

INFO5990: Week 6 Tutorial Answer Guide

Case Study 1: Organizational Alignment Using McKinsey 7-S

Q1: What are the seven elements of the McKinsey 7-S framework?

- Strategy, Structure, Systems, Shared Values, Skills, Style, and Staff.

Q2: How can this model be used to assess organizational readiness for change?

- It helps evaluate alignment between strategy, processes, and people.
- Identifies gaps in coordination, communication, or capability.
- Encourages a holistic approach to organizational change.

Q3: Which elements should be addressed first during transformation?

- Shared Values, as they influence all other elements.
- Structure and Strategy to set direction and clarify roles.
- Style (leadership) if team culture or morale is low.

Q4: Why is it hard to change the “soft” elements?

- They involve beliefs, behaviors, and cultural norms, which are deeply ingrained.
- Employees may be emotionally attached to existing ways.
- Change requires trust-building, time, and consistent modeling from leaders.

Q5: Indicators of misalignment between strategy and capabilities

- Conflicting departmental goals or duplicated efforts.
- Resistance to strategic initiatives or low morale.
- Inconsistent performance outcomes or communication gaps.

Case Study 2: Managing Change with the ADKAR Model

Q1: What are the five components of the ADKAR model and what does each represent?

- Awareness – understanding the need for change.
- Desire – willingness to support and engage in the change.
- Knowledge – information on how to change.
- Ability – skills and behaviors needed to implement the change.
- Reinforcement – sustaining the change through rewards and recognition.

Q2: How can the ADKAR model be applied to both technical and cultural changes?

- It supports mindset and behavior shifts required for cultural transformation.
- It structures the rollout of tools and practices in technical transitions.
- It ensures people are emotionally and practically prepared.

Q3: What practical steps can managers take to support each ADKAR stage?

- Awareness: Clearly communicate the reason for change.
- Desire: Involve employees in planning and decision-making.
- Knowledge: Provide training, resources, and documentation.
- Ability: Offer coaching, tools, and hands-on practice.
- Reinforcement: Celebrate success and offer continuous support.

Q4: How can employee feedback help identify barriers in the change process?

- It highlights confusion, fears, or skill gaps.
- Enables leadership to address concerns proactively.
- Builds a sense of ownership and trust.

Q5: Why is it important to monitor progress beyond the initial implementation phase?

- Ensures lasting adoption and behavioral change.
- Identifies areas where backsliding may occur.
- Encourages continuous improvement and reinforcement.

Case Study 3: Understanding the Value of Information

Q1: What is the difference between data, information, knowledge, and wisdom? Give examples for each.

- Data: Raw facts (e.g., "92, 75, 88").
- Information: Organized data (e.g., "Student scores in a test").
- Knowledge: Interpretation (e.g., "Average score is below target").
- Wisdom: Informed decisions (e.g., "Redesign teaching method to improve scores").

Q2: Why is it important to evaluate the quality and context of information before using it?

- Prevents reliance on biased or outdated content.
- Improves the accuracy and relevance of decisions.
- Ensures ethical and academic integrity.

Q3: What are common causes of plagiarism in IT assignments, and how can it be avoided?

- Causes: Poor time management, lack of understanding, or deliberate dishonesty.
- Solutions: Provide clear guidelines, use plagiarism detection tools, and educate students on referencing.

Q4: How does proper citation and referencing contribute to responsible use of information?

- Gives credit to original authors.
- Demonstrates research effort and academic honesty.
- Allows others to verify or explore sources.

Q5: How can academic institutions use technology to detect and reduce plagiarism?

- Use software like Turnitin or Grammarly.
- Employ AI-based tools to analyze writing patterns.
- Create awareness through digital literacy programs.

Case Study 4: Planning Research for IT Service Improvement

Q1: What are the differences between primary and secondary research in an IT context?

- Primary: Directly collected data (e.g., surveys, interviews, usability testing).
- Secondary: Existing data (e.g., academic papers, case studies, industry reports).

Q2: Which research method would be more suitable for gathering direct feedback from end-users, and why?

- Primary research, as it captures current user needs, pain points, and behaviors directly.
- It allows customized data collection for a specific context.

Q3: How can literature reviews support early-stage planning in IT projects?

- Help identify knowledge gaps and proven practices.
- Avoid duplication of effort.
- Build a strong foundation for project justification.

Q4: Why is statistical analysis important when interpreting survey or experimental data?

- Converts raw data into meaningful insights.
- Validates assumptions with evidence.
- Reduces bias and increases objectivity.

Q5: What role does data visualization (e.g., charts, graphs) play in presenting research findings to stakeholders?

- Simplifies complex information.
- Aids in quick decision-making.
- Enhances engagement and understanding across roles.

Case Study 5: Estimating Software Size with Function Point Metrics

Q1: What are the key components considered in calculating function points?

- External Inputs (EI), External Outputs (EO), External Inquiries (EQ), Internal Logical Files (ILF), External Interface Files (EIF).

Q2: How does Function Point Analysis differ from Lines of Code as a sizing technique?

- FPA measures functionality from a user perspective.
- It is language-independent, while LOC depends on programming style and technology.
- FPA is more useful early in the software development life cycle.

Q3: How can function points be used to support better cost estimation and effort allocation?

- Helps estimate development effort, resources, and timelines.
- Useful for vendor pricing and productivity tracking.
- Improves budgeting and risk management.

Q4: Why might function point metrics be challenging to apply to modern software systems with APIs, microservices, and third-party integrations?

- Modern architectures are decentralized and event-driven.
- Many features are handled outside the core system.
- Function boundaries may not be clearly defined.

Q5: What factors could lead to inaccurate function point estimations?

- Incomplete or vague requirements.
- Misinterpretation of user-facing functionality.
- Lack of collaboration between analysts and developers.