

# 9 Financial Modeling Best Practices

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# The 6 Key Attributes of a Great Financial Model



### **Flexible**

The model contains scenarios with multiple cases (i.e. base case, best case, worst case) for the most critical variables.



### **Intuitive**

The reader can easily follow and understand the model based on the flow of the pages.



### **Transparent**

Every formula can be understood whether the reader clicks into the cell, or looks at a printout on paper.



# **Dynamic**

Any changes to the assumptions should properly flow through the model.



# **Tells a Story**

The model is a powerful communication tool that allows for optimal decision making.



# **Transferable**

When a model is well designed and well built, colleagues and clients will be able to use the file as if they built it themselves.

# 9 Questions to Ask During the Financial Model Planning Process

- Can a reader of the model understand the operations of the company?
- Have the assumptions been challenged and vetted?
- Which assumptions are key drivers to be tested as scenarios?
- Is there enough historical detail to validate the required amount of forecast detail?
- What is the important output that the users want to know?
- What metric is used to measure results?
- How many time periods should be included in the forecast? Why?
- What's the appropriate periodicity for the model (e.g. monthly, quarterly, annual)?
- What is the most logical order to present the data?

# The 5 Key Sections of a Great Financial Model



# **Cover Page**

A well-designed cover page, complete with clear headings, sets the stage by explaining the purpose of the model and inspires confidence in your decision makers. Your financial model is a financial presentation.



# **Executive Summary**

The first thing a reader of a model wants to know is "What's the answer?" Don't make your readers flip through the model to get to the answer. Put your summary up front and they're guaranteed to keep reading.



### **Assumptions**

As soon as your readers understand the answer, the next thing they want to know is "How did you get there?" Your assumptions tell the story of how you arrived at your answer.



# **Scenarios Page**

These are the key driver assumptions that are hard to forecast and hard for management to control, but can have a big impact on the success or failure of the company.



# The Engine

The final section of an optimal model is the engine; this includes the financial statements and the schedules that were used to calculate the results. Most models require schedules to calculate each of the primary line items on the company's financial statements.

# **Model Planning**

Review historical financial statements

Read the management discussion and analysis, and the notes to the financial statements.

Learn about the industry

Read industry journals and equity research reports.

Understand the purpose of the model

Ensure that the output calculations allow the model users to make the required decisions.

Determine the key drivers

Key drivers are the most critical variables that will determine the success or failure of the company.

Make a list of assumptions

This is usually a big list of every assumption needed to build the model.

Identify the required schedules and components

Plan the order and flow of every section in the model such as revenues, costs, working capital, etc.

# 3 Common Approaches to Tab Structure in a Financial Model

### **Vertical Tab Structure**

- Cover: one tab
- Summary: one tab, may include multiple tables
- Assumptions: one tab, multiple assumptions can be stacked vertically
- Scenarios: one tab, which includes the key drivers of the business
- Model: one tab, which includes all financial statements and schedules, can be more than one tab for multiple business units
- Outputs: includes all output calculations in the model, such as ratios and valuation calculations

## **Horizontal Tab Structure**

- Cover: one tab
- Summary: may include more than one tab if there are multiple tables
- Assumptions: can be one tab or multiple tabs for the different categories
- Scenarios: one tab, which includes the key drivers of the business
- Schedules: each supporting schedule is built on its own tab
- Financial Statements: each statement can be built on its own tab OR created vertically on one tab
- Outputs: one or multiple tabs, and includes all output calculations in the model, such as ratios and valuation calculations

# 3 Common Approaches to Tab Structure in a Financial Model

# **Hybrid Tab Structure**

- Cover: A single tab for the model's cover page
- Executive Summary: One tab summarizing the model with tables and graphs
- Assumptions: All assumptions are grouped in one tab, organized for easy adjustment
- Scenarios: One tab dedicated to key business drivers and scenario analysis
- Financial Statements: Compiled vertically on a single tab for a comprehensive financial overview
- Schedules: All schedules are also placed vertically on one tab, streamlining detail review
- Outputs: One or more tabs for output calculations like ratios and valuations, depending on complexity

# Structural Tips

- Never enter the same variable twice within the model a second instance should be linked back to the original input cell.
- Never hardcode values within formulas (i.e. =A5 + B5 + 29.832) the 29.832 is a hardcoded value and should have been entered into its own cell and referenced in the formula.
- Do not insert blank columns in between years. For extra space, make the columns wider. To add calculated growth rates, put these on a different row.
- Use circularity sparingly, and only if it's absolutely necessary and you have an excellent grasp of how to build, manage and de-bug circular references.
- Minimize or avoid the use of macros unless absolutely necessary one common usage of macros in financial models is to create summary pages that populate the answers for multiple cases simultaneously.

# **Headers & Footers**

When building a financial model, attention to detail is crucial, including when it comes to the headers and footers.

Headers and footers can convey effective information and inspire confidence with the reader of the model.

To ensure consistency and accuracy throughout the document, certain design tips should be followed. Adhering to these design tips can significantly enhance the user experience and ultimately contribute to the success of the model.

### **File Path**

Include the file path on every path, typically the bottom left or right corner. This is so colleagues can find or update the correct version.

# Page Numbers

Include page numbers on every page, typically the bottom center. This helps when presenting the model and makes it feel like a presentation.

### **Date & Time**

Include a date and time stamp on every page (typically the bottom left or right corner). This ensures people are all reviewing the same version of the model.

# **Scenario Tag**

Incorporate a Scenario Tag on every page that displays the case being run - this is simply a label that explains to the reader which set of assumptions are being run.

# Scenario Analysis Key Drivers

Flexibility in models is critical, as stakeholders typically like to know what the impacts of changing key drivers would do to the overall business under various scenarios.

Key drivers are assumptions that are difficult to forecast, hard to control, and they materially affect the business.

### These can include:

- 1. Sales Price
- 2. Sale Volume Growth
- 3. Cost Inflation
- 4. Currency Exchange Rates
- 5. Input Costs

An effective model should be able to switch between different operating cases, or scenarios, and these assumptions should dynamically flow through the model and ultimately through to the financial statements.

# **Printing Tips**

- Set up the model in print-size pages
  - Approximately 8 to 10 columns of numbers with row labels
  - Approximately 35 to 50 rows with page titles
- Page Layout Tab (Alt P S P) Expand Page Setup Menu Page Tab
  - Set to Landscape
  - Scaling should be 85% to 95%
- Page Layout Tab Expand Page Setup Menu Margins Tab
  - Minimize the margins: .25" to .4"
  - Click the option to center on page horizontally
- Page Layout Tab Expand Page Setup Menu Header/Footer Tab
  - Click Custom Footer and click on the [Page] and [Pages] buttons
  - Can also use the date, time, and file path buttons
- Page Layout Tab Expand Page Setup Menu Sheet Tab
  - This is the key technique to maintain consistent print ranges that do not have to constantly be reset. In the Sheet box, enter each page range, separated by commas
  - Each page on the model should be separated by at least one blank row