Management Accounting and Excel

I T HAS BEEN MY EXPERIENCE that management accountants tend to be the power users of Excel within their organisations. They usually end up being the unofficial Excel help desk. For this reason, I assume the reader has a good working knowledge of Excel and its built-in features.

Position titles vary between organisations, and some of the titles I consider closely related to management accountants are business analysts and cost accountants.

Although many of the topics covered are advanced, I include some basic and inter-mediate topics when they help explain the more advanced topics. I have found over the years that even advanced Excel users can learn new tips and tricks that improve their Excel productivity.

Many users are self-taught and haven't always learned the best ways to do things. I will share many useful Excel shortcuts in Chapter 3.

ASSUMPTIONS

The premise behind the book is that you have an accounting system but its reporting package does not provide the flexibility you need to create the reports you need. Excel can extract data from most accounting systems and databases. So you can use your existing source data to build your reports.

You may also need to bring together data from other sources and incorporate those values with the financial data. This is an area that has the most scope for providing value-adding reports.

Excel is ideally suited to combining data, financial and non-financial, from different data sources into a single reporting model.

Given that some data resides outside of databases, Excel can also provide the ability to incorporate other small databases that may be held in other spreadsheets.

Please note Excel is not a database. Excel can be used as the data repository for small statistical-type data that may not warrant a database system.

You may also develop your budgets and forecasts in Excel and these can be integrated into your reporting model.

If your database systems do not allow direct connection to Excel, then most database systems have the ability to create files that Excel can read. In general you should aim to have all your data in databases.

Australian Conventions

Examples in this book may include Australian tax terminology, such as GST (goods and services tax).

The Australian financial year is from July 1 to June 30, which spans two calendar years.

Australia has six states and two territories. These are often considered regions for reporting. Laws and holidays can vary amongst the states, and it may be necessary to report differently state by state.

Versions

The instructions and images all relate to Excel 2010 unless otherwise noted. Most instructions will also apply to Excel 2007 and 2013. Some of the new features in Excel 2013 will be noted but not explained in detail.

Many of the techniques can be applied to Excel 2003, but no instructions are included for Excel 2003.

Terminology

There are two terms used frequently in the following chapters that require definition.

1. **Parentheses.** *Parentheses* is the correct term for the symbols used with Excel functions to enclose the function arguments (see the following term). On the Internet and in general conversation, these are commonly referred to as *brackets*. In this book, the term used is *parentheses*.
2. **Arguments.** In this book, the parts of an Excel function are referred to as *arguments.* Many functions accept a single argument, such as the SUM function. Others require more arguments; for instance, the VLOOKUP function requires at least three arguments to return a result. Between the parentheses, arguments are separated by commas. *Argument* is the term Microsoft uses in its Excel help system.

Spelling

The book uses UK spelling, except when referring to Excel features. Excel uses U.S. spelling and all the Excel terms will be spelled as they appear in Excel.

THE GOAL OF REPORTING

Management accounting reports are generally created for performance review. Compliance reports that satisfy a company's legal reporting requirements tend to be reasonably similar across industries. Performance reporting varies depending on the industry and the sector. Excel provides the flexibility to develop performance reports that meet your needs.

Performance Measurement

Measuring your daily, weekly, and monthly performance against the budget, a forecast, or the previous year is the main focus of management reporting. This variance analysis is an important part of the reporting process.

Businesses already have accounting system reporting structures in place. These reports tend to be created by the database system that contains the data and are often limited in their layout structures.

In production systems and other systems in which volumes are important, comparing performance with the total dollar amounts may not be an accurate measure, and per-unit calculations are often required.

Charts can identify relationships and trends and are an important part of the reporting process. Many database systems have limited charting capabilities.

Performance Improvement

Another type of reporting focuses on improving performance. This can involve benchmarking and comparing performance among branches or divisions.

This type of reporting can be ad hoc. Areas may be identified for review and reports created to measure the relevant metrics to assist that review.

The techniques discussed throughout this book can be applied to ad hoc reports. Pivot tables, discussed in Chapter 6, are especially suited to ad hoc reporting.

WHY USE EXCEL?

Excel is the spreadsheet of choice for most accountants. Virtually all accountants use Excel, with various degrees of skill. Excel is the industry's standard spreadsheet, and it is constantly being upgraded and updated to handle today's changing information needs.

Most finance staff members have at least rudimentary skills in Excel.

Excel 2010, which this book is based on, can handle data sets of hundreds of thousands of rows. The built-in data connection systems allow direct connection to most database programs in organisations. Excel 2013 was released in January 2013, and it includes a suite of extra features that can simplify reporting even further.

Excel has the ability to create charts that can summarise large data sets into visual, dashboard reports. There are other reporting packages in the market that can create dashboard reports, but none have the popularity of Excel.

Learning to develop reporting models in Excel is a skill that is transferable between jobs. Other dashboard packages do not have the widespread acceptance of Excel.

Excel has its limitations, but if you are aware of them and build your reporting models accordingly, then you can avoid most issues and create a system that will stand the test of time.

This book encourages you to validate your reports and include validations in all stages of the development process. Reporting models tend to be a work in progress in many organisations. The techniques included in this book make the process of adding to or amending your model easier.

THE GOAL OF THIS BOOK

This book explains and demonstrates many techniques that can be used together to create a reporting system in Excel that has the following characteristics.

Easy to Operate

The reporting model should be easy for the user to operate. This means that there should be a minimum of typing required. The interface should use drop-down selections and check boxes where appropriate to handle selections. Navigation should be straightforward, much like web pages, so you can move quickly and easily between the important sheets.

Easy to Maintain

Reporting models are subject to change. There are the normal day-to-day changes caused by new accounts and new departments; these changes should be easy to handle in your reporting model. Then there are the more drastic changes, in which divisions may be added or removed or the structure of the report has to change to meet new reporting requirements. These changes require more effort but should still be straightforward and logical.

Self-Validating

A number of techniques are demonstrated that make identifying and tracking down errors easier. It's one thing to identify that the balance sheet doesn't balance. It's another to identify *why* it doesn't balance and to provide assistance in tracking down any issues.

Modular

Having a modular approach to creating your file will make achieving the other goals easier. Modular spreadsheets have dedicated sheets for instructions, inputs, settings, data, validations, tables, lists, reports, and charts.

Structured

Structure is achieved by setting and following rules in the developmental process. This book recommends that you use a table structure for much of your data and parameters. The use of lists and range names is also encouraged and is covered in depth in this book.

Flexible

Adding structure allows flexibility. This theme is repeated throughout the book. It seems counterintuitive, but structure provides the framework to incorporate flexibility.

MONTHLY MANAGEMENT REPORTS

These techniques work very well with the standard monthly management reports that management accountants typically create. The techniques can also be applied to virtually any type of report. The monthly management reports tend to be the most time-consuming and offer the most benefits for improving.

The techniques described in this book simplify the reporting process by automating many tasks that in the past had to be done manually.

MACRO POLICY

The techniques described in this book allow you to automate your reporting processes without the use of macros. Formulas and functions are used to automate tasks that had to be done manually in the past. No macro will be used to run the reporting models.

My policy on macros is that you should use Excel's built-in features to their limit and resort to macros only when the built-in features do not provide the functionality that you require.

Macros can be used to replace repetitive tasks, performing those tasks in the blink of an eye and reducing manual processes.

The website for this book includes a number of macros that can assist you in both the model creation phase and the data cleansing phase. I have included instructions on how to install and use the macros. They are not part of the reporting process as such but are basically accessories that can speed up the process of report creation and data cleansing.

Macros are a huge topic in Excel, but this book does not go into depth about them. If you want to learn about macros, I suggest you consult the reading list I have provided on the website.

WARNING: Macros Cannot Be Undone

When you run a macro, you clear Excel's undo list. This means you can't undo what the macro does, and you can't undo anything done before you ran the macro.

Before running a macro it is a good idea to save the file. At least then, if the macro does cause a problem, you can close the file without saving, to revert to the pre-macro version.