

Teach yourself how to build a Business Case for a Social Enterprise

2c. Hands On Modelling Making Your Business Model Intuitive

Building a business case has three stages: -

Step 1: Build a business model in Excel



Step 2: Use the model to evaluate the project



Step 3: Make decisions

Spend only a few seconds on each page

**It may contain errors so always check your own work
and have it audited by a competent person**

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Step 1: Build a business model in Excel



Step 2: Use the model to evaluate the project



Step 3: Make decisions

This module demonstrates how to make your
business model **intuitive**

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Making your model intuitive #1: Stand Alone

The screenshot displays a comprehensive financial model interface. It is organized into several key sections:

- Worked Example - For Website:** A top-left section providing context, audit instructions, and a color-coding key for the model's data.
- Results Comparison:** A central area featuring a grid of charts comparing 'Existing Case', 'Alternative A', and 'Alternative B' across metrics like NPV, IRR, and various cash streams (Production, Capital Costs, Operating Costs, Taxes).
- Inputs - Common:** A table at the bottom left detailing common input parameters for all scenarios.
- Existing case:** A detailed view of the base scenario, including a 'Life of Mine' table and four cash stream tables (Production and Revenue, Capital Costs, Operating Costs, Taxes).
- Alternative A:** A detailed view of the first alternative, mirroring the structure of the existing case but with adjusted values.
- Alternative B:** A detailed view of the second alternative, also mirroring the structure of the existing case.

The interface uses a consistent color-coding system: blue for revenue, green for costs, yellow for taxes, and red for taxes. The 'Life of Mine' table shows production units from 2015 to 2024. The cash stream tables provide annual and total values for each category, with NPV and IRR values summarized at the bottom of each alternative's section.

Make it completely self contained!

Anyone receiving your model in an email or memory stick must be able to open it and read through it from beginning to end without needing any supporting documents.

Making your model intuitive #3: Tabs are named

The screenshot displays a comprehensive financial model for a gold mine project. The model is structured into several key tabs, each with descriptive titles:

- Intro:** Provides an overview of the project and model purpose.
- summary:** Contains a 'Summary' table with key metrics:

NPV - Existing Case	2,007,342
NPV - Alternative A	-3,793,178
- ExistingCase:** Focuses on the 'Existing Case' with charts for 'Existing Case - Four Cash Streams' (Cash Flows, NPV, Mining, Sales, Price, Margin, Opex, Capex).
- Alternative A:** Focuses on 'Alternative A' with corresponding charts for 'Alternative A - Four Cash Streams'.
- Alternative B:** Focuses on 'Alternative B' with corresponding charts for 'Alternative B - Four Cash Streams'.

Each chart is accompanied by a detailed data table. The 'Cashflow and NPV' table shows cash flows and NPV over time for each alternative. The 'Discounting' table shows the present value of cash flows. The model also includes sections for 'Production and Revenue', 'Capital Costs', 'Operating Costs', and 'Taxation'.

The tab at the foot of each worksheet is named descriptively

Making your model intuitive #4: Business Model Flow

The screenshot displays a comprehensive financial model for a 'MetPlant 2011' project. The model is structured into five main columns representing different stages of the business model flow:

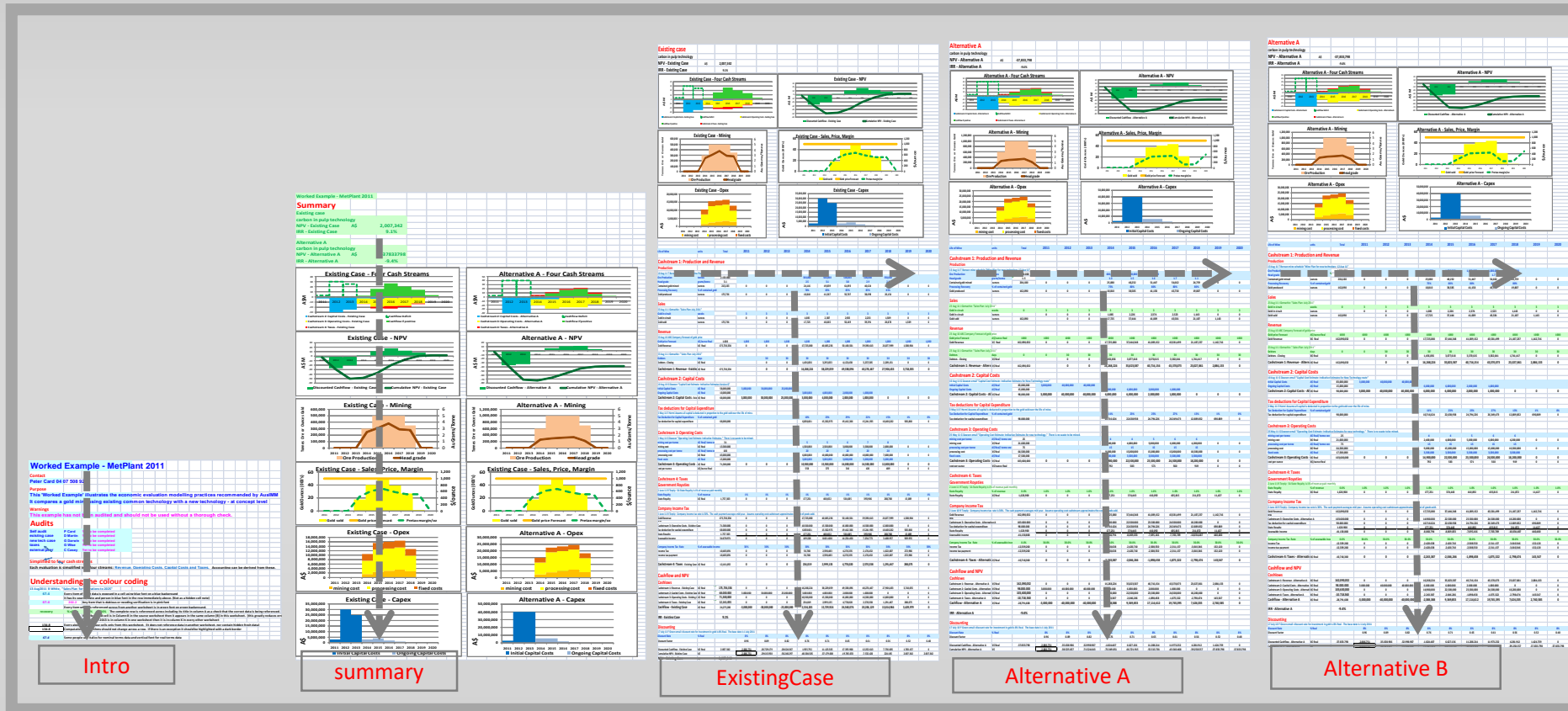
- Intro:** Contains introductory information, contact details, and a purpose statement.
- summary:** Provides a high-level overview of the model, including key metrics like NPV and IRR for both Existing Case and Alternative A.
- ExistingCase:** Detailed financial analysis for the existing technology, including cash flow streams, NPV, mining operations, sales, price, margin, and opex.
- Alternative A:** Detailed financial analysis for the alternative technology, including cash flow streams, NPV, mining operations, sales, price, margin, and opex.
- Alternative B:** Detailed financial analysis for a second alternative technology, including cash flow streams, NPV, mining operations, sales, price, margin, and opex.

Each stage includes various charts (e.g., cash flow, NPV, mining, sales, price, margin) and data tables. A large grey arrow at the bottom indicates the logical flow of the model from left to right.

Inside every business model, the worksheets flows logically from left to right

The 'Intro' and any 'Summary' worksheets are positioned as the first worksheets

Making your model intuitive #5: Worksheet flow



The information inside each worksheet flows intuitively down and across

Making your model intuitive #6: Data is inputted only once

The screenshot displays a complex financial modeling software interface. It is organized into several main sections:

- Worked Example - For Website:** Contains introductory text, audit instructions, and a color-coding key for different data types.
- Results Comparison:** A grid of charts comparing 'Existing Case', 'Alternative A', and 'Alternative B' across various metrics like NPV, IRR, and payback period.
- Existing case:** A detailed data table and chart set for the base scenario, including cash flow streams, NPV, and IRR.
- Alternative A:** A similar data table and chart set for the first alternative scenario.
- Alternative B:** A similar data table and chart set for the second alternative scenario.

A grey arrow points from the 'Inputs - Common' section at the bottom left to the 'Existing case' section. A pink arrow points from the 'Inputs - Common' section to the 'Alternative B' section. The 'Inputs - Common' section contains a large table of input data shared across all scenarios.

Any item of data is entered into the model only once.

Entering it a second time is absolutely forbidden
 – this especially applies to naming the years across the columns at the top

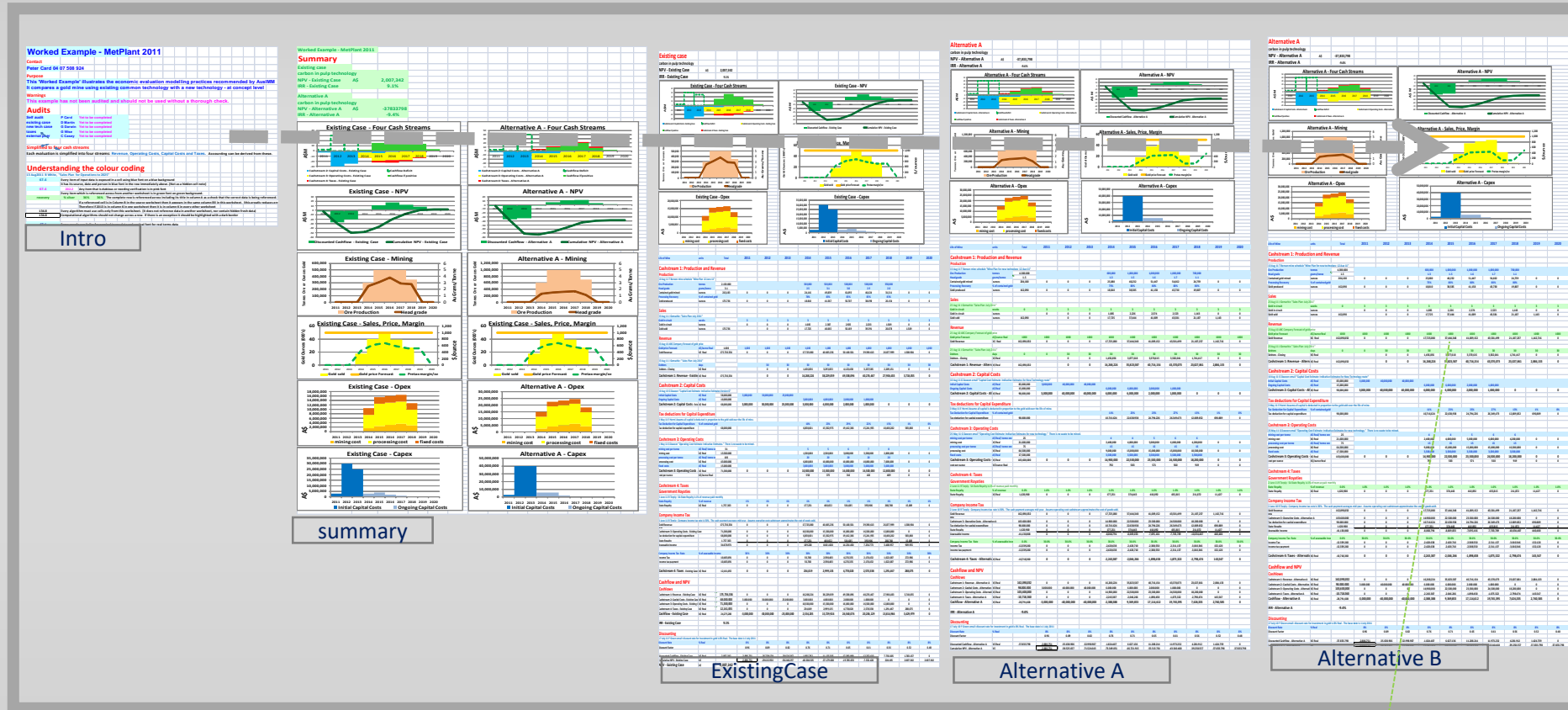
Making your model intuitive #8: Eliminate clutter

The screenshot displays a complex financial model for 'MetPlant 2011'. It is organized into several columns and rows, each representing a different financial metric or calculation. The columns are labeled 'Existing Case', 'Alternative A', and 'Alternative B'. The rows are labeled with various financial metrics such as 'NPV', 'Mining', 'Sales Price Margin', 'Opex', 'Capex', 'Production and Revenue', 'Capital Costs', 'Operating Costs', 'Taxes', 'Income Tax', and 'Cash Flow and NPV'. The model includes numerous charts and graphs, such as 'Four Cash Streams', 'NPV', 'Mining', 'Sales Price Margin', 'Opex', and 'Capex'. A dashed arrow points from the text below to the 'Existing Case' section, and another dashed arrow points from the text below to the 'Alternative B' section.

Do not add into your model rows of computations “in case they might be needed in the future!”
Add these calculations only when needed.

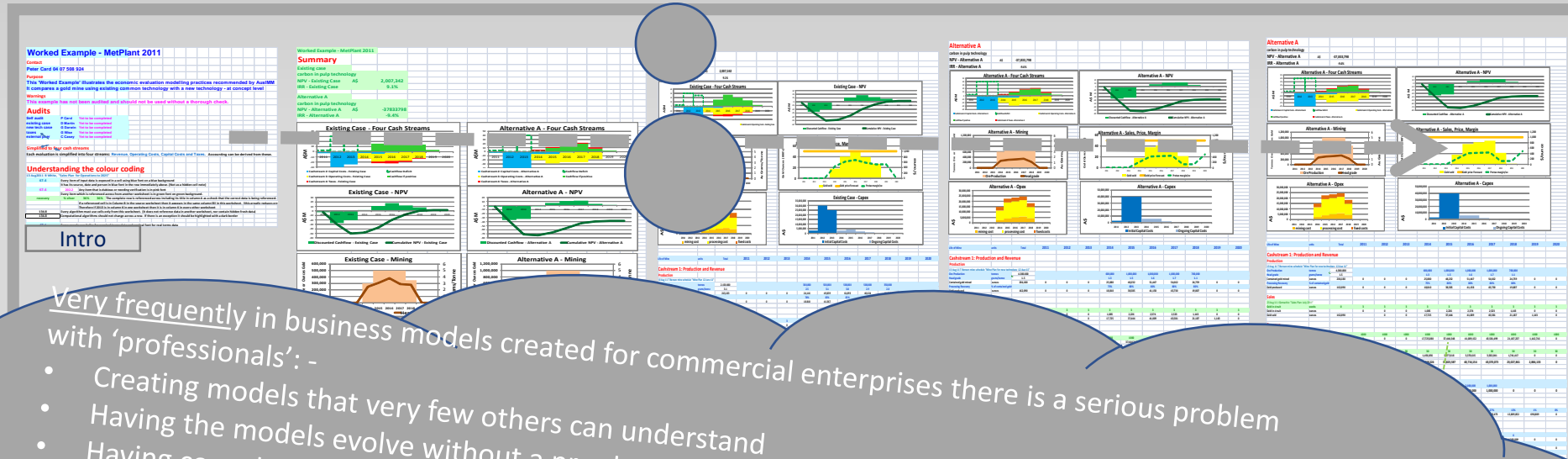
If some rows are no longer being used then delete them!

Making your model intuitive #9: 'Story Book'



Your whole model may become long, detailed and complex but it always must remain easy for others to read. Information must flow logically down each worksheet and across the whole workbook – just like a story book.

Making your model intuitive #10: 'Philosophy'



Very frequently in business models created for commercial enterprises there is a serious problem with 'professionals': -

- Creating models that very few others can understand
- Having the models evolve without a pre-determined structure
- Having convoluted formulae that jump from one worksheet to another
- Having very sophisticated formulae that only experts in Excel can understand

If you receive a copy of one of their models, you can spend days working through thousands of cells trying to find out what are inputs, what are computations, what some of the sophisticated formulae are doing, why it jumps from one worksheet to another and to another... etc, etc. Very wasteful of your time

Q: Are these 'professionals' oblivious to the needs of others, in a big rush, unaware, arrogant, ... ?
 A: Should a social enterprise get one of these involved – even if pro bono?

Glossary 1	
Business Model or 'Economic Model'	A forecast of the social enterprise's physical operations, deliveries of benefits, sales, costs, taxes and net cashflow. It usually is over several years and computed in monthly intervals or in years. It gives a 'helicopter view' of the underlying economic health of the enterprise showing how much funding it will require and when it is likely to 'stand on its own legs' to be self-supporting. . (It uses cash rather than accounting concepts.) Funding and ownership can be added when the project looks promising
Project Funding	Getting investors, donors and lenders to provide cash to fund the project
Accounting	An internationally regulated way of assessing or forecasting the performance of the project over a specified period – past or future - given its recent results, past inputs and future liabilities. (Uses non-cash concepts so may be difficult for some non-accounting people to quickly understand.)
Tax	Extracting money from the project as entirely defined by government legislation - and like accounting uses non-cash concepts.
Real terms	Before applying inflation – example \$2.50 today and still \$2.50 in 5 years (Usually employed in business case modelling.)
<i>Nominal terms or Dollars of the Day</i>	<i>After applying inflation – example \$2.50 today becomes \$3.97 in 5 years</i> (Used in accounting, tax and funding.)

Glossary 2

Four Cashstreams	The business of any social enterprise (or any industry) can be shown in just four <u>cash</u> streams
Cashstream1: Revenue	The cash that will be received from sales of products and delivery of benefits
Cashstream 2: Capital Costs 'capex'	The cash that will be paid out to start-up the project and when up and running, on purchases of things that will last more than one year – 'sustaining capital' to keep it going
Cashstream 3: Operating Costs 'opex'	The cash that will actually be paid out to run the project and make the sales. Typically some will be 'fixed' or 'overheads' that are constant whether many units or few units are being made/sold and 'variable costs' that vary directly with the number of units made/sold.
Cashstream 4: Taxes	The cash that is paid out to meet the expectations of the governments and community - usually as income tax
Net Cashflow	Cash from revenue minus cash paid out as capital costs, operating costs and taxes.
Cumulative cashflow & payback	The running total of cash paid out/received from the beginning. Usually this becomes increasingly negative during construction and 'ramp up'. It improves when sales revenue exceeds all costs. When it improves back up to zero this is called "Payback". Then hopefully becomes strongly positive.

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