

Finance Strategy and Considerations

Fall 2020 Program

Executive Program for Business Leaders

Finance Strategies and Considerations

Balanced Scorecard – Strategic Planning

Cash is King

Budgeting

Primary Financial Statements/Financial Statement Analysis

Return on Investment

Cost Classifications – Margin – Cost Structure Implications

Make or Buy Decisions

Special Orders

Capital Budget/Project Analysis Decision Methods

U.S. Tax Reform Highlights

Strategic Planning and Budgeting

Use of a framework

Vision, Mission, Strategic Initiatives

Corporate Obj -- Key Functional Obj -- Individual Obj

Planning process is your job

Partner with Finance and Accounting throughout process

Document key assumptions

Budget as a guideline

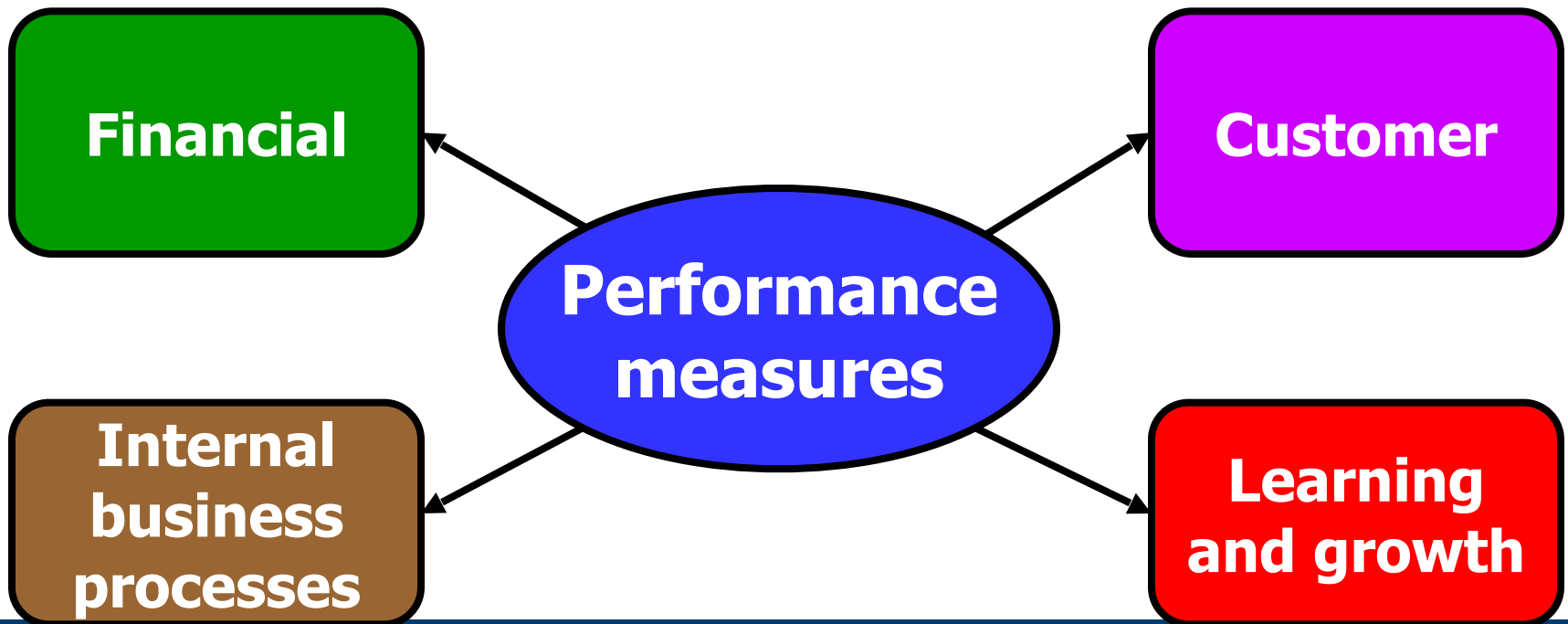
Understand financial reports

Understand nature of variances (one-time or on-going)

How are you tracking/monitoring execution

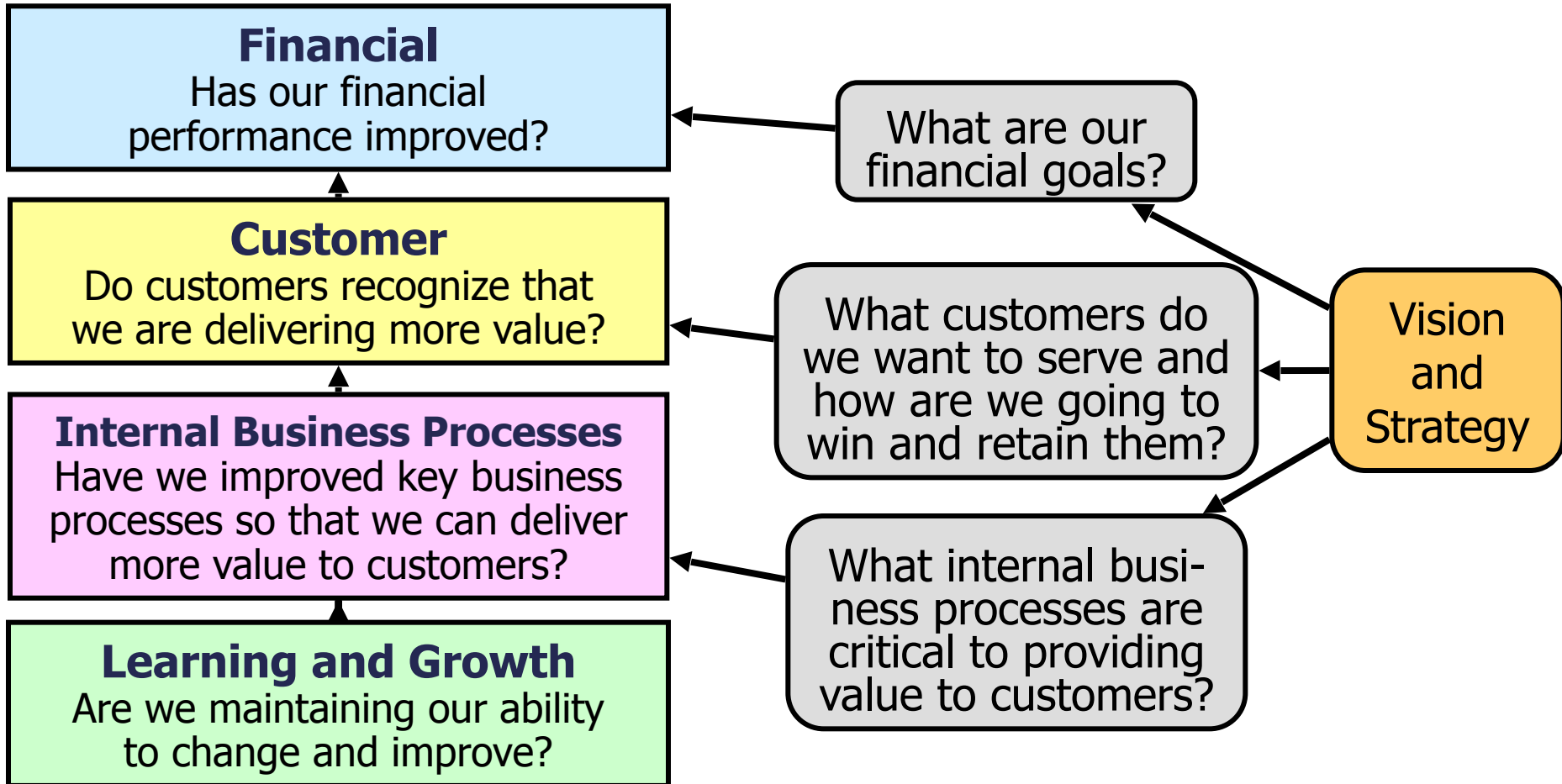
The Balanced Scorecard

Management translates its strategy into performance measures that employees understand and influence.



The Balanced Scorecard: From Strategy to Performance Measures

Performance Measures



Balanced Scorecard-Four Perspectives

Financial Perspective

Operating income
Revenue growth
Revenues from new products
Gross margin percentage
Cost reductions

Customer Perspective

Market share
Customer satisfaction
Customer retention percentage
Time taken to fulfill customer requests

Internal Business Perspective

Innovation

Manufacturing capabilities
Number of new products
New product development times

Operations

Yield
Defect rates
% of on time deliveries

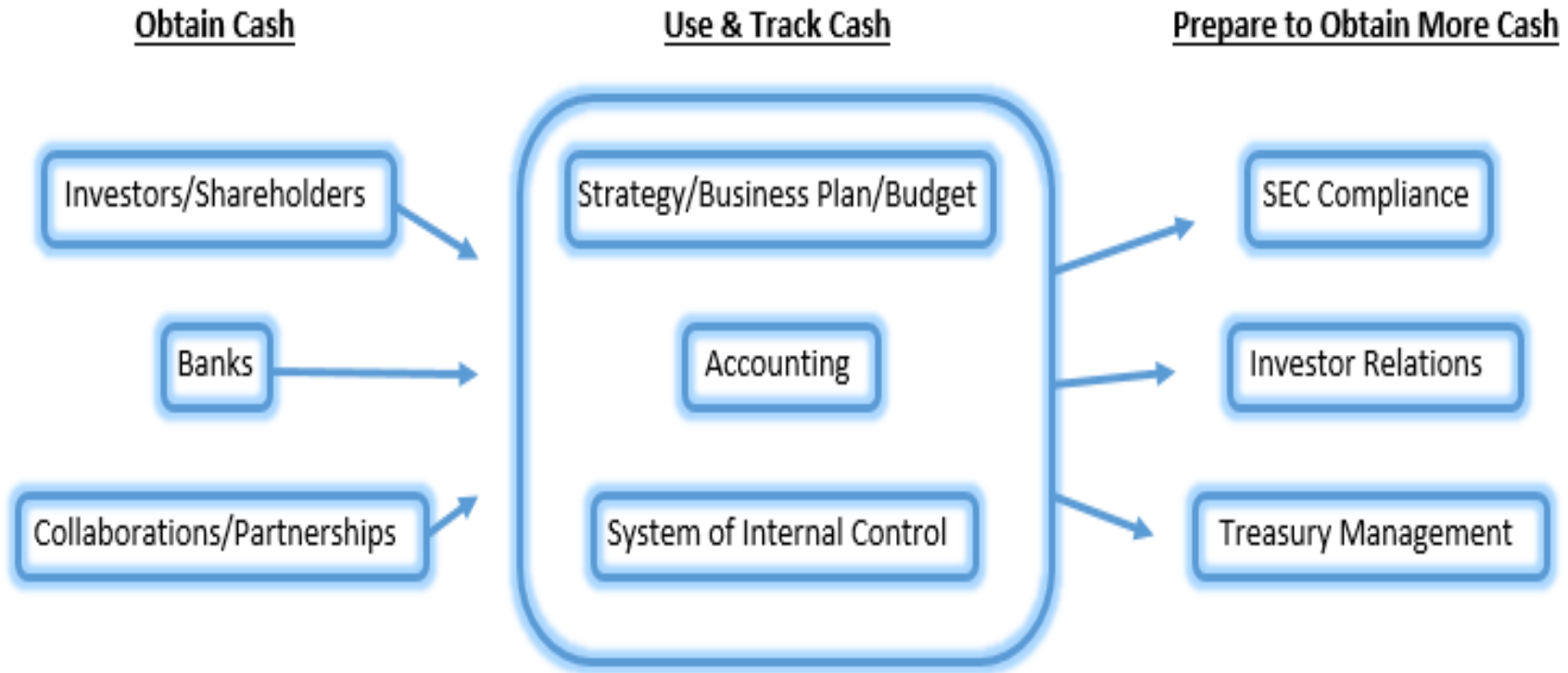
Post sales service

Time taken to replace/repair defective products
Hours of customer training to use products

Learning and Growth

Employee education and skill levels
Employee turnover rates
Information system availability

CASH IS KING



Overview of Budgeting

A budget is a detailed plan for acquiring and using financial and other resources over a specified period.

Budgeting involves two stages:

- 1. *Planning***, which includes developing future objectives and preparing various detailed budgets to achieve those objectives.
- 2. *Control***, which involves the steps taken by management to attain the objectives set down at the planning stage.

Advantages of Budgeting

1. Budgets *communicate management's plans* throughout the organization.
2. Budgeting forces managers to *think about* and *plan* for the future.
3. Budgets provide a means of *allocating resources* to their most effective uses.
4. Budgeting uncovers potential *bottlenecks*.
5. Budgeting *coordinates* the activities of the entire organization.
6. Budgeting provides goals that serve as *benchmarks* for evaluating subsequent performance.

Royal Company - Cash Budget

	<u>April</u>	<u>May</u>	<u>June</u>	<u>Quarter</u>
Beginning Cash Balance	\$40,000	\$30,000	\$30,000	\$40,000
Add receipts:				
<u>Cash Collections</u>	<u>170,000</u>	<u>400,000</u>	<u>335,000</u>	<u>905,000</u>
Total Cash Available	210,000	430,000	365,000	945,000
Less Disbursements:				
Materials purchases	40,000	72,300	72,700	185,000
Direct labor	13,000	23,000	14,500	50,500
Manufacturing overhead	56,000	76,000	59,000	191,000
Selling & administrative	70,000	85,000	75,000	230,000
Dividends	51,000	0	0	51,000
Equipment purchases	0	<u>143,700</u>	<u>48,800</u>	<u>192,500</u>
<u>Total Disbursements</u>	<u>230,000</u>	<u>400,000</u>	<u>270,000</u>	<u>900,000</u>
Excess(deficiency) of cash	(20,000)	30,000	95,000	45,000
Financing:				
Borrowing/repayment				
<u>Interest</u>	50,000	0	(50,000)	0
Total Financing	0	0	(2,000)	(2,000)
Ending Cash Balance	<u>50,000</u>	<u>0</u>	<u>(52,000)</u>	<u>(2,000)</u>
	\$30,000	\$30,000	\$43,000	\$43,000

Budgeted Income Statement

Royal Company	
Budgeted Income Statement	
For the Three Months Ended June 30	
Sales (\$1,000,000 @ 95%)	\$ 950,000
Cost of goods sold (100,000 @ \$5.00)	500,000
Gross margin	450,000
Selling and administrative expenses	260,000
Operating income	190,000
Interest expense	2,000
Net income	\$ 188,000

Royal Company
Budgeted Balance Sheet
June 30

Assets:

Cash	\$ 43,000
Accounts receivable	75,000
Raw materials inventory	4,600
Finished goods inventory	25,000
Land	400,000
Equipment	961,000
Total assets	1,508,600

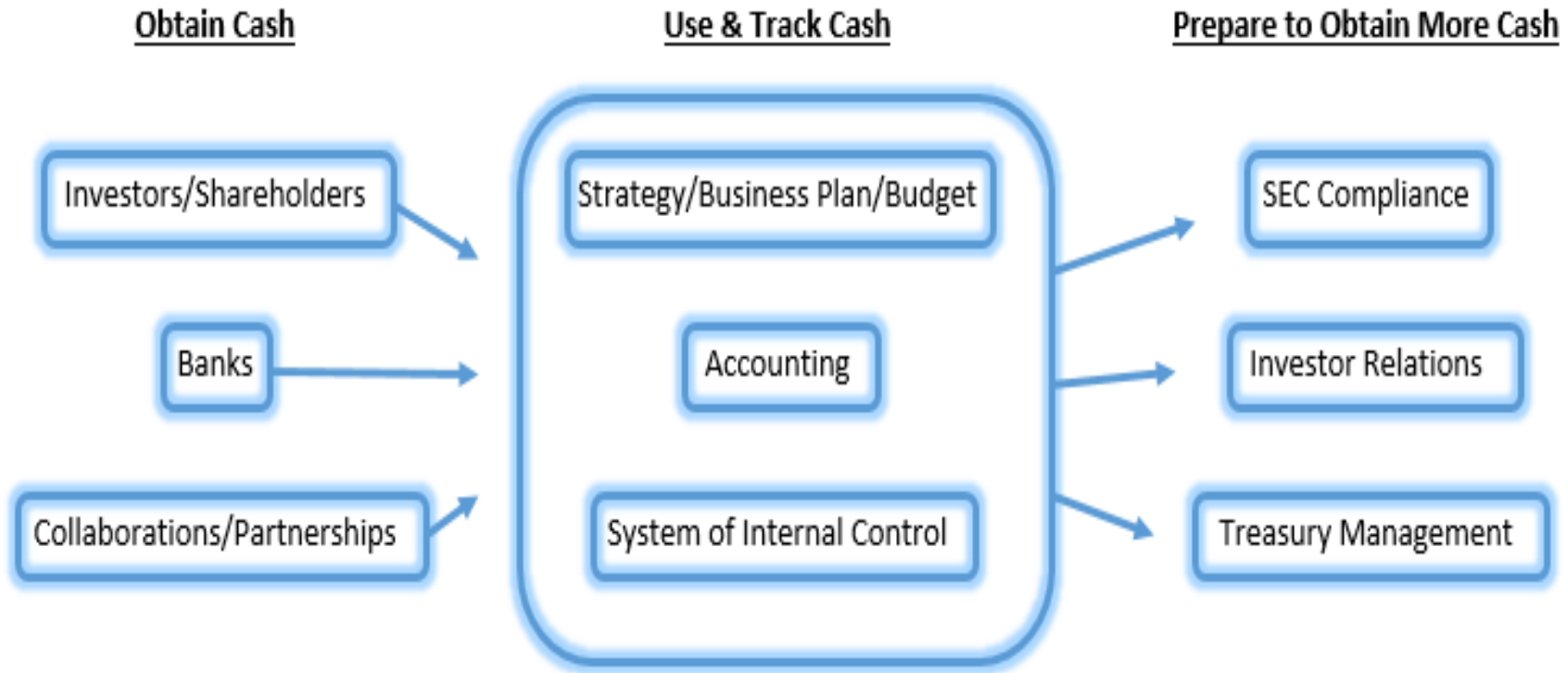
Liabilities and Stockholders' Equity

Accounts payable	\$ 28,400
Common stock	200,000
Retained earnings	1,280,200
Total liabilities and stockholders' equity	\$ 1,508,600

Financial Statement Analysis


1. Income Statement Analysis
2. Balance Sheet Analysis
3. Cash Flow Statement Analysis

CASH IS KING




Return on Investment (ROI) Formula

Income before interest
and taxes (EBIT)



$$\text{ROI} = \frac{\text{Net operating income}}{\text{Average operating assets}}$$

Cash, accounts receivable, inventory,
net plant and equipment, and other
productive assets



Understanding ROI

$$\text{ROI} = \frac{\text{Net operating income}}{\text{Average operating assets}}$$

$$\text{Margin} = \frac{\text{Net operating income}}{\text{Sales}}$$

$$\text{Turnover} = \frac{\text{Sales}}{\text{Average operating assets}}$$

$$\text{ROI} = \text{Margin} \times \text{Turnover}$$

Return on Investment (ROI) Formula

Return on Common Equity

$$\text{ROCE} = \frac{\text{Net income} - \text{Preferred dividends}}{\text{Average common stockholders' equity}}$$

Stockholder's equity less preferred stock

Summary of Cost Classifications

Manufacturing or Inventoriable (Product Costs)

- Direct Materials, Direct Labor, Manufacturing Overhead

Nonmanufacturing Costs (Period Costs)

- Marketing and Selling, Administrative, Research & Development

Predicting cost Behavior in response to Changes in Activity

- Variable, Fixed and Mixed and Step-Variable

Making Decisions

- Differential, Sunk, Opportunity

The Traditional and Contribution Formats

Comparison of the Contribution Income Statement
with the Traditional Income Statement

Traditional Format		Contribution Format	
Sales	\$ 100,000	Sales	\$ 100,000
Cost of goods sold	70,000	Variable expenses	60,000
Gross margin	\$ 30,000	Contribution margin	\$ 40,000
Selling & admin. expense	20,000	Fixed expenses	30,000
Net operating income	\$ 10,000	Net operating income	\$ 10,000



Used primarily for
external reporting.



Used primarily by
management.

Cost Structure – Implications

	Computer Parts Inc.		Pharmaceuticals Inc.	
	Amount	%	Amount	%
Sales	\$ 100,000	100%	\$ 100,000	100%
Less: Variable expenses	60,000	60%	30,000	30%
Contribution margin	40,000	40%	70,000	70%
Less: Fixed costs	30,000		60,000	
Net operating income	\$ 10,000		\$ 10,000	

CVP in Choosing a Cost Structure

	Computer Parts Inc.		Pharmaceuticals Inc.	
	Amount	%	Amount	%
Sales	\$ 110,000	100%	\$ 110,000	100%
Less: Variable expenses	66,000	60%	33,000	30%
Contribution margin	44,000	40%	77,000	70%
Less: Fixed costs	30,000		60,000	
Net operating income	\$ 14,000		\$ 17,000	

Pharma's higher contribution margin leads to a larger increase in net operating income.

Let's look at the breakeven sales dollars for each company.

CVP in Choosing a Cost Structure

	Computer	Pharma
	Amount	Amount
Fixed expenses	\$ 30,000	\$ 60,000
Divided by: CM Ratio	÷ 40%	÷ 70%
Breakeven sales	\$ 75,000	\$ 85,714

Computer Parts Inc. has lower fixed expenses and is more protected from a downturn in sales.

The Make or Buy Decision

A differential approach is more desirable than a total cost approach

rarely enough information to prepared detailed analysis for both alternatives

mingling differential costs with costs that do not differ between alternatives may cause confusion and distract from the information that is really critical

The Make or Buy Decision – A Problem

Essex Company manufactures part 4A that is used in one of its products. The unit product cost of this part is:

Direct materials	\$ 9
Direct labor	5
Variable overhead	1
Depreciation of special equipment	3
Supervisor's Salary	2
General factory overhead	<u>10</u>
Unit product cost	\$ 30

The Make or Buy Decision

The special equipment used to manufacture part 4A has no resale value or alternative use.

The supervisor will not be required if part 4A is outsourced.

The total amount of general factory overhead, which is allocated on the basis of direct labor hours, would be unaffected by this decision.

The \$30 unit product cost is based on 20,000 parts produced each year.

An outside supplier has offered to provide the 20,000 parts at a cost of \$25 per part.

Should we accept the supplier's offer?

The Make or Buy Decision

	Cost Per Unit	Cost of 20,000 Units	
		Make	Buy
Outside purchase price	\$ 25		\$ 500,000
Direct materials (20,000 units)	\$ 9	180,000	
Direct labor	5	100,000	
Variable overhead	1	20,000	
Depreciation of equip.	3	-	
Supervisor's salary	2	40,000	
General factory overhead	10	-	
Total cost	\$ 30	\$ 340,000	\$ 500,000

Another Make or Buy Decision

Royal Company manufactures 20,000 units of part R-3. The cost per unit is as follows:

Direct Materials	\$ 4.80
Direct Labor	7.00
VOH	3.20
FOH	<u>10.00</u>
Total cost per unit	\$ 25.00

An outside supplier has offered to sell 20,000 units of part R-3 to Royal Company for \$23.50. If Royal Company accepts this offer, the facilities now being used to make part R-3 could be rented to another company for \$150,000 per year. Also, Royal Company has determined that \$6.00 of the FOH being applied to part R-3 would continue even if part R-3 were purchased from the outside supplier.

What is the net dollar advantage/disadvantage of accepting the outside supplier's offer?

The Make or Buy Decision

The net dollar advantage/disadvantage of accepting the outside supplier's offer for the purchase of 20,000 units.

	<u>Make</u>	<u>Buy</u>
Direct materials	\$ 96,000	
Direct labor	140,000	
VOH	64,000	
FOH avoided	80,000	
Rental value	<u>150,000</u>	
Purchase cost		<u>\$470,000</u>
Total relevant costs	\$530,000	\$470,000

The net advantage in favor of buying = \$60,000

Accept a One-Time Order at a Special Price

- A one-time order – not part of normal ongoing business.
- Only incremental costs and benefits are relevant.
- Typically existing fixed manufacturing overhead costs not affected by the order thus not relevant.

Special Order Example

Northern Optical ordinarily sells the X-lens for \$50.

The variable production cost is \$10, the fixed production cost is \$18 per unit, and the variable selling cost is \$1.

A customer has requested a special order for 10,000 units of the X-lens to be imprinted with the customer's logo.

This special order would not involve any selling costs, but Northern Optical would have to purchase an imprinting machine for \$50,000 that would have no future use.

Typical Capital Budgeting Decisions

Should we purchase new equipment to reduce costs?

Should we acquire a new facility to increase capacity and sales?

Which of several available machines should we purchase?

Should we purchase or lease the new equipment?

Should we replace old equipment now or later?

Capital Budgeting and/or Project Analysis

Cash Outflows examples:

- Initial investment
- Working capital required
- Repairs and investment
- Increased operating cost
- Overhaul of equipment

Cash Inflows examples:

- Sale of old equipment
- Increased cash received from customers
- Reduced cash outflows related to operating costs
- Salvage value of equipment when project is completed
- Working capital released

Three Capital Budgeting Decision Methods

	Payback	Net Present Value (NPV)	Internal Rate of Return (IRR)
Description	Time to recover initial investment	PV of projects cash inflows to PV of its cash outflows	IRR of project over its useful life
Focus	Cash Flow	Cash Flow	Cash Flow
Uses time value of money	No (\$ today = \$ tomorrow)	Yes (Discount cash flows)	Yes (Discount cash flows)
Calculation	Time in which investment required = Net cash inflow	Schedule annual cash flows and PV using discount rate	Schedule annual cash flows and calculate the IRR

Three Capital Budgeting Decision Methods

	Payback	Net Present Value (NPV)	Internal Rate of Return (IRR)
Decision Criteria		Positive NPV	Compare IRR to minimum required rate of return
Additional information	<p>Identifies if project in the “ballpark”</p> <p>Limits: No time value of money</p> <p>Ignores cash flow after payback period</p>	<p>Assumes - All cash flows other than initial investment occur at the end of periods</p> <p>5-year project excel formula: =cash flow yr 0 + NPV(R of R, cash flow yr 1:cash flow year 5)</p>	<p>In essence, IRR finds the discount rate that equates the PV of cash outflows to cash inflows</p> <p>5-year project excel formula: =IRR(cash flow yr 0:cash flow year 5)</p>

Lester Company has been offered a five year contract to provide component parts for a large company. Company uses a 10% discount rate

Cost and revenue information

Cost of special equipment	\$160,000
Working capital required (released yr 5)	100,000
Relining equipment in 3 years	30,000
Salvage value of equipment in 5 years	5,000
Annual cash revenue and costs:	
Sales revenue from parts	750,000
Cost of parts sold	400,000
Salaries, shipping, etc.	270,000

Cash Flows on the Project

	<u>Time 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Cost of Special Equipment	(160,000)					
Working Capital required	(100,000)					
Cash Flow from Project		80,000	80,000	80,000	80,000	80,000
Cost to reline equipment				(30,000)		
Salvage value of equipment						5,000
Working Capital released						100,000
Totals	(260,000)	80,000	80,000	50,000	80,000	185,000
Net Present Value		85,920				
Internal Rate of Return		21%				

The Goal – Eli Goldratt

Reduce total costs

Reduce inventory

Accelerate the rate that cash is generated by the system

Open Discussion and Dialogue