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Model Build – Inputs & Assumptions

Now that we've been through all of the tools, features and formulas that we're going to need, we're going to put them into a format that's going to be useful for us. We're going to work through them from start to finish in a financial model case study.

Our case study is we're running a very small but very successful cafe. We think it's successful but we're not entirely sure because we've never really put together a P & L before and we certainly haven't thought too much about cash flow but we've been asked by our bank to put together a P & L, so we think we'd better have a go at doing that. We're going to use all of the tools and the techniques that we've been learning about to put together this financial model for our Cafe. It's fairly simple and it's not going to take that long but it will take longer in one of these videos so we're going to split these up into a number of different segments.

I will take you through and I will explain what we're about to do. I'll give you a minute for you to have a go by yourself. You will get a lot more about of this if you try and do these tools and techniques by yourself rather than just copying or looking at what we've done on the screen. Have a go by yourself and then we'll work through it together.

With this example we are going to be following best practice, we are going to be doing inputs, put in assumptions, use our dollar signs, use our referencing and use all of our linking. The situation or the product that we're working on is customer based, looking at fixed costs and variable costs but it really doesn't matter what industry you're working in. The fantastic thing that I just love about Excel and financial modelling is that it's applicable over so many different industries and across different countries. You can send a copy of your financial model to anyone on the other side of the world. They can open it up, see what you've done and they can make sense of it. You'll be able to apply the things that we

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are talking about in terms of the principles of best practice to any of the industries or products that you're working on.

I've given you a template of what our financial model should look like and we're going to be populating that so you'll be able to make sure your formulas look exactly the same as mine and to save you a little bit of time.

Please open up the cafe model file that I've given you. We are going to go through some of the assumptions for our model. The revenue assumptions that we've got here is that we sell on average, looking at the historicals, we sell about 120 cups of coffee a day. We're going to do some scenario analysis on this a little later on.

Historically 40% of those are large cups and 60% are small cups. We charge \$4.00 for a large and \$3.50 for a small. That's how we're going to calculate our revenue. The expense assumptions that we've got is that the Barista salary is \$50,000. We're going to put in some on-costs and it varies from country to country and industry to industry because you've got things like pension, superannuation or insurance, all sorts of other what we call on-costs. Just to keep things very simple, we're going to say 25% on-costs. That's just the cost of having a staff member on board. The rent that we've got to pay is \$1200 a month. Utilities are \$100 a month and the variable cost of consumables is 45c per cup. Then we've got some other assumptions there.

Let's open up our cafe model and start putting in our assumptions. We always start with our assumptions at the back. We're working from right to left. In the tab you can see by the way we've formatted it you can see which of those are assumptions. So the average number of cups per day is 120. We've put in some assumptions documentation here to say where we got that from. Those cups were based on last year's sales so we put that down in black and white. We just use a very basic assumptions documentation method there. That's 120 and the price that we've got here is \$4 for a large and \$3.50 for a small. Historically 40% of those were large and 60% of those were small. That will help me when I come to calculate my revenue.

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The Barista salary was \$50,000 and the on-costs were 25%. Wow, \$50,000 a month, not bad. It's actually an annual salary but that's not clear. It's really important that we always be very specific about the time period. If there is any kind of possible misinterpretation about what we've put down in our model then we put it down in the assumptions. I just going to be absolutely clear here and put down annual salary.

The monthly rent was \$1200, the monthly utilities was \$100 and the consumables are \$0.45 per cup. The way we got 45c was we just looked at the total consumables costs; lids, cups, sugar, milk and all the things that go into making a cup of coffee. We added them all up and divided by the number of cups that we sold. So not a huge amount of detail but we're trying to keep things simple. We've put a note to say that the consumables have been calculated on average for the large and the small cups. The last thing we want is for someone to come in after us and say you haven't done enough detail on here. We want to always be sure that your model can speak for you and if you're not around you want to make it clear that you didn't make a mistake, you just wanted to keep it simple.

Another point that's very important is that GST or VAT or sales tax or any other kind of taxes have been excluded for the purpose of this model, so that's an important assumption to put in there. The income tax is 30%. Those are our inputs that we need to put into our financial model.

The other thing that we need to think about is the distribution over the year. We are going to do a financial model from January through to December and each month is going to be different because this cafe is based in the city so it's only open during working days. We assume that weekends are very quiet, in fact they even close on the weekends. You're really only concerned about working days so we need to take out things like public holidays and any other days and that varies from month to month. On our assumptions we put in the number of business days per month. This was based on the calendar for last year. We put that down as an assumption. We also find that different times of the year are busier than others. We'll say this is an Australia based model and in Australia, historically the months of December and January are very quiet in the city. A lot of people take holidays, we have school holidays and so therefore the city is generally a fairly quiet place. We'll say that

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December and January is only running at about 80% of capacity and we're going to use a seasonality or factoring kind of technique which is very common in forecasting and budgeting.

We're going to say that our seasonality variance is 80% so that means that if our average is 120, we then just multiply that for 80% to give us the number of cups that we expect on average for January. February is 90, starting to get a little busier in February. March gets busier and by May and June, we've got the end of the financial year and things get very busy around year end. People get very stressed, they are drinking a lot more coffee. By June and July they're at 120% capacity. It's important to phase this out, it needs to be equally phased throughout the year. If I just go in and shift, Ctrl, right arrow and highlight the whole lot, I can see down the bottom there that it sums up to 120% or to 12. So I'm doing this as factor of one or 100% if 1 is the average and then we multiply it by say 80% that is going to say it's lower than average or if it's 120% it's going to be higher than average. So we are going to use that to phase out our seasonality right throughout this model.

We're happy with all of the inputs and the assumptions in our financial model. We've got it all very documented, well laid out and we've got all of our assumptions in there and nicely formatted. Once we are happy with that, we can then move on to calculating our revenue and our expenses.