Test Bank for Concepts in Enterprise Resource Planning 4th Edition by Monk Wagner ISBN 1111820392 9781111820398 Full link download:

Test Bank:

Solution Manual:

Chapter 2: The Development of Enterprise Resource Planning Systems

TRUE/FALSE

1. Individual information systems for each functional area in a company are known as silos.

   ANS: T   PTS: 1   REF: 20

2. Silos of information are also known as stovepipes.

   ANS: T   PTS: 1   REF: 20

3. The complex hardware and software that goes into an ERP system was not available until the 1970s.

   ANS: F   PTS: 1   REF: 21

4. The capabilities of computer hardware doubling every 18 months is known as Gates' Law.

   ANS: F   PTS: 1   REF: 21

5. Scalability means that the capacity of a piece of equipment can be increased by adding new hardware.

   ANS: T   PTS: 1   REF: 22

6. The software that holds data in an organized fashion is known as a database management system, or a DBMS.

   ANS: T   PTS: 1   REF: 22

7. Materials requirements prediction (MRP) software allows a plant manager to plan production and raw materials requirements by guess-timation.

    ANS: F   PTS: 1   REF: 23

8. The direct computer-to-computer exchange of standard business documents is known as EDI, or electronic data interchange.

    ANS: T   PTS: 1   REF: 23

9. The functional model of business and management was useful for decades and is still the current school of thought.

    ANS: F   PTS: 1   REF: 24

10. SAP expanded into international markets but kept the software in a single language, German, and a single currency, the Euro.

    ANS: F   PTS: 1   REF: 26

11. SAP's R/3 can only run on mainframe computers.

    ANS: F   PTS: 1   REF: 27

12. SAP's goal was to develop a standard software product that could be configured to meet the needs of each company.

    ANS: T   PTS: 1   REF: 26

13. Old systems are known as legacy systems.

    ANS: T   PTS: 1   REF: 27

14. Open architecture encourages software companies are encouraged to develop add-on software products that can be integrated with existing software, such as SAP's R/3.

    ANS: T   PTS: 1   REF: 27

15. In the accompanying figure, data is entered into the system once and then used throughout the organization.

Figure 2-4 Data flow within an integrated information system

ANS: T   PTS: 1   REF: 29

16. An ERP system allows data to be entered once, and then used throughout the organization.

ANS: T   PTS: 1   REF: 29

17. An ERP module is a module that automates a specific business function.

ANS: F   PTS: 1   REF: 31

18. A company's level of data integration is highest when the company uses one vendor to supply all of its ERP modules.

ANS: T   PTS: 1   REF: 31

19. An important consideration in minimizing the risk of fraud and abuse is defining limits on the dollar value of business transactions that certain employees can process.

ANS: T   PTS: 1   REF: 32

20. A best practice is the best, most efficient way of handling a certain business process.

ANS: T   PTS: 1   REF: 34

21. One benefit of ERP systems is that ERP integrates people and data while eliminating the need to update and repair many separate computer systems.

ANS: T   PTS: 1   REF: 36

22. A large company will likely spent $1 million on ERP implementation, which includes software and training.

ANS: F   PTS: 1   REF: 37

23. Not every company is a good match with the constraints inherent in ERP.

ANS: T   PTS: 1   REF: 37

24. SAP's internal programming language is Visual Basic.

ANS: F   PTS: 1   REF: 38

25. A return on investment (ROI) is an assessment of an investment project's value, calculated by dividing the value of the project's benefits by the project's cost.

ANS: T   PTS: 1   REF: 39

MULTIPLE CHOICE

1. Individual information systems for each functional area in a company are known as:
   a. silos c. tubers
   b. bagpipes d. separated systems

   ANS: A   PTS: 1   REF: 20

2. The complex software and hardware required for ERP systems was not available until the
   a. 1960s c. 1980s
   b. 1970s d. 1990s

   ANS: D   PTS: 1   REF: 21

3. The observation that the number of transistors built onto a computer chip doubles every 18 months is known as:
   a. Moore's Law   c. Doubletake
   b. Gate's Prophesy   d. Acceleration

   ANS: A   PTS: 1   REF: 21

4. 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 c. scalability
   b. middleware d. computability

ANS: C   PTS: 1   REF: 22

5. In the 1980s,_____, the technology that holds data in an organized fashion, existed for ERP development.
    a. spreadsheets   c. client/server architecture
    b. DBMS   d. word-processors

    ANS: B   PTS: 1   REF: 22

6. _____software allows a plant manager to plan production and raw materials requirements by working backward from the sales forecast.
    a. DBMS   c. MRP
    b. EDI   d. EFT

    ANS: C   PTS: 1   REF: 23

7. The direct computer-to-computer exchange of standard business documents is known as:
    a. MRP   c. EDI
    b. e-mail   d. DDS

    ANS: C   PTS: 1   REF: 23

8. In a process-oriented company, the flow of information and management activity is_____, in line with the flow of materials and products. a. horizontal across functions
    b. vertical from top level management down through the hierarchical management structure c. vertical through functions
    d. horizontal from marketing and sales to inventory and production

    ANS: A   PTS: 1   REF: 24

9. Software_____are individual programs that can be purchased, installed, and run separately, but extract data from the common database.
    a. nodes   c. modules
    b. chunks   d. tidbits

    ANS: C   PTS: 1   REF: 26

10. In_____, third-party software companies are encouraged to develop add-on software products that can be integrated with existing software.
    a. open architecture   c. integrated pieces
    b. clip-ons   d. piecemeal nodes

ANS: A   PTS: 1   REF: 27

11._____is SAP's biggest competitor.
   a. J.D. Edwards   c. Microsoft
   b. PeopleSoft   d. Oracle

ANS: D   PTS: 1   REF: 28

12. Old information and computer systems are known as_____.
    a. dinosaurs   c. legacy systems
    b. passe systems   d. relics

ANS: C   PTS: 1   REF: 27

13. Which ERP package is a popular software choice for managing human resources and financial activities at universities?
    a. SAP   c. Microsoft Dynamics
    b. PeopleSoft   d. J.D. Edwards

ANS: B   PTS: 1   REF: 27-28

14. Which R/3 module records sales orders?
    a. SD   c. PP
    b. MM   d. QM

ANS: A   PTS: 1   REF: 29

15. Which of the following modules in SAP ERP maintains production information?
    a. SD   c. PP
    b. MM   d. QM

ANS: C   PTS: 1   REF: 29

16. The_____module helps the company manage fixed-asset purchases (plant and machinery) and related depreciation.
    a. Plant Maintenance   c. Materials Management
    b. Asset Management   d. Product Planning

ANS: B   PTS: 1   REF: 30

17. Which of the following module in SAP is a set of tools that can automate the activities in SAP ERP?
    a. Workflow   c. Financial Accounting

b.   Controlling   d. Project System

18. When top management is queried on the reasons for implementing ERP systems, the overriding answer
     is_____.
     a.   cost saving   c. increased profitability
     b.   control   d. inventory management

19. Which R/3 module records transactions in the general ledger?
     a.   CO   c. FI
     b.   WF   d. PS

20. After a company chooses the modules they want to implement, they must decide on_____options, which
     allow the customer to customize the modules to fit their business to some extent.
     a.   settings c. flexible
     b.   configuration   d.   tandem

21. As part of the_____process, a company can define any number of tolerance groups with a range of
     limits, and can then assign employees to these tolerance groups.
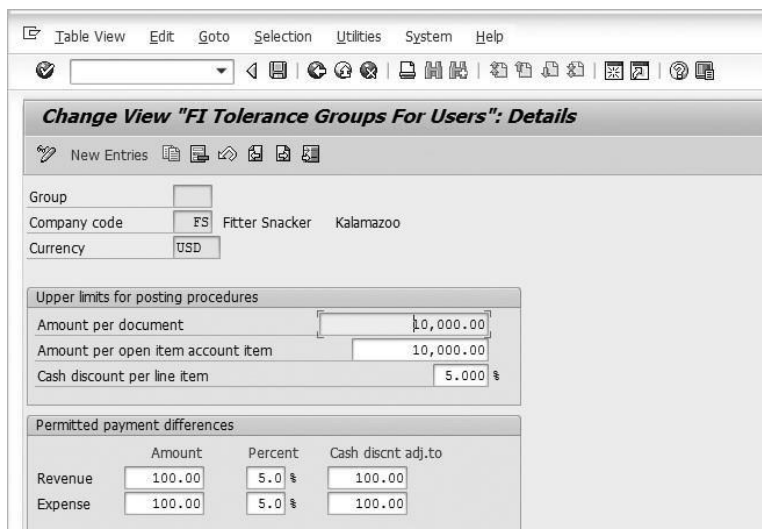
Figure 2-6 A customization example: tolerance groups to set transaction limits

     a.   manufacturing   c. configuration

b. development   d. programming

ANS: C   PTS: 1   REF: 32

22. Which of the following is a benefit to running an ERP system?
    a. Global integration
    b. Elimination of updating and repairing multiple systems
    c. Capability to manage operations, not just monitor them
    d. All of the above are benefits

ANS: D   PTS: 1   REF: 36

23. An ERP system for a large company will cost_____, including software, training, and implementation.
    a. $100-500 million   c. $1-5 billion
    b. $1-5 million   d. $50,000-$500,000

ANS: A   PTS: 1   REF: 37

24. SAP's internal programming language is called:
    a. R/3   c. Visual Basic
    b. C++   d. ABAP

ANS: D   PTS: 1   REF: 38

25. One assessment of a project's value is calculated by the:
    a. DVT   c. ROI
    b. PMT   d. PPT

ANS: C   PTS: 1   REF: 39

26. Bumpy rollouts of ERP systems are usually caused by:
    a. software problems   c. hardware problems
    b. people problems   d. configuration problems

ANS: B   PTS: 1   REF: 40

COMPLETION

1. _____ states that the number of transistors on a computer chip doubles every 24 months.

ANS: Moore's Law

PTS: 1   REF: 21

2. A central-local computer arrangement is called_____architecture.

    ANS:
    client server client/server
    client-server

    PTS: 1   REF: 22

3. _____ means that the capacity of a piece of equipment can be increased by adding
    new hardware.

    ANS:
    Scalable
    Scalability

    PTS: 1   REF: 22

4. The software that holds that data in an organized fashion, and that allows for the easy retrieval of data, is
    the_____.

    ANS:
    database management system
    DBMS
    database management system (DBMS)
    DBMS (database management system)

    PTS: 1   REF: 22

5. _____software allows a plant manager to plan production and raw materials
    requirements by working backward from the sales forecast.

    ANS: MRP
    material requirements planning material
    requirements planning (MRP)
    MRP (material requirements planning)

    PTS: 1   REF: 23

6. The prediction of future sales is the_____.

    ANS: sales forecast

    PTS: 1   REF: 23

7. _____is the direct computer-to-computer exchange of standard business documents.

    ANS:
    Electronic data interchange

EDI
Electronic data interchange (EDI)
EDI (electronic data interchange)

PTS: 1   REF: 23

8. Originially, in English, SAP was an acronym for_____.

    ANS: Systems Analysis and Program Development

    PTS: 1   REF: 25

9. In_____, third-party software companies are encouraged to develop add-on software products that can be integrated with existing software.

    ANS: open architecture

    PTS: 1   REF: 27

10. Old systems are known as_____.

    ANS: legacy systems

    PTS: 1   REF: 27

11. SAP's biggest competitor is_____.

    ANS: Oracle

    PTS: 1   REF: 28

12. The_____records sales orders and scheduled deliveries. Information about the customer (pricing, address and shipping instructions, billing details, and so on) is maintained and accessed from this module.

    ANS:
    Sales and Distribution
    SD
    Sales and Distribution (SD)
    SD (Sales and Distribution)

    PTS: 1   REF: 29

13. When data are entered into the system, data in all related files in the_____are automatically updated.

    ANS: central database

    PTS: 1   REF: 33

14. R/3's design incorporates_____, which means that R/3 designers choose the best, most efficient ways in which business processes should be handled.

   ANS: best practices

   PTS: 1   REF: 34

15. SAP's internal programming language is_____.

   ANS:
   ABAP
   Advanced Business Application Programming
   Advanced Business Application Programming (ABAP)
   ABAP (Advanced Business Application Programming)

   PTS: 1   REF: 38

16. _____help businesses customize the software to fit their unique needs.

   ANS: configuration

   PTS: 1   REF: 38

17. 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)_____.

   ANS: ROI
   return on investment return
   on investment (ROI)
   ROI (return on investment)

   PTS: 1   REF: 39

SHORT ANSWER

1. The accompanying figure depicts Moore's Law. What significance does this law have with regard to the development of ERP systems?
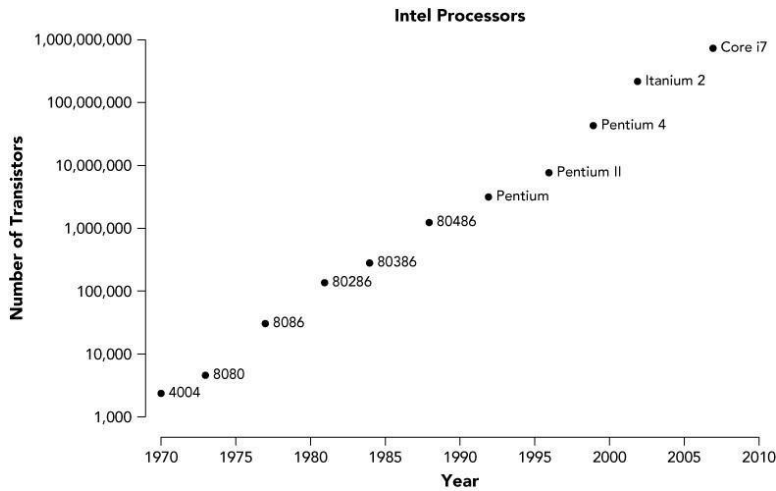
Figure 2-1 The actual increase in transistors on a chip approximates Moore's Law

ANS:
Computers had to be powerful enough to provide integrated, real time data for decision making

PTS: 1   REF: 21

2. Describe how information is exchanged between lower operating levels in the functional organization shown in the accompanying figure.
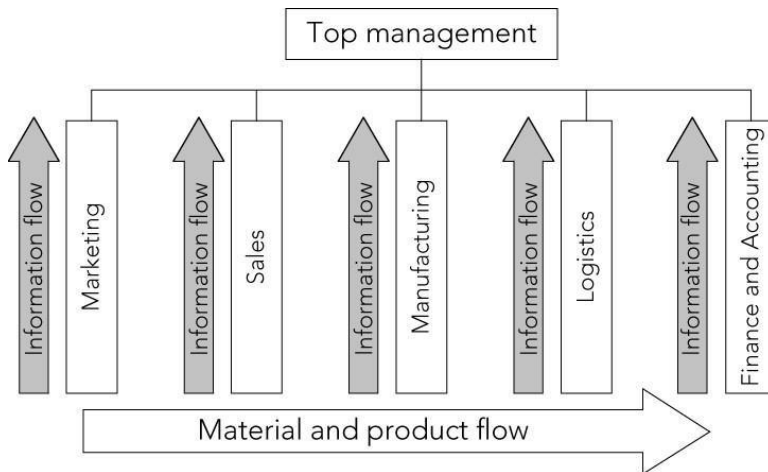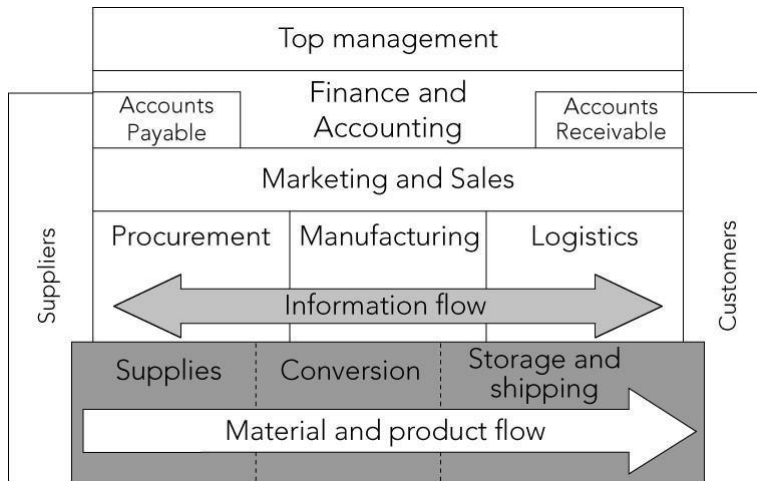

Figure 2-2 Information and material flows in the functional business model

ANS:
No exchange of information occurs between lower operating groups. Instead, exchange of information between operating groups is handled by top management which might not be knowledgeable about the functional area.

PTS: 1   REF: 24

3. Describe how information is exchanged between lower operating levels in the business process model shown in the accompanying figure:

Figure 2-3 Information and material flow in a process business model

ANS:
Information can flow between operating levels without top management's involvement.

PTS: 1   REF: 25

ESSAY

1. Besides the fact that ERP systems are integrated information systems and lead to more efficient business processes, there are other benefits. Outline them.

ANS:
The significance of ERP lies in its many benefits. Recall that integrated information systems can lead to more efficient business processes that cost less than those in unintegrated systems. In addition, ERP systems offer the following benefits:
- · ERP allows easier global integration. Barriers of currency exchange rates, language, and culture can be bridged automatically, so data can be integrated across international borders.
- · ERP integrates people and data while eliminating the need to update and repair many separate computer systems. For example, at one point, Boeing had 450 data systems that fed data into its production process; the company now has a single system for recording production data.
- · ERP allows management to actually 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 analyzing that data 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: 36

2. 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?

ANS:

The total cost of an ERP system implementation includes several factors, including the following:
·   The scale of the ERP software, which corresponds to the size of the company it serves

- · The need for new hardware capable of running complex ERP software
- · Consultants' and analysts' fees
- · Length of time required 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 $100 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—and full implementation of the new system could 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: 36-37

3. Discuss the reasons behind a bumpy rollout of an ERP system. Cite some real examples.

ANS:
You can find numerous cases of implementation woes in the news. W. L. Gore, the maker of GoreTex fabric, had 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 resolve the problems after implementation, but the fix cost W. L. Gore additional hundreds of thousands of dollars.

Hershey Foods (now The Hershey Company) had a rough rollout of its ERP system in 1999, due to its use of what experts call 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's order-processing and shipping departments had glitches that were being fixed as late as September. Because of that, Hershey lost a large share of the Halloween candy market that year.

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

- · Some executives blindly hope that new software will cure fundamental business problems that are not curable by any software. The root of a problem may lie in flawed core business processes. Unless the company changes its business processes, it will just be computerizing an ineffective way of doing business.
- · 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 in which the implementation becomes an IT project rather than a company-wide project.
- · Unless a large project such as an ERP installation is promoted from the top down, it is doomed to fail; top executives must be behind a project 100 percent if it is going to be successful.
- · A recent academic study attempting to identify the critical success factors of ERP implementations showed that a good project manager was critical and central to success of a project. In addition, training was crucial—along with a project champion, that is, someone who might not be in the CEO role but who brings enthusiasm and leadership to a project.
- · ERP implementation brings a tremendous amount of change for users of the system. Managers need to effectively manage that change in order to ensure a smooth implementation. Many ERP implementation experts emphasize the importance of proper education and training for both employees and managers. Most people will naturally resist changing the way they do their jobs. Many analysts have noted that active top management support is crucial for successful acceptance and implementation of such company-wide changes.

PTS: 1   REF: 40-41