

MAKING CENTS OUT OF BUSINESS FINANCIALS

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AGENDA

Financial Statement Overview

Income Statement (P&L) Deep Dive

Levers & Scenario Analysis

Profitability Ratios

Questions

FINANCIAL STATEMENTS

- **How much did we earn?**

Income Statement



- **How much are we worth?**

Balance Sheet

- **Can we keep operating?**

Cash Flow Statement

TOY TRAIN SHOP

- Jim, wood craftsman
- Started as one-man operation in his basement, but has moved to a larger workshop and added a few employees
- Small store at front of workshop



INCOME STATEMENT

- The income statement presents the net profit or loss of a business incurred over a specific period (month, quarter, year)
- AKA: Profit & Loss Statement (P&L)
- Basic equation: $\text{Revenues} - \text{Expenses} = \text{Net Profit or (Loss)}$

INCOME STATEMENT

Revenue
- Direct cost
Gross Profit

- Indirect cost
Operating Profit

+/- Other income & expenses
Pretax Income

- Taxes
Net Profit



REVENUE

- Money generated from normal business operations¹
- AKA: sales, top line
- Basic equation: average sales price x number of units sold

GROSS SALES VS NET SALES

Invoice Price

- Rebates, discounts, promotions

Net Sales Billed (NSB)

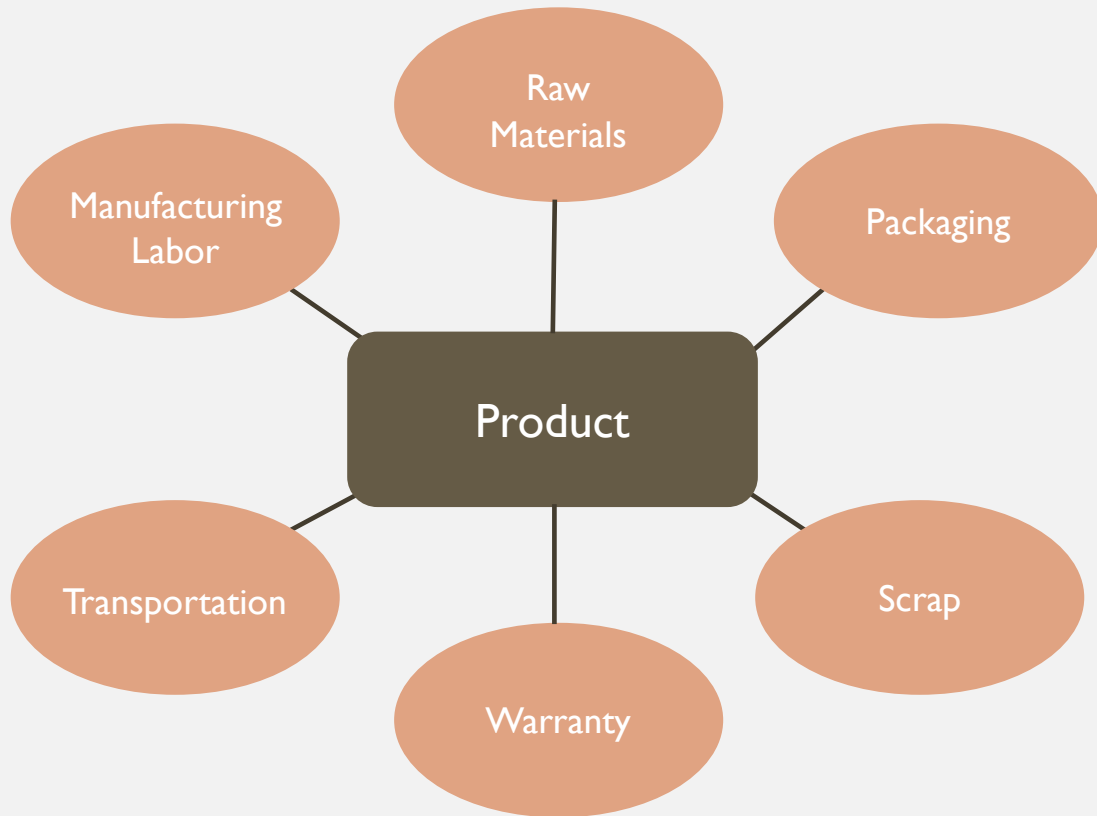


DIRECT COST

- Costs that can be directly tied to the production of specific goods or services¹
- AKA: cost of goods sold (COGS), cost of sales
- Ex: raw materials, direct labor

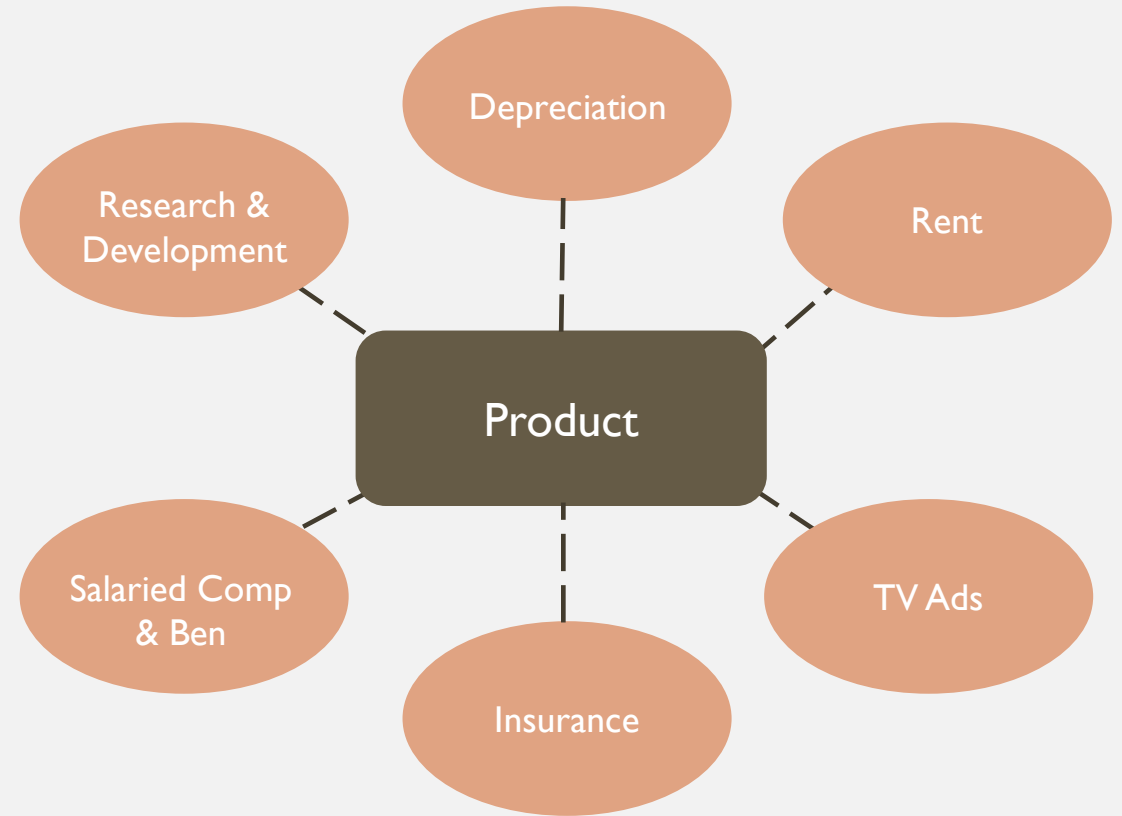
UNDERSTANDING COSTS

DIRECT COST



Costs directly tied to goods or services sold

INDIRECT COST



Costs to maintain business that cannot be directly tied to goods or services sold



REVENUE

- Price: \$80
- Discount: \$10
- Units sold: 5,000

Invoice Price	$\$80 \times 5,000 = \$400,000$
- Discount	$\$10 \times 5,000 = \$50,000$
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NSB	\$350,000



DIRECT COST

- Material

Wood \$18.00

Paint \$3.00

Nails \$1.50

Glue \$1.50

- Packaging \$4.00

- Labor \$12.00

Total \$40.00/unit

$$\$40 \times 5,000 = \$200,000$$

GROSS PROFIT

	<u>2020</u>	
Revenue	\$350,000	
- <u>Direct cost</u>	<u>(\$200,000)</u>	
Gross Profit	\$150,000	◀

INCOME STATEMENT

Revenue

- Direct cost

Gross Profit

- Indirect cost

Operating Profit

+/- Other income & expenses

Pretax Income

- Taxes

Net Profit

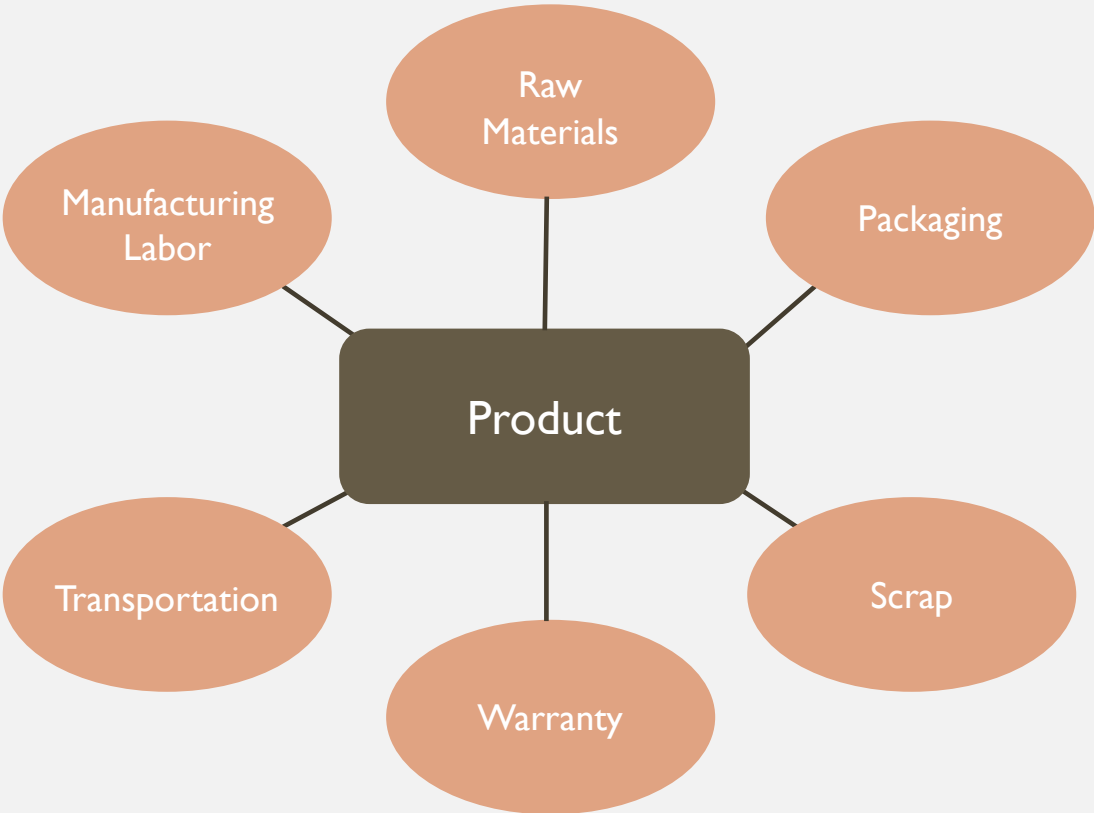


INDIRECT COST

- Costs involved with maintaining and running a company²
- AKA: Operating expense, fixed cost
- Ex: office supplies, rent, salaried employees

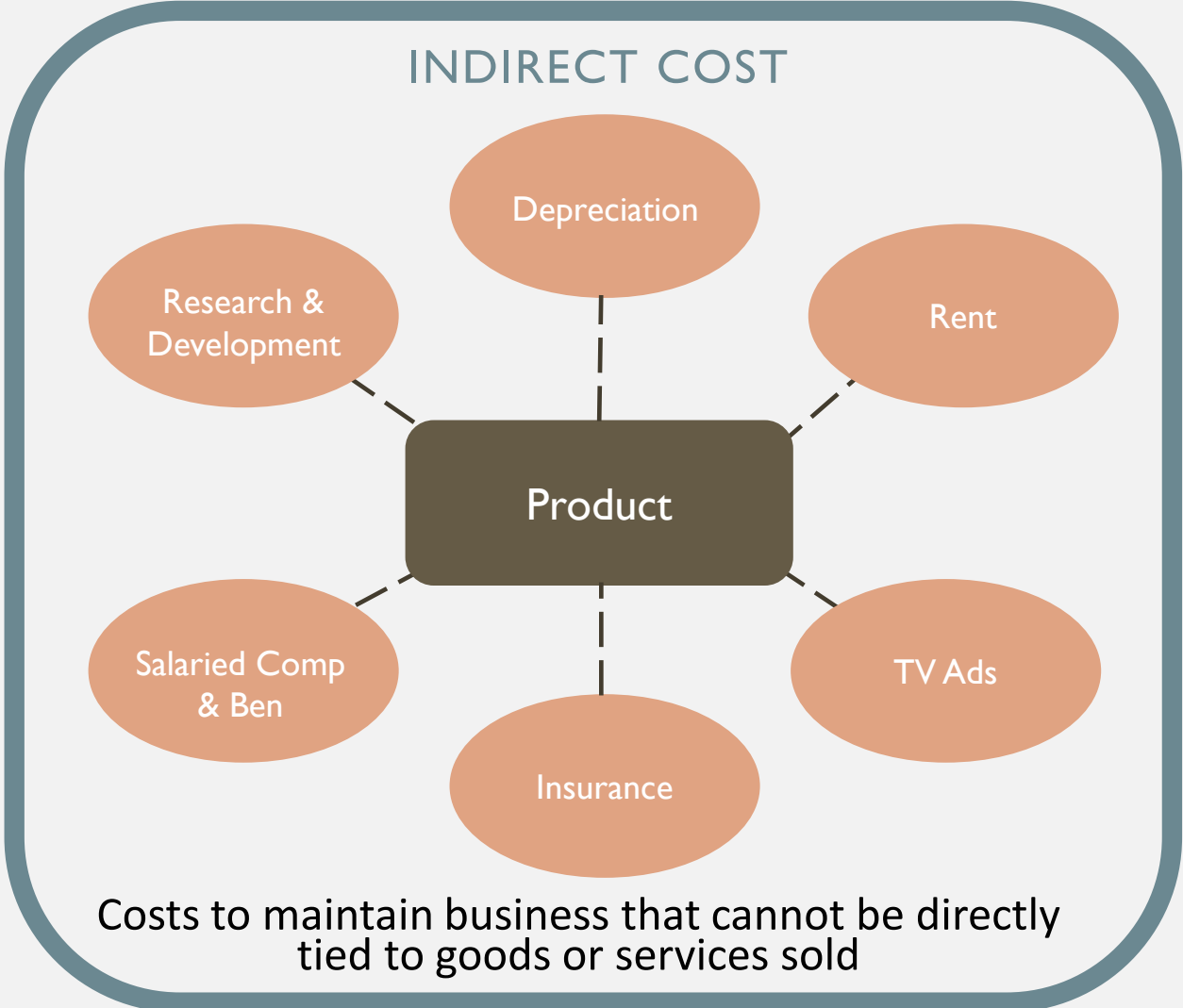
UNDERSTANDING COSTS

DIRECT COST



Costs directly tied to goods or services sold

INDIRECT COST



Costs to maintain business that cannot be directly tied to goods or services sold



INDIRECT COST

Workshop rent	\$23,000
Part-time sales associate	\$20,000
Utilities	\$5,000
Annual trip to toy festival for market research	\$1,000
Local radio advertising	<u>\$1,000</u>
Total	\$50,000

OPERATING PROFIT

	<u>2020</u>	
Revenue	\$350,000	
- <u>Direct cost</u>	<u>(\$200,000)</u>	
Gross Profit	\$150,000	
- <u>Indirect cost</u>	<u>(\$50,000)</u>	
Operating Profit	\$100,000	◀

INCOME STATEMENT

Revenue

- Direct cost

Gross Profit

- Indirect cost

Operating Profit

+/- Other income & expenses

Pretax Income

- Taxes

Net Profit



OTHER INCOME & EXPENSES

- Income and expenses generated or lost from sources not directly related to a business' core operations³
- Other income ex: rental income, sale of fixed assets
- Expense ex: interest accrued on loans



OTHER INCOME & EXPENSES

Interest on loan \$10,000

PRETAX INCOME

	<u>2020</u>
Revenue	\$350,000
- <u>Direct cost</u>	<u>(\$200,000)</u>
Gross Profit	\$150,000
- <u>Indirect cost</u>	<u>(\$50,000)</u>
Operating Profit	\$100,000
+/- <u>Other income & expenses</u>	<u>(\$10,000)</u>
Pretax Income	\$90,000



Earnings before tax (EBT)

INCOME STATEMENT

	Revenue
-	<u>Direct cost</u>
	Gross Profit
-	<u>Indirect cost</u>
	Operating Profit
+/-	<u>Other income & expenses</u>
	Pretax Income
-	<u>Taxes</u>
	Net Profit



TAXES

- Pretax income (EBT) \$90,000
- Tax rate 25%

$$\$90,00 \times 25\% = \$22,500$$

NET PROFIT

	<u>2020</u>
Revenue	\$350,000
- <u>Direct cost</u>	<u>(\$200,000)</u>
Gross Profit	\$150,000
- <u>Indirect cost</u>	<u>(\$50,000)</u>
Operating Profit	\$100,000
+/- <u>Other income & expenses</u>	<u>(\$10,000)</u>
Pretax Income	\$90,000
- <u>Taxes</u>	<u>(\$22,500)</u>
Net Profit	\$67,500



THE BOTTOM LINE

THREE LEVERS

Price

Cost

Volume

SCENARIO

Jim is considering including a mini train whistle in every box to differentiate himself and stay ahead of the competition.

It will cost him \$4/unit and he will not increase price, but believes he'll get 10% more sales from the addition. Is it worth it?

THREE LEVERS

Price
Flat

Cost
+\$4

Volume
+10%

SCENARIO ANALYSIS

BASE

NSB	5,000 units * \$70 = \$350,000
- Direct cost	5,000 units * \$40 = \$200,000
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Gross Profit	= \$150,000

NEW

NSB	5,500 units * \$70 = \$385,000
- Direct cost	5,500 units * \$44 = \$242,000
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Gross Profit	= \$143,000

Net loss **\$7,000** at Gross Profit

- To determine point at which volume gain covers cost increase/price loss or vice versa

BREAKEVEN ANALYSIS

BREAKEVEN ANALYSIS

BASE			NEW	
Price	\$70		Price	\$70
Cost	\$40		Cost	\$44
Units	5,000		Units	X

hold gross profit constant and solve for X

$$\text{Gross Profit} = (\$70 - \$40) * 5,000 = \mathbf{\$150,000}$$

$$\text{Gross Profit} = (\$70 - \$44) * X = \mathbf{\$150,000}$$

$$\$26 * X = \$150,000$$

$$X = 5,769 \text{ units}$$

$$(5,769 - 5,000) / 5,000 = 15\% \text{ volume lift to B/E}$$

- Profitability ratios
- Useful for comparing across time periods or benchmarking against competition
- Basic Equation: $\text{profit} / \text{sales} = \text{margin}$

PROFIT MARGINS

PROFIT MARGINS

	<u>2020</u>	
Revenue	\$350,000	Gross Profit / Revenue \$150K/ \$350K
- <u>Direct cost</u>	<u>(\$200,000)</u>	Gross Margin = 43%
Gross Profit	\$150,000	Operating Profit / Revenue \$100K/ \$350K
- <u>Indirect cost</u>	<u>(\$50,000)</u>	Operating Margin = 29%
Operating Profit	\$100,000	Pretax Profit / Revenue \$90K/ \$350K
+/- <u>Other income & expenses</u>	<u>(\$10,000)</u>	Pretax Margin = 26%
Pretax Income	\$90,000	Net Profit / Revenue \$67.5K/ \$350K
- <u>Taxes</u>	<u>(\$22,500)</u>	Net Margin = 19%
Net Profit	\$67,500	

PHARMACEUTICAL

Revenue	\$54B	
Gross Profit	\$42B	78%
Operating Profit	\$14B	26%
Pretax Income	\$12B	22%
Net Profit ⁴	\$11B	20%

RETAIL

Revenue	\$500B	
Gross Profit	\$127B	25%
Operating Profit	\$20B	4%
Pretax Income	\$15B	3%
Net Profit ⁵	\$11B	2%

ADDITIONAL RESOURCES

- [Investopedia](#)

CITATIONS

¹ investopedia.com

² businessnewsdaily.com

³ superbrowsers.ca

⁴ Pfizer 2019 Annual Report

⁵ Walmart 2019 Annual Report



Thank you