

1. Understand the Organization

- 2 to 3 good points per

Look for → wants to/wondered ...

- GOALS → personal and company
 - Qualitative and quantitative
 - Time constraints, financing constraints

Business Size-Up

Industry Analysis

- Key trends and external factors – investments, growth, saturation, regulations

Consumer Analysis: WHO ARE THEY (large corp, small business?, B2B or B2C)

- What do they want? When do they buy? What do they buy? Are they influenced (price, convenience...?)

Implications- focus on how implication supports your goals or information learned in business size up

Competitive Analysis

- What is our competitive edge?
- Indirect or direct? How large of a corporation?
- Are competitors doing well or poorly?
- LOOK AT LOCATION OF COMPETITORS → (closer in proximity etc..)

Corporate Capabilities

- Financing → is equity financing an option or debt? – Value of stock
- Operations? Length and quality of production
- Experience? – supported by other firms, established or new?
- Current capabilities – how will decision help the company?

b) Financial Size-Up

Statement of Cash Flows

Operations

Net income or loss (I/S)

I/S: amortization/depn', loss (ADD) or gain on sale (LOSS), NOT BAD DEBT

B/S: A/R, A/P, Inventory + current assets +

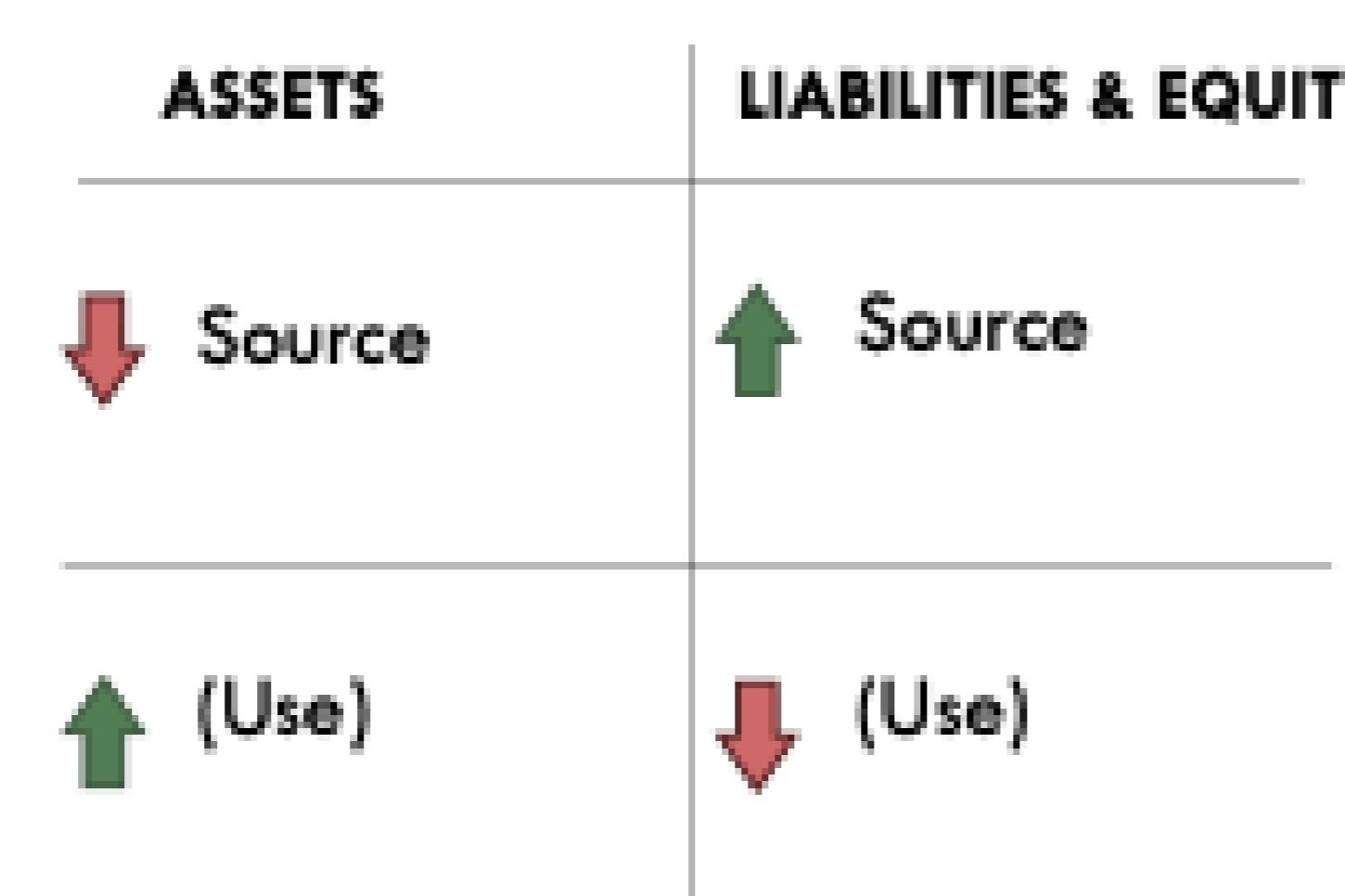
liabilities

Financing

B/S: loans, stocks, personal investment

Reconstruct retained earnings to determine dividends/drawings

Retained Earnings/Shareholders' Equity		**RE from last year
Given	O/B (last year's E/B from SOFP)	
Add	Net income (this year)	
	Trial Balance	
Dividends/Drawings	PLUG	
Given	E/B (this year's E/B from SOFP)	



Contribution Analysis

Contribution Margin Rate: (Selling Price - Variable Cost) / Selling Price

Break even Analysis:

- B/E Units = Fixed Costs ÷ Unit Contribution
= Fixed Costs ÷ (Selling Price - Variable Cost per Unit)
- B/E Sales = Fixed Costs ÷ Contribution Margin Ratio
= Fixed Costs ÷ [(SP - VC per Unit) ÷ SP]

I/S on a Contribution Basis

Net Sales

Less: Variable Costs

Contribution

Less: Fixed Costs

Income from Operations

Target Profit Breakeven

- Target Units = (Fixed Costs + Target Profit) ÷ (SP - VC)
- Target Sales = (Fixed Costs + Target Profit) ÷ [(SP - VC) ÷ SP]

Breakevens with Multi-Product Firms

- B/E Sales = Fixed Costs ÷ Weighted Avg. Contribution Margin Rate

Weighted Avg CM:

1. Weighted Average Contribution Margin = (Contribution Margin Rate, Product 1) (Expected percentage of revenue, Product 1) + ...

Profit = total contribution - total FC

WASP = SP * % of units sold

WAVC = VC * % of units sold (sum of all)

WAUC = WASP - WAVC

WACMR = WASP - WAVC/ WASP → given % units

Margin of Safety:

- Margin of Safety = (Projected Sales - B/E Sales) ÷ Projected Sales

ROI

- ROI = Recurring Annual Return ÷ Initial Investment

Costing Methods:

price should exceed the cost

- FOH application rate = \$ FOH expenses / \$ DL

- Total Overhead Application Rate = [(\$ Admin + FOH) ÷ \$ DL]

Direct Cost: direct material, direct labour and direct selling expense (floor price)

- Direct cost = variable cost

- Does not change with unit volumes

- For contribution analysis, BE calculations

Absorption Cost: Include ALL PRODUCTION COSTS regardless of classification as fixed or variable → use proxy (DLH, DL\$, Machine Hours)

- Direct Materials, labour, FOH

- will change depend on changes in volume

Calculated using financial statement

- COG man/units man OR COGS/units sold

USE: compare plan efficiency when producing same products

Full Cost: Include ALL COSTS in the price per unit (FC + VC to run the business)

- Direct materials, direct labour, all FOH, all selling expenses, all general and administrative charges, all financing charges

USE: long-term financing

- need P > FC for most of products to make a profit

Stability

Net worth to Total Assets

TE/ TA

% business owned by eq, High is safer/too low = too much debt, too high (underleveraged)

Total Debt to Total Assets

TL/TA

% business is financed through debt, Lower is safer (^opp)

Debt to Equity (D/E)

TL/TE

Amount of times of debt for every dollar of equity, L is safer, too high = leveraged, too low = bad use of eq

Long-Term Debt Interest Coverage

EBIT/ Int on

Number of times competitors can meet int payment → higher sales → lenders want to know int can be covered – can we take on more debt?

Liquidity

Current Ratio: Current Assets/Current Liabilities (2:1)

Acid Test: Cash, T/I & A/R/Current Liabilities (1:1)

• Age AR: A/R / (Sales/360) – industry avg - too low (tight credit policies - might scare off)

• Age AP: A/P / (COGS or Purchases / 360) – industry avg

- L = losing short term cash, H = poor reputation

• Age Inventory: E/B Inventory / (COGS / 360) – industry avg

- low = stock outs, high = waste of cash

6 - 8 RATIOS

Ratio Analysis

Profitability → vertical analysis

1. Ratio: vs competitor or industry
2. Interpret: WHY? Num or demon.
3. Implication: link to company decision/goal

COGS: Sales

COGS/ Net Sales ↓

1. Ratio: vs competitor or industry

2. Interpret: WHY? Num or demon.

3. Implication: link to company decision/goal

ROA

Net income/E/B Assets*100

High return → good use of Asset →

investment is healthy for growing business if ROA good

ROE

NI/ShareEq

High means happy shareholders

Investment Utilization

Inventory Turnover

COGS/Inventory ↑

Times per year inventory is being sold, L means inv is sitting around

FA Turnover

Sales/E/B Net Fixed Assets

sales \$ earned for each FA \$ → how useful assets are (H is better, but too H means assets are old and L means useless A)

Total Asset Turnover

Sales/Total Assets ↑ # sales \$ for every \$ A, (H is better, but too H means assets are old and L means useless A)

2. Assess the Future Opportunities

a) Qualitative

- Assess PROS and CONS of decisions to make (financing, HR, capacity, qualitative factors – timing)
- LINK BACK TO GOALS AND CONSIDERATIONS OF THE CASE
 - does the company have experience with a similar decision?

ANALYZE NUMBERS AFTER EVERY SECTION

b) Quantitative

Differential Analysis

- Cash
- Future oriented
- **Different between alternatives (with sensitivity or options)**
- Can write out in 000s to save time (make clear)
- Account for projections in differential (if % of sales use % projected sales)

Differential Inflows

- Recurring

$$\begin{aligned} \text{ROI} &= \text{CASH FLOW} / \text{INVESTMENT} \\ \text{PAYBACK} &= \text{INVESTMENT} / \text{CASH FLOW} \end{aligned}$$

Differential Outflows

- Recurring

Differential Investments: ONE TIME INVESTMENTS

- Prop, plant, eq, intangibles all INCREASE WC account, TRAINING
 - Intangible assets
 - Increase in working capital
- Differential Inventory** = $\frac{\text{Diff. COGS} \times \text{Days of Inventory}}{360 \text{ days}}$

$$\text{Differential A/R} = \frac{\text{Diff. Credit Sales} \times \text{Days of A/R}}{360 \text{ days}}$$

$$\text{Differential A/P} = \frac{\text{Diff. Purchases (or COGS)} \times \text{Days of A/P}}{360 \text{ days}}$$

Denominator = Operating period (year = 360 or 120 days)

- A/P: look for PAID ON CREDIT or account in A/P = COGS
- **A/P is a gain → therefore should be (-) from outflows UNLESS IS A INVESTMENT (ex. saving on A/P expenses)**
- Pay attention to what is paid on CREDIT (may be a portion of revenue)

Differential ROI = DCF/DI *must exceed bank int and compensate for risk

Payback = DI/DCF

- SHOULD BE less than life of useful asset *can compare to retirement
- *can use unit cont and add back depreciation for diff. *don't use full cost*

**** DO NOT INCLUDE FINANCING AND INTEREST COST IN**

DIFFERENTIAL** econ of scale means ROI increase when sales

increase**

Analysis:

- Compare to **hurdle rate**
- Differential can be done with sensitivity calculations (ex. utilization)
- Bank loan/interest is not included on differential
- How do the alternatives compare?

Cash Budgeting

- all CASH items account for (A, VC and FC)

1. Identify the nature and timing of cash inflows

- a. Financing (bank loans, capital infusions, proceeds/revenue, investment, A/R collections)

2. Identify nature and timing of cash outflows

- a. Cash operating expenditures (rent, supplies, inventory)
- b. Capital expenditures (purchase of equipment)
- c. Financial commitments (interest payments, principle repayments)
- d. Dividends and drawings

- SUBTRACT outflow from inflow to get NCF

- ADD/SUB cash flow for the period to the E/B from the previous period

ANALYSIS: when is the max cash requirement (is this much financing possible?)

- if overall cash flow is (+) [if (-) what can we do?]
- Which variables have the biggest impact on cash flow?
- If (-), is the outflow a long-term or short-term problem and how can we fix it?

ACCOUNT FOR DAYS A/R, A/P and Inventory to look at WHEN cash is an inflow or outflow

Segment Reporting

- Consider those COSTS associated with the running of the segment
- Compare those COSTS to budget or to segment revenues

1. Revenue (net sales)

2. Direct expenses (traceable to each line)

→ contribution (sales- direct expenses)

3. Indirect expenses (not traceable)

4. Net income

5. Net profit margin = net income/sale

6. Contribution margin = net income/contribution

3. Decision

- As [role], I will [decision]
- This helps meet [goals] by [qual pros] concerned about [qual cons]
- [Decision] helps mitigate them by [implications]
- Quant analysis shows [ROI/Payback/B/E/cash flow] exceeds goals/hurdle rate

Financing Plan Decision →

FINANCING OPTIONS: **debt cheaper than equity, good interest cov and current ratio could help with securing loan**

Debt: how leveraged is the company?

What type of debt financing? Bonds or bank loan?

Equity: how leveraged is the company?

Common or preferred? What is the current value of the stock price – is better to

Cash:

Look at **current ratio and acid test** or current ratio to see if cash can decrease

→ **BE SPECIFIC**

4. Evaluate the Effectiveness of Your Strategy

a) Projected Statements

- project lower differential

Income Statement → add back non-cash expenses – dep'n

** Assume same % as the previous year unless stated otherwise**

Revenue

- Projection + differential income

COGS

- % COGS from normal operations + differential COGS

Operating Expenses

- % of expenses is from NORMAL OPERATIONS + differential outflows
- **ADD any dep'n from new investments**

*If straight line depreciation can use last years plus differential

Statement of Financial Position: use last year as a template

Assume same \$ amount as the previous year → add back non-cash expenses

Assets

- Fixed Assets = last year - dep'n (I/S)

- **Assume advance from shareholder were paid last FY**

For projected working capital → pay attention to days of A/R, A/P and Inventory

Inventory = [(projected existing COGS/360)*last days of inventory] + new inventory

A/R = [(projected existing sales/360)*last days of A/R] + diff A/R

A/P = [(projected existing COGS/360)*last days of A/P] + diff A/P

** existing is without the new sales or COGS**

Liabilities

- **DECIDE ON PLUG**

- INCOME TAX PAYABLE: FROM I/S

- Bank indebtedness paid if cash flow is (+)

- Assume loan is paid off if cash flow is (+)

Retained Earnings = LAST YEAR RE + PROJECTED NET INCOME - DIVIDENDS + [ADD INVESTMENTS FOR SOLE PROP.]

For PLUG →

1. Decide on PLUG (operating line of credit, loan, stock, preferred shares, bonds)
2. Balance with ASSETS
3. Determine PLUG value → if (X) then can move into cash

→ **CHALLENGE ASSUMPTION ABOUT SALE PROJECTIONS, DAYS A/R, A/P**

1.Understand the Organization Business Size-Up Industry Analysis Consumer Analysis Competitive Analysis Corporate Capabilities b) Financial Size-Up SFC Ratio Analysis Contribution Analysis Segment Reporting	Action Plan and Contingency Plan → not too much time on plan** <ul style="list-style-type: none"> • Specific items on how to execute plan • HR, budget, secure financing, purchase machinery, due diligence, marking Contingency Plan: <ul style="list-style-type: none"> • Lower hurdle rate, preferred shares, delays. how to incentivize <ul style="list-style-type: none"> • increase wages • Do not have to be in full support of this plan <ul style="list-style-type: none"> i.e if we do not get 'x', we are not going to continue with this plan • Long term <ul style="list-style-type: none"> • contracts, notify of service • Immediate plans <ul style="list-style-type: none"> • secure financing • who to hire • buy equipment
2. Assess the Future Opportunities a) Qualitative b) Quantitative Differential Analysis Contribution Analysis Breakeven Analysis Segment Reporting Cash Budgeting	
3. Make a Decision Financing Plan	
4. Evaluate the Effectiveness of Your Strategy a) Projected Statements Income Statement Statement of Financial Position	

Action Plan and Contingency Plan
Marketing Plan