About this Document

These course materials were written to support the online module which is available at www.plumsolutions.com.au The courseware which includes this material and the online component remains the intellectual property of Plum Solutions Pty Ltd.

These materials are distributed to enrolled students of this course, and may be stored for personal future reference, but no part of this publication may be reproduced in any form, or distributed in any way without written permission from Plum Solutions Pty Ltd.

Building Error Checks

A good financial model needs to contain error checks. Let's look at a couple of ways of building error checks throughout the financial model.

For example, you are doing a summary using a SUMIF formula. We want to put an error check into there so we can say this cell minus this cell. That is the simplest way of putting in an error check. That is if you've probably guessed by now, my favourite way of putting an error check in because it is quick, simple and you can also the see the size of the error. I like to format it like that so that you can see it, get rid of the zeros and make it red so that way you just see an unobtrusive red dash if there isn't an error. Then if somebody makes a mistake, for example if somebody put Automatic and then put a space at the end there and you can see there that it is not right and a number automatically appears and so that you know if you see a red number that there is an error.

There are a couple of other ways to do an error check. You could say equals and equals the other cell like that and that will give you either a True or a False. I probably don't want that to be in red font, so change to black. Some people like to see actual text underneath so you might like to see "okay" or "error check alright" or something like that. If you wanted to do that, put in IF, a particular cell does not equal this cell, then you want to see the word "error" otherwise a zero. That way if there is a problem, it will show you the word “error”. That sometimes does cause a false error because Excel truncates at many decimal places so sometimes when you calculate something one way and then calculate it another way, it does give you a false error. We don't want that to happen so it's usually a good idea to put in a tolerance for error in that situation. What you can say is, if the difference between the two different cells is greater than one, then give me the word "error". The easiest way to do

that is to use the absolute value; IF the absolute value of the difference between the two cells is greater than one, give me the word "error", otherwise give me a zero. It's a bit more complicated. Let's do that. Put IF, open bracket, the absolute value of this cell minus this cell, close bracket is greater than one, give me the word "error", otherwise zero. If someone makes a mistake here, it shows the word error, otherwise it's a zero.

What we sometimes do is put in some conditional formatting so that if it is an error, the whole cell will turn red. The easiest way to do that is to go into Highlight Cells rules, select if Equal To the word "error" and it defaults to light red fill with dark red text. Test it and you can see that the entire cell turns red.

So a couple of ways there; you can either do one cell minus the other, you can use a true and a false or you can say if the absolute value of the difference between the two which will give you the text. However you choose to do an error check, once you have created them right throughout your model, it is a good idea to create an error checking page and that way you will be able to, at a glance, see what might be wrong. Go the Alert tab. I can link that tab through to the other tabs and so that each of those cells can be linked through to different errors right throughout the entire model and then at the top here, we can create a COUNTIF formula to say if any of the cells in that column contains the word “error”, then it will tell us errors exist within this model otherwise zero. That can save you a lot of time. I have models that I have built a long time ago and people are using them over and over again and every now and then it will stop working and so they will say there is a problem. I can just go in and look. Sometimes I hide that sheet so nobody sees it and then I just unhide, have a look down and I can very quickly see where someone has entered in the wrong data or a problem and it will help me find my errors very quickly.

Copyright Plum Solutions Pty Ltd