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## CHAPTER 13

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## Decision Making

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- Steps in decision making:
  - Define problem
  - Identify **alternatives**
  - Identify costs / benefits of alternatives
  - Compare **relevant costs / benefits**
  - Select **alternative** with:
    - **Greatest benefit**
    - **Lowest cost**

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- Focus **only** on **relevant** costs & benefits
  - Everything else is irrelevant

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## Relevant Costs & Benefits

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- Relevant costs & benefits are **different** between alternatives

- 7 • **Assume you rent boat for \$1,000/month**
- **Harbor tour business vs fishing business:**

	<u>Fishing</u>	<u>Tour</u>	<u>Difference</u>
Revenue	\$8,000	\$10,000	-\$2,000
Expenses	-1,000	-4,000	3,000
Rent	<u>-1,000</u>	<u>-1,000</u>	<u>0</u>
Profit	<u>\$6,000</u>	<u>\$5,000</u>	<u>\$1,000</u>

- 8 • Rent is same for both alternatives
- You get same result if you ignore Rent

	<u>Fishing</u>	<u>Tour</u>	<u>Difference</u>
Revenue	\$8,000	\$10,000	-\$2,000
Expenses	<u>-1,000</u>	<u>-4,000</u>	<u>3,000</u>
Profit	<u>\$7,000</u>	<u>\$6,000</u>	<u>\$1,000</u>

- Rent is **not relevant**

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- No need to consider costs / benefits that are same
  - May mislead you
- Also → Relevant costs & benefits are **future** costs & benefits
  - Not **sunk** or **historical** costs

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- E.g., Assume you own large painting for home
  - Paid \$10,000
- Moving & no room
- Only offer is \$8,000
- Fact that you originally paid \$10,000 is irrelevant
  - Original price is **sunk cost**

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Opportunity Costs

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- Opportunity Costs
  - Other revenue
    - Only available if one of alternatives is selected
  - Treated as cost of alternative that closes off additional revenue

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- E.g., Assume you rented retail space
- Choice: CD store vs Comic Book store
- With Comic Book store only:
  - Can sublease part of space to vending machine operators
    - Additional \$200 a month
  - This sublease not available with CD store alternative

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- Lost revenue from vending machine sublease (\$200)
  - Opportunity Cost of CD store
  - Added to other costs of CD store

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- Lost sublease rent shown as cost for CD Store Alternative
  - Opportunity Cost

	<u>CD Store</u>	<u>Comic Book Store</u>	<u>Difference</u>
Revenue	\$10,000	\$7,000	\$3,000
Expenses	-5,000	-2,000	-3,000
Sublease	-200	0	-200
Profit	<u>\$4,800</u>	<u>\$5,000</u>	<u>-\$200</u>

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- Can also show Opportunity as additional revenue

	<u>CD Store</u>	<u>Comic Book Store</u>	<u>Difference</u>
Revenue	\$10,000	\$7,000	\$3,000
Expenses	-5,000	-2,000	-3,000
Sublease	200	0	-200
Profit	<u>\$5,000</u>	<u>\$5,200</u>	<u>-\$200</u>

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Other Important Factors

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- We focus on **quantitative**
  - **Qualitative** factors
- E.g., Should we outsource?
  - Supplier reliability
  - Quality control
  - Workforce morale
  - Robustness
  - Ability to resume production