***Business Intelligence***

1) When faced with a turbulent business environment, organizations are best able to survive or even excel by minimizing changes until the environment stabilizes.

Answer: FALSE

2) The management of Norfolk Southern, a large freight railroad company, invested in data warehousing technologies. Even though railroad transportation is a mature industry, Norfolk Southern gained a competitive advantage by using its data warehousing technologies to squeeze additional efficiency from its operations.

Answer: TRUE

3) Globalization has significantly reduced the complexity of the business environment. For example, companies can find suppliers and customers in many countries where materials are cheaper, which reduces competition and complexity.

Answer: FALSE

4) One of the major objectives of computerized decision support is to minimize the gap between the current performance of an organization and its desired performance.

Answer: TRUE

5) Decision support concepts have been implemented incrementally, under different names, by many vendors who have created tools and methodologies for decision support.

Answer: TRUE

6) Business intelligence (BI) is a narrow term that refers to specific architectures, tools, databases, analytical tools, applications, and methodologies.

Answer: FALSE

7) BI's major objective is to enable interactive access, sometimes in real time, to data, to enable manipulation of data, and to give business managers and analysts the ability to conduct appropriate analysis.

Answer: TRUE

8) BI system has four major components: data warehouse, business analytics, business performance management; and a user interface

Answer: TRUE

9) A BI system's components include a *decision support system* with source data; *business performance management (BPM)* for monitoring and analyzing performance; and a *user interface* such as a dashboard.

Answer: FALSE

10) In BI, data warehousing performs the monitoring and analyzing of performance.

Answer: FALSE

11) Only the most current data is stored in the data warehouse to keep BI current.

Answer: FALSE

12) End users can work with the data in a data warehouse by using reports, queries, and various data mining tools.

Answer: TRUE

13) The advantage of BPM is that it extends the monitoring, measuring, and comparing of sales, profit, cost, profitability, and other performance indicators by introducing prediction and forecasting capabilities.

Answer: FALSE

14) The benefits of dashboards are that they provide a comprehensive visual view of key performance indicators, trends, and exceptions.

Answer: TRUE

15) Dashboards and information portals are important BI data visualization tools.

Answer: TRUE

16) Automated decision systems (ADS) are rule-based systems that provide solutions to repetitive managerial problems, usually in one functional area (e.g., finance, manufacturing).

Answer: TRUE

17) Online Transaction Processing (OLTP) systems handle a company's routine on-going business. In contrast, a data warehouse is typically a distinct system that provides storage for data that will be made use of in analysis.

Answer: TRUE

18) One of the most important aspects of a successful BI is that it must be of benefit to the enterprise as a whole rather than a single manager or task.

Answer: FALSE

19) BI must be a technical exercise for the information systems department to insure its success.

Answer: FALSE

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20) Security and privacy are extremely important issues in the development of any computerized system, especially BI that contain data that may possess strategic value.

Answer: TRUE

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21) Norfolk Southern Railroad built a \_\_\_\_\_\_\_\_ application that pulls data from the data warehouse and then graphically depicts actual performance against planned performance.

A) dashboard

B) graphical interface

C) transaction processing

D) forecasting

Answer: A

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22) Norfolk Southern Railroad invested in a Teradata \_\_\_\_\_\_\_\_, which is a central repository of historical data that is organized for easy access and manipulation to support decision making.

A) database

B) data warehouse

C) data repository

D) data disk

Answer: B

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23) Numerous types of business \_\_\_\_\_\_\_\_ result from today's business climate.

A) decisions

B) responses

C) support

D) pressures

Answer: D

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24) Companies are facing each of the following impacts of globalization except:

A) easier to find suppliers and customers in many countries

B) less complex business environment

C) cheaper materials

D) more and stronger competitors

Answer: B

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25) Which of the following is an organizational response to a business environmental factor?

A) customer demand

B) government regulations

C) new business models

D) globalization

Answer: C

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26) Today's computerized systems possess capabilities that can facilitate decision support in a number of ways, including each of the following except:

A) increased productivity of group members

B) improved communication and collaboration

C) agility support

D) reduced environmental pressures

Answer: D

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27) Business environment factors that create pressures on organizations include all of the following except:

A) workforce that is younger and shrinking

B) need for real-time, on-demand transactions

C) booming electronic markets on the Internet

D) innovative marketing methods

Answer: A

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28) One of the major objectives of \_\_\_\_\_\_\_\_ is to facilitate closing the gap between the current performance of an organization and its desired performance, as expressed in its mission, objectives, and goals.

A) business alliances

B) customer relationships

C) business models

D) computerized decision support

Answer: D

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29) Which of the following is not a component of BI architecture?

A) Data

B) Users

C) User interface

D) Web

Answer: D

30) The major benefit of \_\_\_\_\_\_\_\_ to the company is the ability to provide accurate information when needed.

A) data warehouse

B) analytical models

C) management information systems

D) business intelligence

Answer: D

31) Organizations are being compelled to capture, understand, and harness their data to support decision making in order to improve:

A) business operations

B) competition

C) compliance

D) risk

Answer: A

32) \_\_\_\_\_\_\_\_ are now extremely compressed; faster, more informed, and better decision making is therefore a competitive imperative. Managers need the right information at the right time and in the right place.

A) R & D

B) Business cycle times

C) Product life cycle

D) Forecasts

Answer: B

33) Which BI analytic application provides the following business value: *Personalize customer relationships for*

*higher satisfaction and retention*?

A) customer segmentation

B) fraud detection

C) customer attrition

D) channel optimization

Answer: A

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34) Which BI analytic application provides the following business value: *Prevent loss of high-value customers*

*and let go of lower-value customers*?

A) customer segmentation

B) fraud detection

C) customer attrition

D) channel optimization

Answer: C

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35) Which BI analytic application provides the following business value: *Interact with customers based on*

*their preference and your need to manage cost*?

A) customer segmentation

B) fraud detection

C) customer attrition

D) channel optimization

Answer: D

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36) A(n) \_\_\_\_\_\_\_\_ is a rule-based system that provides a solution, usually in one functional area, such as finance or manufacturing, to a specific repetitive managerial problem.

A) decision support systems (DSS)

B) transaction processing system (TPS)

C) online analytical processing (OLAP) system

D) automated decision system (ADS)

Answer: D

37) The two critical partnerships required for \_\_\_\_\_\_\_\_ are a partnership between functional area heads and a partnership between potential customers and providers.

A) intelligence creation

B) BI governance

C) event-driven alerts

D) predictive analysis

Answer: B

38) Most operational data in Enterprise Resources Planning (ERP) systems are stored in \_\_\_\_\_\_\_\_ systems.

A) OLTP

B) OLAP

C) TPS

D) DSS

Answer: A

39) Which of the following is not a function of a BI Competency Center (BICC)?

A) Demonstrates how BI is clearly linked to strategy and execution of strategy.

B) Encourages interaction between the potential business use communities and the IS organization.

C) Insures that the data warehouse platform is structured and remains stable enough to provide for changing business requirements.

D) Helps important stakeholders like high-level executives see how BI can play an important role.

Answer: C

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40) An approach to real-time, on-demand BI, commonly called \_\_\_\_\_\_\_\_, uses Web services to discover key business events.

A) business activity management (BAM)

B) business performance management (BPM)

C) business best practices

D) operational control

Answer: A

41) Business intelligence (BI) combines architectures, tools, \_\_\_\_\_\_\_\_, analytical tools, applications, and methodologies.

Answer: databases

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42) Business intelligence's major objective is to enable \_\_\_\_\_\_\_\_ access to data, enable manipulation of these data, and to provide business managers and analysts the ability to conduct appropriate analysis.

Answer: interactive

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43) The process of business intelligence is based on the \_\_\_\_\_\_\_\_ of data to information, then to decisions, and finally to actions.

Answer: transformation

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44) \_\_\_\_\_\_\_\_ are the collection of tools for manipulating, mining, and analyzing the data in the data warehouse.

Answer: Business analytics

45) Users can connect to the BI system via the \_\_\_\_\_\_\_\_, such as a browser.

Answer: user interface

46) \_\_\_\_\_\_\_\_ is a process of searching for unknown relationships or information in large databases or data warehouses, using intelligent tools.

Answer: Data mining

47) \_\_\_\_\_\_\_\_ which is also referred to as corporate performance management (CPM), is an emerging portfolio of applications and methodology that contains evolving BI architecture and tools in its core.

Answer: Business performance management (BPM)

48) \_\_\_\_\_\_\_\_ are a type of user interface that provide a comprehensive visual view of corporate performance measures, trends, and exceptions.

Answer: Dashboards

49) \_\_\_\_\_\_\_\_ are now extremely compressed; faster, more informed, and better decision making is therefore a competitive imperative.

Answer: Business cycle times

50) \_\_\_\_\_\_\_\_ is a business rules-based system that uses intelligence to recommend solution to repetitive decisions, such as pricing.

Answer: Automated Decision Systems (ADS)

51) One example of ADS is an \_\_\_\_\_\_\_\_ alert, which is a warning or action that is activated when a predefined or unusual event occurs.

Answer: event-driven

52) Critical partnerships required for \_\_\_\_\_\_\_\_ are a partnership between functional area heads and a partnership between potential customers and providers.

Answer: BI governance

53) For each potential BI project in the portfolio, it is important to use return on investments (ROI) and total cost of ownership measures to estimate the \_\_\_\_\_\_\_\_ ratio.

Answer: cost-benefit

54) A major \_\_\_\_\_\_\_\_ issue is who should serve as decision makers involved in prioritizing BI projects.

Answer: BI governance

55) Online Transaction Processing (OLTP) systems handle a company's \_\_\_\_\_\_\_\_ business.

Answer: routine on-going

56) Most operational data in supply chain management (SCM) or customer relationship management (CRM) systems are stored in \_\_\_\_\_\_\_\_ systems.

Answer: OLTP

57) First and foremost, the fundamental reasons for investing in BI must be \_\_\_\_\_\_\_\_ with the company's business strategy.

Answer: aligned

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58) Software monitors called \_\_\_\_\_\_\_\_ can be placed on a separate server in the network or on the transactional application databases themselves, and they can use event- and process-based approaches to proactively and intelligently measure and monitor operational processes.

Answer: intelligent agents

59) Traditional BI systems use a large volume of \_\_\_\_\_\_\_\_ data that has been extracted, cleansed, and loaded into a data warehouse to produce reports and analyses.

Answer: static

60) An approach to real-time, on-demand BI, commonly called \_\_\_\_\_\_\_\_, uses Web services to discover key business events.

Answer: business activity management (BAM)

61) List four major business environmental factors in today's business environment.

Answer: See Table 1.1 in the textbook.

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62) List the components of the architecture of business intelligence.

Answer:

• Data warehouse with source data

• Business analytics, a collection of tools for manipulating, mining, and analyzing the data in the data warehouse

• Business performance management (BPM) for monitoring and analysis of performance

• User interface

63) End users can work with the data and information in a data warehouse by using a variety of tools and techniques. These tools and techniques fit into two major categories. Identify and explain or give examples of these two categories.

Answer:

1. **Reports and queries.** Business analytics include static and dynamic reporting, all types of queries.

2. **Data, text, and Web mining and other statistical tools.** Data mining is a process of searching for unknown relationships or information in large databases or data warehouses, using intelligent tools such as neural computing, predictive analytics techniques, or advanced statistical methods.

64) What is business performance management (BPM)?

Answer: BPM is a portfolio of applications and methodology. BPM extends the monitoring, measuring, and comparing of sales, profit, cost, profitability, and other performance indicators by introducing the concept of management and feedback.

65) List two BI analytical applications and their business value.

Answer: See Table 1.2 in textbook.

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