

Chapter 1: The Nature of Information Technology Projects

Learning Objectives:

- ☐ Understand why information technology (IT) projects are organizational investments.
- ☐ Understand why projects are planned organizational change and why they must align with an organization's business strategy.
- ☐ Define what a project is and describe the attributes of a project.
- ☐ Define the discipline called project management.
- ☐ Understand the relationship among project portfolios, programs, and projects.
- ☐ Understand how the disciplines of information technology and project management have evolved together and have led to how we manage projects today
- ☐ Understand the current state of IT project management.
- ☐ Understand why some projects fail and how to improve the likelihood of success.

True/False

1. Information Technology Projects are organizational investments.
2. A project can be defined as a temporary endeavor undertaken to accomplish a unique purpose.
3. A project sponsor is responsible for ensuring that all of the project management and technical development processes are in place and being carried out within a set of specific requirements, defined processes, and quality standards.
4. Assumptions are what we use to estimate scope, schedule and budget and to assess the risks of the project.
5. Project management is the application of knowledge, skills, tools, and techniques to project activities in order to meet project requirements.

6. Projects are planned organizational change. Therefore, the project manager and team do not need to worry about the political climate within the organization because top management has a firm understanding of the organization's culture, environment, politics, etc.

7. The *Guide to the Project Management Body of Knowledge* provides a basis for identifying and describing the generally accepted principles of project management.

8. The Data Processing Era that began in the 1960's focused on automating many of the organizational transactions such as general accounting, inventory management, and production scheduling with the aid of a centralized mainframe or mini computers.

9. The Micro Era that started in the 1980's provided a smooth transition from large centralized computers to the personal computer that was widely welcomed by data processing managers who believed the replication of data throughout the organization would provide added backup and security.

10. The rise of islands of independent that replicated data throughout the organization during the Micro Era in the 1980's often challenged the centralized control of many data processing managers.

11. During the Network Era, IT projects have focused primarily on the challenge of creating a scalable IT infrastructure to support many partners, strategic alliances, vendors, and customers.

12. According to the CHAOS studies most IT projects are completed on time and on budget.

13. According to the CHAOS studies, more IT projects are becoming increasing successful, but there is still a need to improve the likelihood of success.

14. According to the CHAOS studies, user involvement and executive support tend to be important factors for successful projects.

15. According to the Standish Group, it appears that most project today fail not because of technology, but from a lack of user involvement and incomplete resources.

16. The Socio-Technical Approach has been adopted by many organizations because successful projects require a pure technical approach that focuses on the tools, techniques, and methodologies of IT development.

17. IT projects must provide value an organization.

18. Only the most successful projects are likely to lead to best practices.

Multiple Choice

1. A project _____
 - a) is a temporary endeavor undertaken to accomplish a unique product, service, or result.
 - b) is an ongoing activity that provides value to the organization.
 - c) must be completed on time and on budget to be successful.
 - d) does not usually have a deadline.
 - e) has a high likelihood of success.

2. The project manager is _____
 - a) responsible for ensuring that all management and technical processes are in place and carried out.
 - b) the client, customer, or organizational manager who acts as the project champion and provides organizational resources and direction.
 - c) the user or client who has specific knowledge, expertise, or insight in a specific functional area needed to support the project.
 - d) provides the technical solution to the organizational problem and may include systems analysts, network specialists, or programmers.
 - e) the person responsible for final acceptance of the application.

3. The project sponsor is _____
 - a) responsible for ensuring that all management and technical processes are in place and carried out.
 - b) the client, customer, or organizational manager who acts as the project champion and provides organizational resources and direction.
 - c) the user or client who has specific knowledge, expertise, or insight in a specific functional area needed to support the project.
 - d) provides the technical solution to the organizational problem and may include systems analysts, network specialists, or programmers.
 - e) the person responsible for final acceptance of the application.

4. The subject matter expert is _____

- a) responsible for ensuring that all management and technical processes are in place and carried out.
- b) the client, customer, or organizational manager who acts as the project champion and provides organizational resources and direction.
- c) the user or client who has specific knowledge, expertise, or insight in a specific functional area needed to support the project.
- d) provides the technical solution to the organizational problem and may include systems analysts, network specialists, or programmers.
- e) the person responsible for final acceptance of the application.

5. The technical expert is _____

- a) responsible for ensuring that all management and technical processes are in place and carried out.
- b) the client, customer, or organizational manager who acts as the project champion and provides organizational resources and direction.
- c) the user or client who has specific knowledge, expertise, or insight in a specific functional area needed to support the project.
- d) provides the technical solution to the organizational problem and may include systems analysts, network specialists, or programmers.
- e) the person responsible for final acceptance of the application.

6. ____ can arise from the estimation process or the stability of the project team.

- a) Internal risks
- b) External risks
- c) Assumptions
- d) Cost overruns
- e) None of these

7. Which of the following organizational variables can influence the selection of IT projects?

- a) culture
- b) environment
- c) politics
- d) strategy
- e) all of these

8. The EDP era _____

- a) Began in the early 1980s with the personal computer
- b) Began in the 1960s when large organizations first purchased a centralized mainframe or minicomputer.
- c) Began in the 1990s when many organizations sought to regain control of the IT department and hired a Chief Data Processing Officer
- d) Is credited to the U.S. Navy when it used a project management approach to manage the Polaris missile project.
- e) Began in the late 1960s and early 1970s with a defense project called ARPANET that eventually led to the Internet.

9. The Micro era _____

- a) Began in the early 1980s with the personal computer
- b) Began in the 1960s when large organizations first purchased a centralized mainframe or minicomputer.
- c) Began in the 1990s when many organizations sought to regain control of the IT department and hired a Chief Data Processing Officer
- d) Is credited to the U.S. Navy when it used a project management approach to manage the Polaris missile project.
- e) Began in the late 1960s and early 1970s with a defense project called ARPANET that eventually led to the Internet.

10. The Network era _____

- a) Began in the early 1980s with the personal computer
- b) Began in the 1960s when large organizations first purchased a centralized mainframe or inicomputer.
- c) Began in the 1990s when many organizations sought to regain control of the IT department and hired a Chief Data Processing Officer
- d) Is credited to the U.S. Navy when it used a project management approach to manage the Polaris missile project.
- e) Began in the late 1960s and early 1970s with a defense project called ARPANET that eventually led to the Internet.

11. The desire to fund a project should be based upon _____

- a) time savings
- b) resource constraints
- c) cost savings
- d) the value the completed project will provide to an organization.
- e) None of these

12. According to the CHAOS studies, IT projects _____

- a) Are always over-budget and over schedule
- b) Are always succesful even though they can be chaotic
- c) Project success is improving because of better project management tools and processes, smaller projects, and improved communication
- d) Project failure is increasing because because of a lack of available resources and due to a shortage of highly trained technical people
- e) None of these

13. The top factors to project success as reported by the CHAOS studies focus on _____

- a) innovative and cutting edge technology
- b) clear ownership of the project
- c) competent staff and new technologies
- d) user involvement and executive support
- e) proper planning and changing requirements

14. According to the CHAOS studies, which of the following factors tend to be most prevelant for challenged or failed projects?

- a) Lack of user input and incomplete requirements
- b) New technologies
- c) Lack of interest by the customer
- d) Shortage of highly trained technical experts
- e) Lack of subject matter experts (SME)

15. The Value-Driven Approach focuses on _____

- a) completing the project on time.
- b) a bug-free application.
- c) providing value to the organization.
- d) completing the project under budget.
- e) selecting the right team members, skill sets, and resources for the project.

16. The Socio-Technical Approach focuses on ____
- a) the technology used to implement the project.
 - b) using technology to meet the needs of the business.
 - c) the tools, techniques, and methodologies to develop the application.
 - d) cost considerations.
 - e) selecting the right team members, skill sets, and resources for the project.

17. The benefits, described in the text, of using a project management approach to developing information systems include all of the following **except**,

- a) providing a common set of tools and controls which provides a common language to compare projects throughout the organization
- b) the ability to better estimate and control costs and schedules which leads to a more effective conservation of company resources
- c) improved communication and status reports leads giving the developers the ability to manage expectations of stakeholders
- d) competitive advantage for internal developers whose work might have to be outsourced if the quality and cost of their work can be bettered by outside competition
- e) the coupling of project success to the selection of team members and the skill sets and resources that they bring to the project.

18. The following statements about knowledge management (KM) are true *except*,

- a) KM is a well defined body of knowledge with an established theoretical base.
- b) KM is a systematic process for acquiring, creating, synthesizing, sharing, and using information.
- c) Many organizations have KM initiatives underway and spending on these systems is expected to increase.
- d) Many organizations believe KM is just a fad or a buzzword
- e) KM is one of the three approaches the text points to for improving the likelihood of IT project success.

19. A value-driven approach to project management means ____

- a) Applying project management tools and processes that are part of a methodology
- b) Taking a purely technical approach to projects that focuses mainly on the technology
- c) Deriving excellence in project management by documenting lessons learned and developing best practices
- d) Applying knowledge, skills, tools, and techniques to project activities to meet project requirements
- e) Measuring project success in terms of the value the project brings to the organization and not only in terms of meeting the project schedule and budget