

ENGINEERING ECONOMICS ISE460
SESSION 2
CHAPTERS 2, May 26, 2011

OUTLINE

- **Questions?**
- **News?**
- **Chapter 2 - Financials**

ENGINEERING ECONOMICS ISE460
SESSION 2
CHAPTERS 2, May 26, 2011

Why study financials?

Your own Company
Your suppliers
Your investments

Chapter 2 – Understanding Financial Statements

- If someone gave you \$100,000, what would you do with it?

mutual fund
Ex on mobile
Down on a house
Rental property

Stocks
Index funds
Bonds
(Puts and call
Vegas)
Ferrari
Payoff loans
Houses

Hold onto it,

ENGINEERING ECONOMICS ISE460
SESSION 2
CHAPTERS 2, May 26, 2011

Things to do with profits?

INVEST - STOCKS (OWN)

GIVE TO EMPLOYEES Update technology

INCREASE BENEFITS Dividends

Research

Expand

Increase output
Buy another Company

ENGINEERING ECONOMICS ISE460
SESSION 2
CHAPTERS 2, May 26, 2011

Is any of this applicable to personal finances?

Yes!

ENGINEERING ECONOMICS ISE460
SESSION 2
CHAPTER 8, May 26, 2011

OUTLINE

- Questions? Comments? Relevant and interesting News?
- Chapter 8

How do we determine what
a product costs?
July plan for Jan & Dec

all expenses have to be born by
Corporate expenses Products

Design
mfgr.

~~Jet~~
CEO pay or services

Laptop
\$2700
Fry's

Sales White

Price controlled by the market

Costs must be less than the
price

CHAPTER 8 - COSTS

XXXX hrs

- **IMPORTANT TERMS:**
 - **MANUFACTURING COSTS**
 - » **DIRECT MATERIALS**
 - » **DIRECT LABOR**
 - » **INDIRECT LABOR**
 - » **OVERHEAD**
 - **MATERIAL**
 - **REGULAR**
 - **SALES AND ADMINISTRATIVE COSTS**
 - **RESEARCH, DEVELOPMENT, DESIGN COSTS**

20 - 30%

Marginal costs

Basic printed circuit boards

<u>chemical line</u>	<u>\$4M</u>
<u>\$4M</u>	1500 panels/day
1500	

Break Even Volume

- Initial investment = \$20M
- Fixed operating cost per year = \$5M
- Unit cost to manufacture = \$50
- Selling price = \$200
- Expected Life 4 years
- Ignoring the time value of money and assuming equal volumes per year, how many units per year must I make in order to break even

- $20M + 5M(4) + 4(50)v = 200(4)v$
- $v = 66,667$

