True/False Questions

1. **True or False:** Trade-off analysis helps businesses balance competing priorities when making decisions.
2. **True or False:** Speeding up page load times will always improve engagement.
3. **True or False:** Defining clear objectives for each metric is unnecessary when conducting trade-off analysis.
4. **True or False:** Identifying historical trends in key metrics helps businesses predict potential trade-offs.
5. **True or False:** Correlation analysis proves that one metric directly causes another to change.
6. **True or False:** If a business increases discounts, it will always increase total revenue.
7. **True or False:** A/B testing can be used to experimentally validate trade-offs between different metrics.
8. **True or False:** Prioritization frameworks like ICE and PIE help businesses decide which trade-offs are worth making.
9. **True or False:** Bottleneck analysis can help identify which part of the user journey is negatively impacted by a change.
10. **True or False:** Once an optimization is made, there's no need to monitor its long-term impact.

Multiple Choice Questions

Slide 1: Why Trade-Off Analysis is Important

1. **Why is trade-off analysis important in business decision-making?**
    - A) It ensures all changes are made without any negative consequences
    - B) It helps balance competing priorities and minimize risks
    - C) It guarantees that every optimization increases revenue
    - D) It eliminates the need for A/B testing
2. **What is one of the biggest benefits of trade-off analysis?**
    - A) It removes the need for experimentation
    - B) It ensures changes align with business goals
    - C) It guarantees every change will work perfectly
    - D) It simplifies product development by focusing on a single metric

Slide 2: Define the Metrics and Their Objectives

3. **What is the first step in trade-off analysis?**
    - A) Implementing changes immediately
    - B) Defining key metrics and setting clear objectives
    - C) Running an A/B test

- D) Analyzing customer feedback

4. **Which of the following is an example of a well-defined objective in trade-off analysis?**
    - A) "Improve website speed"
    - B) "Make the product more appealing"
    - C) "Reduce page load time by 30% while maintaining at least 5% conversion rate"
    - D) "Increase engagement"

Slide 3: Data Analysis & Identifying Key Metrics

5. **Why is historical data analysis important in trade-off analysis?**
    - A) It allows businesses to guess which metrics are important
    - B) It helps identify patterns and trends that can influence future decisions
    - C) It eliminates the need for experimentation
    - D) It automatically prioritizes the best optimizations
6. **Which of the following helps identify where users drop off in the funnel?**
    - A) Correlation analysis
    - B) Segmenting key user journeys (e.g., cart additions, checkout starts, and completions)
    - C) Prioritization frameworks like ICE
    - D) Running ads to increase traffic

Slide 4: Modeling Trade-Offs Between Metrics

7. **How does correlation analysis help in trade-off analysis?**
    - A) It proves that one metric causes another to change
    - B) It determines how two metrics are related (positively or negatively)
    - C) It eliminates the need for A/B testing
    - D) It only applies to financial data
8. **Why is segmenting data important in trade-off analysis?**
    - A) It ensures that all user groups respond the same way to changes
    - B) It helps uncover differences in how various user segments experience trade-offs
    - C) It replaces the need for correlation analysis
    - D) It speeds up A/B testing results

Slide 5: Prioritizing Trade-Offs Using Decision Frameworks

9. **Which of these decision frameworks helps prioritize optimizations based on impact, confidence, and effort?**
    - A) ICE (Impact, Confidence, Effort)
    - B) PIE (Potential, Importance, Ease)
    - C) Correlation analysis
    - D) A/B testing

10. **What is the purpose of cost-benefit analysis in trade-off decision-making?**
- A) To ensure every optimization is successful
- B) To compare the potential benefits of a change against its costs and risks
- C) To eliminate the need for experimentation
- D) To focus only on financial metrics