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`=Sum(it)`9th February 2002

Building a strong business case financial model



Speaker: Danielle Stein Fairhurst

Principal Consultant, Plum Solutions

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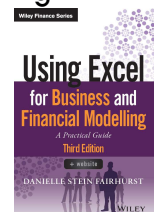
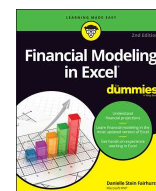
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Meet your Facilitator, Financial Modelling specialist

DANIELLE STEIN FAIRHURST



- Microsoft MVP 2021
- Founded Modellers' Meetups
- Author of "Using Excel for Business & Financial Modelling" and "Financial Modeling in Excel for Dummies"
- Judge for the 2021 Financial Modelling Awards
- ATP & Advisory Board Member for Financial Modeling Institute (FMI)



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- + 1 Defining the Business Case
- + 2 The Business Case Structure
- + 3 Financial Modelling Technical Skills
- + 4 Presenting the Business case

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1. Defining the Business Case

Filling in the blanks...

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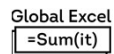
What is a Business case? What is it not?

- + A template?
 - + A word document?
 - + A spreadsheet?
 - + A financial model?
- All of these? Yes.

However, it is an artefact that is the result of a **highly structured strategic planning process**.

It's a 'contract' between Executive sponsor and company for the investment above BAU.

It's **NOT** a fill-in-the-blanks template

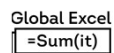


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Three Specialist Skills for Building a Business Case

1. Business case process – **strategic analysis**
2. Modelling – **supports the strategic process**
3. Domain knowledge – **industry and technical expertise**



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2. The Business Case Structure

- **Key questions** that a good business case answers
- **Content** of a good business case
- **Process tips** for modellers – decide in the right order
- **Content tips** for modellers – benefits

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Any good case needs to address key questions

Simple questions that require the right sequence and often require rigorous analysis to answer well.

What is the Value Proposition?

What is the best solution?

Opportunity/Problem

- What is the opportunity?
- Why is it relevant to us?
- What happens if we don't do it?
- Are there interim or partial opportunities?

Strategy Contribution

- How much does it contribute to (financial) targets?
- Why should we fund this now?
- Why fund this ahead of others?

Options

- Strategic choices? (e.g., exit market)
- Business choices? (e.g., change business rules)
- Asset/Product choices? (e.g., buy new system)

Project & Solution

- What do we need?
- From whom?

Two halves – value proposition and solution. **All questions need to be answered to some degree**; and depending upon depth of analysis required, may need modelling support

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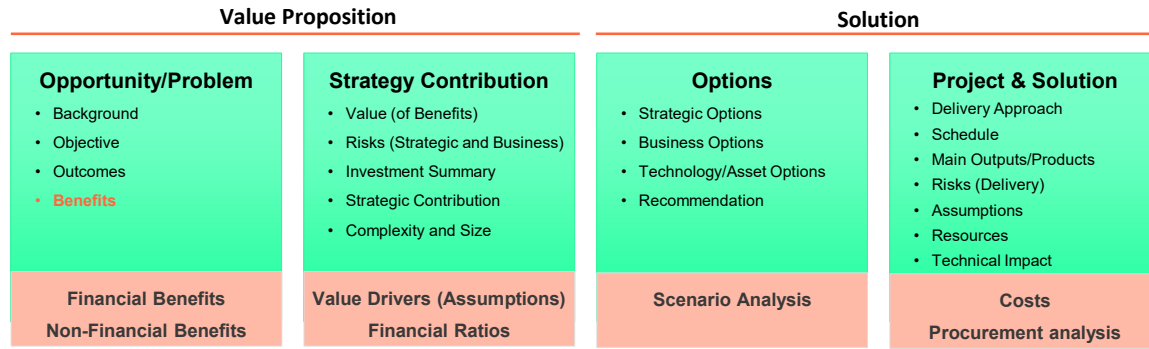
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Source: Capability Network
Material available at www.capability.com.au/plum

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The content of a good case includes

A full or light business case is a question of depth of analysis, not optional components. The model needs to match.



The modeller(s) should be **involved from beginning to end**; a full business case 'model' has many components that iterate through development

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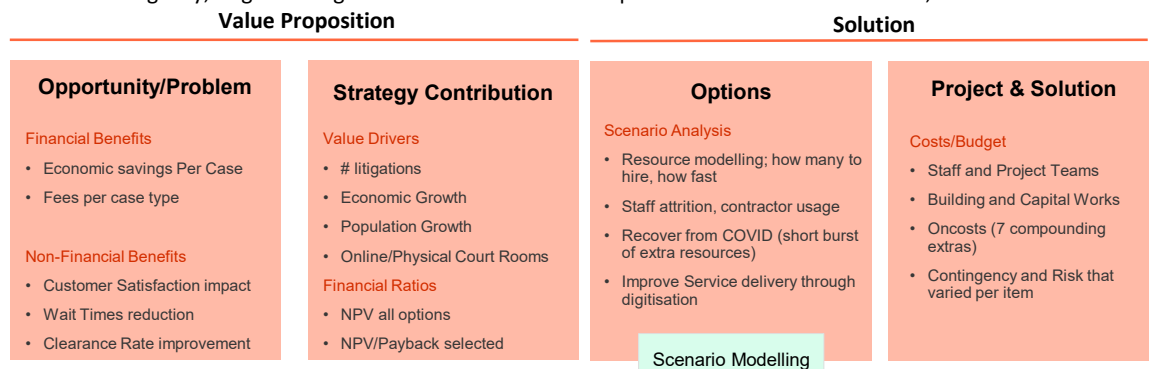
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Recent case study

Governance Agency; large backlog of cases from COVID. Example of what our model included; **so much more than cost!**



As scenarios were tested, various audiences in client were interested in the impact on their area. Without **integrated modelling**, the quality of the business case would be severely compromised.

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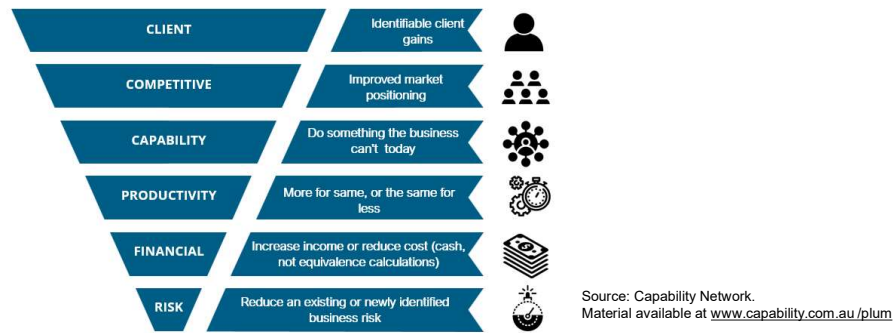
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Key modelling components - Benefits

Each **component in the model** has a **specific definition and relationship to other components**. **Benefits is an obvious one**. We use the Benefits Funnel¹ to illustrate general priority of different benefit types; and each type has valid (and therefore invalid) data types in a model.



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Different organisations have different styles (or philosophies). The key to a good business case is high-quality, rigorous analysis for each section. Equip yourself with an approach or tool for each.

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3. Financial Modelling Technical Skills

Not just a supporting document – it's the heart of the business case

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Project Evaluation Techniques

- + Net Present Value (NPV)
- + Internal Rate of Return (IRR)
- + Payback Period

- + Use WACC to calculate NPV



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Calculating the Weighted Average Cost of Capital (WACC)

$$\text{WACC} = (\text{Proportion of Equity} \times \text{Cost of Equity}) + (\text{Proportion of Debt} \times \text{Cost of Debt, Less Tax})$$

Use after-tax cost of debt

Use only 'permanent' short term finance in the weighting calculation

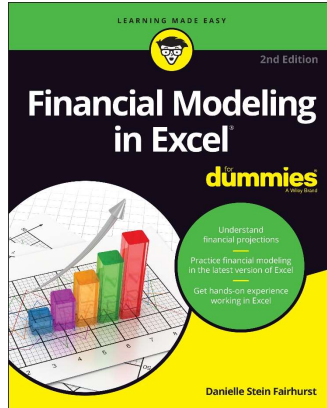
Use market values for debt and equity

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Case Study: Scenario Analysis



1. “Do nothing” Scenario
2. “Do something” Scenario
3. Scenario comparison

Chapter 3 of “Financial Modeling in Excel for Dummies”

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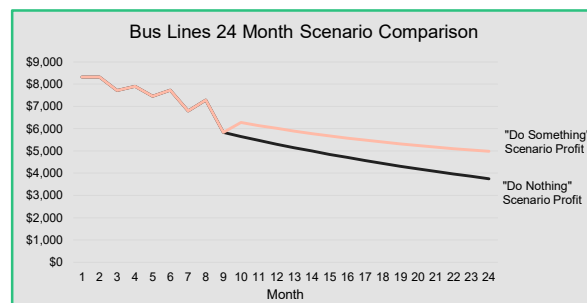
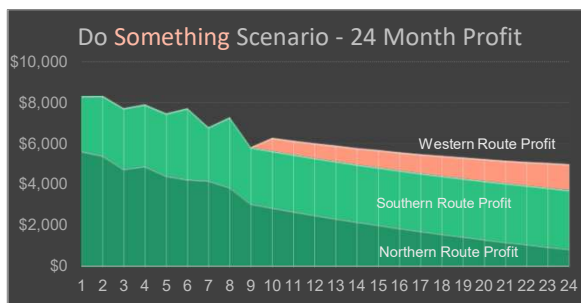
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Financial Model Example

Problem; losing customers

Do Nothing vs Do Something



“Financial Modeling for Dummies” 2nd Edition, page 35

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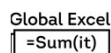
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EXCEL SCENARIO TOOLS

1. Manual Scenario selection
 - Data validation dropdown
 - Combo box dropdown
2. Scenario Manager
3. Data Tables
4. Goal Seek (What-if Analysis)
5. Monte Carlo (Stochastic Simulations)



See "Using Excel for Business and Financial Modelling", Chapter 11

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Manual Scenario Analysis

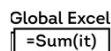
Use numbers, data validations, or form controls to drive scenarios

Advantages:

- Easy to build, easy to understand
- Can handle a large number of inputs and outputs

Disadvantages:

- Can only look at one scenario at a time
- Difficult to compare scenarios side by side



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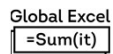
Data Tables

Advantages:

- Can look at multiple outcomes simultaneously
- Perfect for sensitivity analysis

Disadvantages:

- Tricky for beginners
- Inputs and outputs need to be on the same page
- Can only show one or two variables and only one output

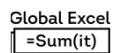


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REMEMBER

There can be only
one outcome and it
will be wrong!



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4. Presenting the Business Case

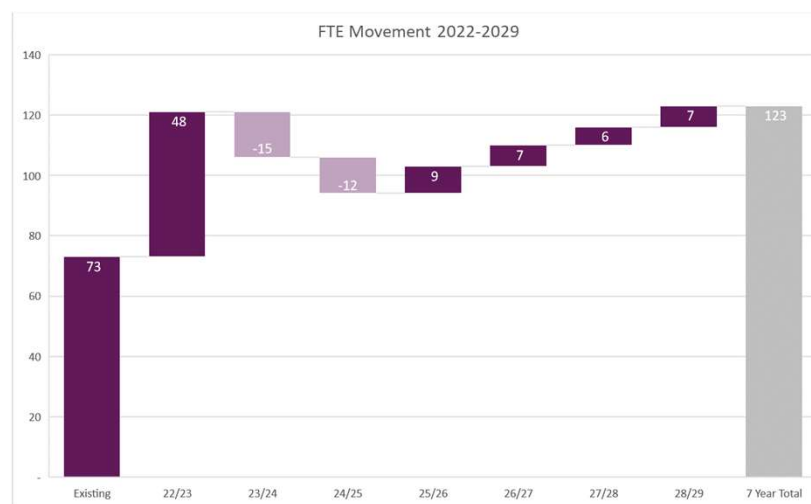
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Presenting the Model Output

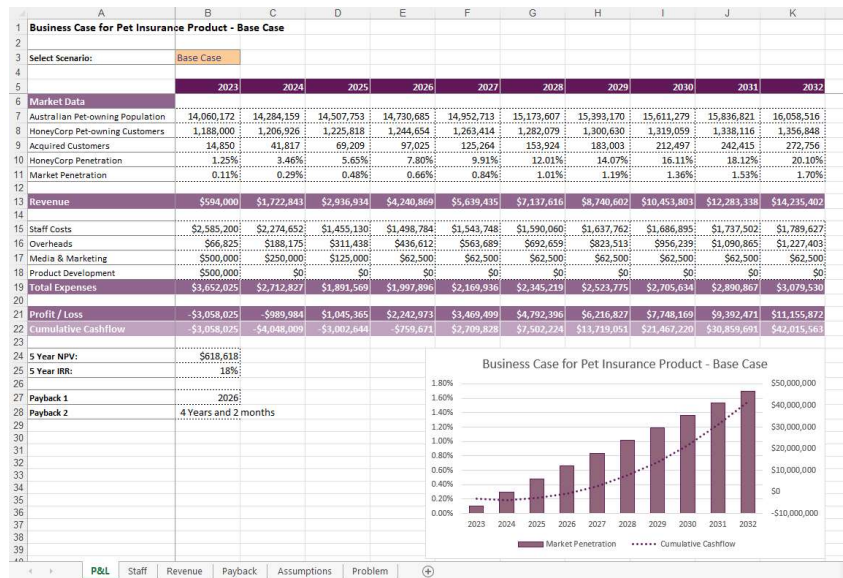


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DON'T EMBED A SPREADSHEET



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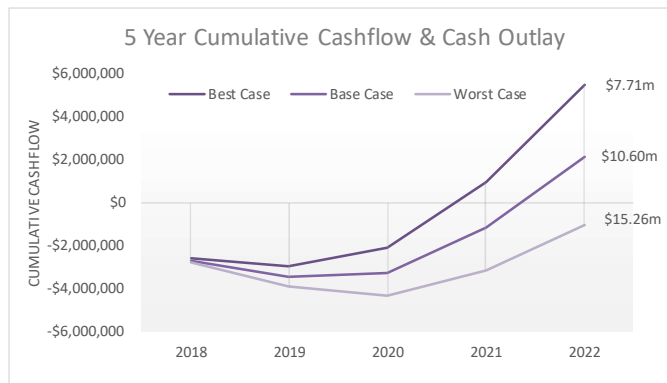
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DO SUMMARISE KEY POINTS

Business Case for Pet Insurance Product - Scenario Analysis

	Best Case	Base Case	Worst Case
5 Year NPV:	\$2.51m	\$0.30m	-\$1.75m
5 Year IRR:	38%	15%	-9%
Payback:	3 Yrs 9 mths	4 Yrs 5 mths	5 Yrs 5 mths

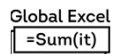


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Thank you!

Download the accompanying files at www.capability.com.au/plum



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