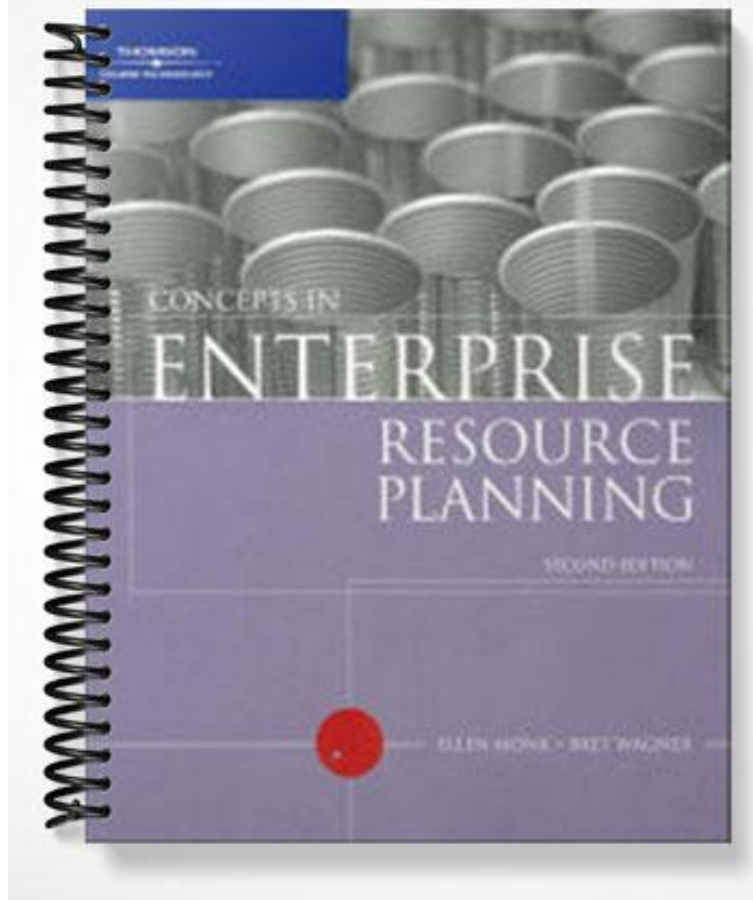


TEST BANK



ch02

True/False

Indicate whether the statement is true or false.

- 1. The complex hardware and software that goes into an ERP system was not available until the 1970s.
- 2. The capabilities of computer hardware doubling every 18 months is known as Gates' Law.
- 3. Scalability refers to a piece of equipment's capacity being exceeded and that capacity being expanded by adding new hardware.
- 4. The software that holds data in an organized fashion is known as a database management system, or a DBMS.
- 5. Materials requirements planning (MRP) software allows a plant manager to plan production and raw materials requirements by guess-timation.
- 6. The direct computer-to-computer exchange of standard business documents is known as EDI, or electronic data interchange.
- 7. The functional model of business and management was useful for decades and is still the current school of thought.
- 8. SAP's first software project involved developing a materials and logistics management system for ICI.
- 9. SAP expanded into international markets but kept the software in a single language, German, and a single currency, the Euro.
- 10. SAP's R/3 can only run on mainframe computers.
- 11. Old systems are known as legacy systems.
- 12. Open architecture is defined as allowing third-party software vendors to write software to integrate with the main package, such as SAP's R/3.
- 13. The Oracle corporation began selling ERP software; they recently acquired a firm known for its database management systems.
- 14. Defining the dollar limits on transactions in the SAP R/3 system is known as limiting the tolerance groups.
- 15. SAP R/3 was the first software that could deliver ERP integration.
- 16. R/3's design incorporates best practices, which means the designers have chosen the best, most efficient way in which a business process should be handled.
- 17. Companies who opt to integrate modules from different ERP vendors are said to choose the best in show.
- 18. One benefit of ERP systems is the elimination of updating and repairing many separate computer systems.
- 19. A large company might spent \$1 million on ERP implementation, which includes software and training.
- 20. Not every company is suited to ERP systems.
- 21. SAP's internal programming language is visual basic.
- 22. The return on investment (ROI) is an assessment of an investment's project's value that is calculated by dividing the value of the project's benefits by the value of the project's cost.

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ___ 23. The complex software and hardware required for ERP systems was not available until the
- a. 1960s
 - b. 1970s
 - c. 1980s
 - d. 1990s
- ___ 24. The observation that the number of transistors built onto a computer chip doubles every 18 months is known as:
- a. Moore's Law
 - b. Gate's Prophecy
 - c. Doubling
 - d. Acceleration
- ___ 25. When a piece of equipment's capacity is exceeded, its capacity can be increased by adding new hardware. This is commonly known as:
- a. Adaptability
 - b. Middleware
 - c. Scalability
 - d. Computability
- ___ 26. In the 1980s, ____, the technology that holds data in an organized fashion, existed for ERP development.
- a. Spreadsheets
 - b. DBMS
 - c. Client/Server
 - d. Word-processors
- ___ 27. ____ software allows a plant manager to plan production and raw materials requirements by working backward from the sales forecast.
- a. DBMS
 - b. EDI
 - c. MRP
 - d. EFT
- ___ 28. The direct computer-to-computer exchange of standard business documents is known as:
- a. MRP
 - b. E-mail
 - c. EDI
 - d. DDS
- ___ 29. Software ____ are individual programs that can be purchased, installed, and run separately, but extract data from the common database.
- a. Nodes
 - b. Chunks
 - c. Modules
 - d. Tidbits
- ___ 30. When third party software companies are able to write software to integrate with an ERP system, it is said to have:
- a. Open architecture
 - b. Clip-ons
 - c. Integrated pieces
 - d. Piecemeal nodes
- ___ 31. Old information and computer systems are known as:
- a. Dinosaurs
 - b. Passe systems
 - c. Legacy systems
 - d. Aged ones
- ___ 32. ____ is SAP's biggest competitor.
- a. J.D. Edwards
 - b. PeopleSoft
 - c. Microsoft
 - d. Oracle
- ___ 33. Which R/3 module records sales orders?
- a. SD
 - b. MM
 - c. PP
 - d. QM
- ___ 34. Which R/3 module records transactions in the general ledger?
- a. CO
 - b. WF
 - c. FI
 - d. PS
- ___ 35. After a company chooses the modules they want to implement, they must decide on about ____ options, which allow the customer to customize the modules to fit their business to some extent.
- a. Settings
 - b. Customizations
 - c. Optional
 - d. Add-ons

52. Old systems are known as _____.
53. SAP's biggest competitor is _____.
54. In an ERP system, all modules access the _____.
55. After a company chooses its major modules, it chooses from an assortment of _____ options.
56. R/3's design incorporates _____, which means that R/3 designers choose the best, most efficient ways in which business processes should be handled.
57. The _____ approach is when companies install modules from various ERP vendors.
58. SAP's internal programming language is _____.
59. An assessment of an investment's project value that is calculated by dividing the value of the project's benefits by the value of the project's cost is known as a(n) _____.
60. The statistical and logical analysis of large sets of transaction data is known as _____.
61. _____ is the conducting of business over the Internet.

Essay

62. Besides the fact that ERP systems are integrated information systems and lead to more efficient business processes, there are other benefits. Outline them.
63. Discuss the various costs associated with the implementation of an ERP system for a large company and for a midsize company. How long does implementation take?
64. Discuss the reasons behind a bumpy rollout of an ERP system. Cite some real examples.

ch02

Answer Section

TRUE/FALSE

1.	ANS: F	PTS: 1	REF: 18
2.	ANS: F	PTS: 1	REF: 19
3.	ANS: T	PTS: 1	REF: 20
4.	ANS: T	PTS: 1	REF: 20
5.	ANS: F	PTS: 1	REF: 20
6.	ANS: T	PTS: 1	REF: 20
7.	ANS: F	PTS: 1	REF: 21
8.	ANS: T	PTS: 1	REF: 23
9.	ANS: F	PTS: 1	REF: 23
10.	ANS: F	PTS: 1	REF: 24
11.	ANS: T	PTS: 1	REF: 24
12.	ANS: T	PTS: 1	REF: 24
13.	ANS: F	PTS: 1	REF: 25
14.	ANS: T	PTS: 1	REF: 28
15.	ANS: T	PTS: 1	REF: 29
16.	ANS: T	PTS: 1	REF: 30
17.	ANS: F	PTS: 1	REF: 30
18.	ANS: T	PTS: 1	REF: 32
19.	ANS: F	PTS: 1	REF: 32
20.	ANS: T	PTS: 1	REF: 33
21.	ANS: F	PTS: 1	REF: 33
22.	ANS: T	PTS: 1	REF: 34

MULTIPLE CHOICE

23.	ANS: D	PTS: 1	REF: 18
24.	ANS: A	PTS: 1	REF: 19
25.	ANS: C	PTS: 1	REF: 20
26.	ANS: B	PTS: 1	REF: 20
27.	ANS: C	PTS: 1	REF: 20
28.	ANS: C	PTS: 1	REF: 20
29.	ANS: C	PTS: 1	REF: 23
30.	ANS: A	PTS: 1	REF: 24
31.	ANS: C	PTS: 1	REF: 24
32.	ANS: D	PTS: 1	REF: 25
33.	ANS: A	PTS: 1	REF: 27
34.	ANS: C	PTS: 1	REF: 27
35.	ANS: B	PTS: 1	REF: 28
36.	ANS: D	PTS: 1	REF: 30
37.	ANS: D	PTS: 1	REF: 32

38. ANS: C PTS: 1 REF: 32
39. ANS: D PTS: 1 REF: 33
40. ANS: C PTS: 1 REF: 34
41. ANS: B PTS: 1 REF: 35
42. ANS: C PTS: 1 REF: 39
43. ANS: C PTS: 1 REF: 39

COMPLETION

44. ANS: Moore's Law
PTS: 1 REF: 19
45. ANS: scalable
PTS: 1 REF: 20
46. ANS:
database management system
DBMS
database management system (DBMS)
DBMS (database management system)
PTS: 1 REF: 20
47. ANS:
Materials requirements planning
MRP
Materials requirements planning (MRP)
MRP (materials requirements planning)
PTS: 1 REF: 20
48. ANS: sales forecast
PTS: 1 REF: 20
49. ANS:
Electronic data interchange
EDI
Electronic data interchange (EDI)
EDI (electronic data interchange)
PTS: 1 REF: 20
50. ANS: Systems Analysis and Program Development
PTS: 1 REF: 23
51. ANS: open architecture
PTS: 1 REF: 24
52. ANS: legacy systems
PTS: 1 REF: 24
53. ANS: Oracle

- PTS: 1 REF: 25
54. ANS: central database
- PTS: 1 REF: 26
55. ANS: configuration
- PTS: 1 REF: 28
56. ANS: best practices
- PTS: 1 REF: 30
57. ANS: best of breed
- PTS: 1 REF: 30
58. ANS:
ABAP
Advanced Business Application Programming
ABAP (Advanced Business Application Programming)
Advanced Business Application Programming (ADAB)
- PTS: 1 REF: 33
59. ANS:
ROI
return on investment
ROI (return on investment)
return on investment (ROI)
- PTS: 1 REF: 34
60. ANS: data mining
- PTS: 1 REF: 39
61. ANS:
E-commerce
Electronic commerce
E-commerce (electronic commerce)
Electronic commerce (e-commerce)
- PTS: 1 REF: 39

ESSAY

62. ANS:

The significance of ERP lies in its many benefits. As was previously mentioned, integrated information systems can lead to more efficient business processes that cost less than those in unintegrated systems. ERP systems have these benefits as well:
ERP allows easier global integration: Barriers of currency exchange rates, language, and culture can be bridged automatically, so data can be integrated.

ERP not only integrates people and data, but it also eliminates updating and repairing many separate computer systems. For example, Boeing had 450 data systems that fed data into its production process. The company now has a single way to record production data.

ERP allows management to manage operations, not just monitor them. For example, without ERP, getting an answer to "How are we doing?" requires getting data from each business unit and then putting the data together for a comprehensive, integrated picture. The ERP system already has all the data, allowing the manager to focus on improving processes. This focus enhances management of the company as a whole, and makes the organization more adaptable when change is required.

PTS: 1 REF: 32

63. ANS:

Cost of an ERP system includes several factors:

The size of the ERP software, which corresponds to the size of the company it serves

New hardware that is capable of running complex ERP software

Consultants' and analysts' fees

Time for implementation (which causes disruption of business)

Training (which costs both time and money)

A large company, one with well over 1,000 employees, will likely spend \$50 million to \$500 million for an ERP system with operations involving multiple countries, currencies, languages and tax laws. Such an installation might cost as much as \$30 million in software license fees, \$200 million in consulting fees, additional millions to purchase new hardware, and even more millions to train managers and employees. In addition, full implementation of the new system might take four to six years.

A midsize company (one with fewer than 1,000 employees) might spend \$10 million to \$20 million in total implementation costs and have its ERP system up and running in about two years.

PTS: 1 REF: 32

64. ANS:

Some reports indicate that only a low percentage of companies experience a smooth rollout of their new ERP systems and immediately begin receiving the benefits they anticipate. You should put such reports into perspective. All kinds of software implementations can suffer from delays, cost overruns, and performance problems, not just ERP projects. Such delays have been a major problem for the IS industry since the early days of business computing. Nevertheless, it is worth thinking specifically about why ERP installation problems can occur.

There are numerous cases of implementation woes in the press. W.L. Gore, the maker of GoreTex, had some problems implementing its PeopleSoft system for personnel, payroll, and benefits. The manufacturer sued PeopleSoft, Deloitte & Touche LLP, and Deloitte Consulting for incompetence. W.L. Gore blamed the consultants for not understanding the system and leaving its personnel department in a mess.

PeopleSoft consultants were brought in to fix the problems, but the fix cost W.L. Gore additional hundreds of thousands of dollars. Hershey foods had a rough rollout of its ERP system in 1999, due to what experts say was the "Big Bang" approach to implementation, in which huge pieces of the system are implemented all at once. Companies rarely use this approach because it is so risky. Hershey lost a large share of the Halloween candy market that year due to ERP problems from this poor implementation.

Usually, a bumpy rollout and low ROI are caused by people problems and misguided expectations, not computer malfunctions. For example:

Some executives blindly hope that new software will cure fundamental business problems that are not curable by any software.

Some executives and IT managers don't take enough time for a proper analysis during the planning and implementation phase.

Some executives and IT managers skimp on employee education and training.

Some companies do not place the ownership or accountability for the implementation project on the personnel who will operate the system. This lack of ownership can lead to a situation where the implementation becomes an IT project rather than a company-wide project.

Unless a large project like an ERP installation is promoted from the top down, it is doomed to fail. The top executives have to be behind the project 100 percent for it to be successful.

ERP implementation brings a tremendous amount of change for the users. Managers need to manage that change well so that the implementation goes smoothly.

Many ERP implementation experts stress the importance of proper education and training for both employees and managers. Most people will naturally resist changing the way they've done their jobs.

Many analysts have noted that active top management support is crucial for successful implementation. Some companies willingly part with funds for software and new hardware, but don't properly budget for employee training. ERP software is complex and can be intimidating at first. This fact alone supports the case for adequate training. Typically, ERP training costs \$10,000 to \$20,000 per employee. Some analysts recommend allocating 11 percent of the project's budget for training. The cost includes training employees on how to use the software to do their job, employees' nonproductive downtime during training, and—very important—educating employees about how the data they control affects the entire business operation.

Nestle has learned many lessons from its implementation of ERP systems. Its six-year, \$210 million project was initially headed for failure because Nestle didn't include on the implementation team any employees from the operating groups affected. Employees left the company, morale was down and help desk calls were up. After three years, the ERP implementation was temporarily stopped. Jeri Dunn, the vice president and CIO of Nestle USA learned that the project was not about implementing the software, but about change management. "When you move to SAP, you are changing the way people work... You are challenging their principles, their beliefs and the way they have done things for many, many years," said Dunn. Nestle ultimately reaped benefits from its ERP installation.

Most ERP installations do generate returns. Only 4 percent of managers reported that they had achieved all the benefits that they had anticipated from their ERP installation. Thirty-eight percent of managers have achieved the majority of benefits they expected, and 38 percent have achieved about half of the anticipated benefits.

PTS: 1

REF: 35-36