

Introduction to Financial Modeling

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A concise guide to the purpose, process, and key components of building a financial model.

1. What Is Financial Modeling?

Aspect	Description
Definition	A quantitative representation of a company's financial performance, built in a spreadsheet (or specialized software) to forecast future results.
Purpose	• Evaluate investment opportunities • Support strategic decisions (M&A, capital budgeting, fundraising) • Perform valuation and scenario analysis • Communicate financial insights to stakeholders
Typical Users	Investment bankers, equity analysts, corporate finance teams, private equity professionals, CFOs, consultants, entrepreneurs.

2. Core Principles

1. **Logic First, Layout Second** – Define the model's logic (inputs ? calculations ? outputs) before formatting.
 2. **Consistency** – Use uniform formulas, naming conventions, and formatting throughout.
 3. **Transparency** – Keep assumptions visible; avoid hidden or hard-coded numbers.
 4. **Modularity** – Separate sections (inputs, calculations, outputs) into distinct tabs or blocks.
 5. **Error-Control** – Build in checks (balance sheet reconciliation, error flags).
 6. **Scalability** – Design the model so it can be expanded (e.g., adding new years, scenarios).
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3. Typical Structure of a Financial Model

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| 1. Input / Assumptions |
+-----+
| 2. Historical Financials |
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3. Revenue & Cost Drivers
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4. Operating Model (P&L)
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5. Working Capital
+-----+
6. Capital Expenditures & Depreciation
+-----+
7. Financing (Debt/Equity)
+-----+
8. Cash Flow Statement
+-----+
9. Valuation (DCF, Multiples)
+-----+
10. Outputs & Dashboards
+-----+
11. Sensitivity & Scenario Analysis
+-----+

3.1 Input / Assumptions

- Macro variables (GDP growth, inflation, exchange rates)
- Company-specific drivers (price per unit, unit volume, cost of goods sold %)
- Financing terms (interest rate, repayment schedule)
- Tax rates, depreciation methods

3.2 Historical Financials

- Import 3-5 years of audited statements (Income Statement, Balance Sheet, Cash Flow)
- Clean data: remove non-recurring items, align fiscal periods

3.3 Revenue & Cost Drivers

- **Top-down** (market size × market share) or **bottom-up** (price × quantity) approach
- Build separate schedules for each product line or segment
- Link drivers to assumptions sheet for easy tweaking

3.4 Operating Model (P&L)

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- Revenue ? COGS ? Gross Profit ? Operating Expenses ? EBITDA ? EBIT ? Taxes ? Net Income
- Use percentage of revenue or fixed cost assumptions where appropriate

3.5 Working Capital

- Forecast **Accounts Receivable, Inventory, Accounts Payable** using turnover ratios or days sales outstanding (DSO) / days inventory outstanding (DIO) / days payable outstanding (DPO).
- Calculate net working capital change each period.

3.6 CapEx & Depreciation

- Schedule capital expenditures (maintenance vs. growth).
- Apply depreciation method (straight line, declining balance)