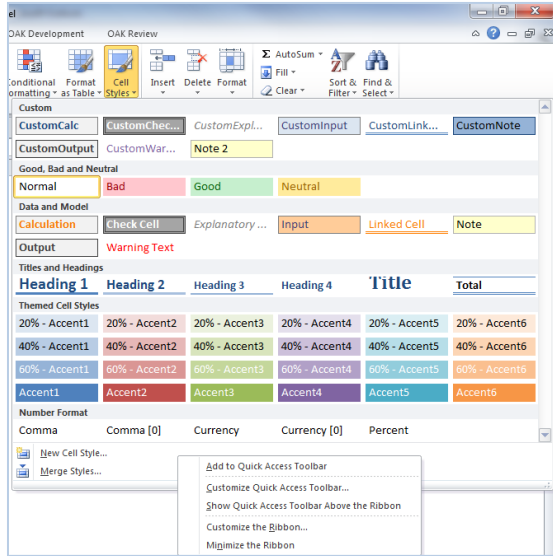

Figure 8). By selecting this option we enable a shortcut icon to be place on the quick access toolbar which is always available to simplify the process of applying the customised cell styles during the model creation process.

Ultimately, the idea is to create a process whereby users can effectively facilitate the set-up of customised cell styles and improve the efficiency related to their application during the model creation process. The use of cell styles is crucial to presentation and model transparency, both of which are key components to widely accepted financial modelling guidelines worldwide.

Figure 8: Adding to the Quick Access Toolbar

MORE INFORMATION

If you'd like any assistance or further information about financial modelling or applying these principles in your organisation, just call us to discuss your requirements on +61 8 6210 8500 or e-mail info@accessanalytic.com.au

ACCESS ANALYTIC

Access Analytic Overview

OVERVIEW

Access Analytic provides AMAZING Excel solutions to enable companies to grow, control their costs and reduce their risks.

I never knew Excel could do that!				
	Process Improvement	**Financial Modelling**	**Reporting**	**Training**
Assist Growth	Flexibility	Forecasting & Capital Raising	Dashboards & Power BI	Tailored Courses
Control Cost	Efficiency	Budget Systems	Finance, HR & Operations	Productivity
Reduce Risk	Automation	Model Audit	Confidence	Best Practice

Figure 1: Access Analytic Solutions Overview

Our Services fall into three groups:

1. **Helping Companies Grow**:

   - **Process Improvement**: streamlining processes to create flexible, scalable processes.

   - **Financial Modelling**: to forecast results (e.g. equity/loan capital raising, business planning, feasibility studies, project economics etc.) with sensitivity and scenario analysis to support decision-making with confidence.

   - **Reporting**: tailored dashboards and KPIs using Excel and Power BI to connect to both cloud and on-premise data, thereby allowing companies to keep on top of their operations, gain insights, and make data-driven decisions.

   - **Training**: training in all of these areas to transfer skills to support further growth.

2. **Helping Companies Control Cost**

   - **Process Improvement**: efficient Excel-based processes that reduce the need for manual input.

   - **Financial Modelling**: Excel-based budgeting and forecasting systems that enable companies to efficiently control and monitor their costs.

   - **Reporting**: reporting to assist Finance, Human Resources and Operations with their areas of responsibility for cost control.

   - **Training**: assisting staff to become more productive and reduce the need for additional resources. Courses are provided on an in-house basis, which often results in a cost saving of 50% or more compared to public courses.

ACCESS ANALYTIC

3. **Helping Companies Reduce Risk**

- **Process Improvement**: by automating processes, companies not only save time, they also reduce the errors and risks that result from manual inputs. This results in more accurate data, which can provide better analysis.

- **Financial Modelling**: independent model auditing services to provide assurance that key models are producing accurate results and can be relied upon.

- **Reporting**: reporting that focuses on the right data at the right time to provide transparency & visibility.

- **Training**: financial modelling best practices to reduce risk and improve quality.

We are based in Perth, Western Australia and the business was established in 2000.

Access Analytic provides services to clients located in: Australasia, Asia, Africa and the Middle East. A selection of our clients is shown below:

ACCESS ANALYTIC: RISING STAR

Access Analytic was named as one of the WA Business News' Rising Stars for 2012, recognising the success and achievements of our company.

Further details regarding Access Analytic Solutions have been included at Appendix A: Access Analytic Details on page 13 below.

ACCESS ANALYTIC

KEY STAFF

Jeff Robson, Principal Business Analyst

Masters (Applied Finance), BCom (Accounting & Information Systems), CISA, MAICD, FAIM, F Fin, Microsoft Excel Expert

Jeff is the founding Director and Principal Business Analyst at Access Analytic Solutions. He has over 20 years' experience in chartered accounting, business management and consulting.

Jeff holds a Masters in Applied Finance and is a Certified Information Systems Auditor. He is highly regarded and recognised around the world as an expert in the field of financial modelling.

His achievements have been recognised by his peers and he is a Fellow of both the Financial Services Institute of Australasia and the Australian Institute of Management.

Jeff has extensive experience in best practice financial modelling, management reporting, business analysis, and spreadsheet auditing and is also an entertaining international presenter and trainer on these subjects.

Wyn Hopkins, Senior Manager

B.Sc. (Hons) Accounting & Financial Management, CA, MS Excel Expert

Wyn gained his Chartered Accountant qualification at PricewaterhouseCoopers in the UK in 2000.

He has extensive Business Analyst experience in FTSE 100 financial services companies (HBOS and Barclays in the UK) as well as GESB in Perth and telecommunications companies industry in Australia.

Wyn is skilled in financial analysis, strategic financial modelling, management reporting and forecasting, and value-based management techniques.

Yury Tokarev (Manager)

CA, PhD (Finance & Economics), GradDip (Accounting), BBS, Microsoft Excel Expert

Yury joined Access Analytic from WHK Chartered Accountants, where he was involved in business services and advisory for four years.

Prior to this, he worked as a Corporate Finance Consultant at one of the top European Investment Banks.

Yury has highly advanced skills in Excel and financial modelling, including complex financial models and the development of VBA macro solutions.

ACCESS ANALYTIC

Anthony Kitson, Senior Business Analyst (Contract)

Chartered Accountant (CA), B.Bus (Accounting & Finance), B.Eng (Electronics & Comms), CISA, Prince2 Practitioner

Anthony has extensive expertise in consulting and business management, with over 25 years in combined experience.

He specialises in the areas of Financial Modelling, Data Analytics, reporting, revenue leakage, Business Intelligence, and Information Management.

Anthony's experience has been gained across the Government, Energy, Power & Natural Resources, Financial Services, and Industrial sectors.

He has specialised expertise in financial modelling for mining, including building and reviewing models for Bank Feasibility Studies, project finance, consolidated corporate models, production planning and workforce planning.

Neale Blackwood, Senior Business Analyst (Contract)

CPA, B.Bus (Accounting), Microsoft Excel Expert

Neale is a CPA with over 20 years' experience in accounting, budgeting, management reporting, and developing spreadsheet applications.

Neale has extensive experience across a broad range of industries including mining, education, property, forestry, government, and construction.

Neale is the CPA magazine's authority on spreadsheets and related subjects, and writes a monthly column for this publication.

He is also a sought-after speaker and trainer regarding the use of Excel, particularly by accountants.

Brett Rawcliffe, Senior Database Analyst (Contract)

MACS

Brett is a highly experienced database analyst and is regularly in contact with Microsoft regarding their database software.

Over the last 13 years Brett has developed hundreds of database solutions for companies of all sizes, from sole traders needing a simple contact manager to multi-nationals needing to develop specialised systems to complement their organisation-wide systems.

Appendix A: Access Analytic Details

Access Analytic Solutions Details	
Full Name:	Access Analytic Solutions Pty Ltd
Address:	Suite 143, Level 1 580 Hay St Perth WA 6000 Australia
Phone:	+61 8 6210 8500
Fax:	+61 8 6210 1662
Web:	www.accessanalytic.com.au
ACN:	091 625 697
ABN:	64 091 625 697
Contact:	Jeff Robson, CEO E: jrobson@accessanalytic.com.au M: +61 4 1258 1486

ACCESS ANALYTIC