## Second Edition BUSINESS INTELLIGENCE A Managerial Approach Efraim Turban | Ramesh Sharda Dursun Delen | David King

## Business Intelligence, 2e (Turban/Sharda/Delen/King) Chapter 1 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 Diff: 2 Page Ref: 3

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 Diff: 2 Page Ref: 5

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
Diff: 3 Page Ref: 6

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 Diff: 2 Page Ref: 8

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
Diff: 1 Page Ref: 8

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

Answer: FALSE Diff: 2 Page Ref: 8

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 Diff: 2 Page Ref: 8

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

Answer: TRUE

Diff: 2 Page Ref: 10

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 Diff: 2 Page Ref: 10

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

Answer: FALSE Diff: 2 Page Ref: 10

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

Answer: FALSE Diff: 2 Page Ref: 10

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

Answer: TRUE Diff: 2 Page Ref: 10

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 Diff: 2 Page Ref: 12

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

Answer: TRUE Diff: 2 Page Ref: 12

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

Answer: TRUE

Diff: 2 Page Ref: 12

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 Diff: 3 Page Ref: 14

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

Diff: 3 Page Ref: 18

enterprise as a whole rather than a single manager or task.  Answer: FALSE  Diff: 2 Page Ref: 18
19) BI must be a technical exercise for the information systems department to insure its success. Answer: FALSE Diff: 2 Page Ref: 19
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  Diff: 3 Page Ref: 21
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 Diff: 2 Page Ref: 4
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 Diff: 2 Page Ref: 4
23) Numerous types of business result from today's business climate.  A) decisions B) responses C) support D) pressures Answer: D Diff: 1 Page Ref: 6
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 Diff: 2 Page Ref: 6

18) One of the most important aspects of a successful BI is that it must be of benefit to the

- 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 Diff: 3 Page Ref: 6 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 Diff: 2 Page Ref: 6 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 Diff: 1 Page Ref: 7 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 Diff: 3 Page Ref: 8 29) Which of the following is not a component of BI architecture?
- A) Data
- B) Users
- C) User interface
- D) Web

Answer: D

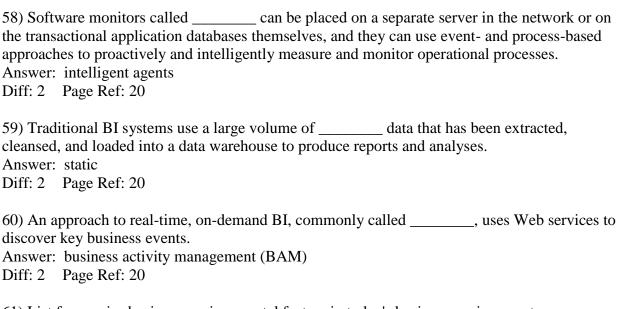
Diff: 2 Page Ref: 10

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 Diff: 2 Page Ref: 12			
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			
Diff: 2 Page Ref: 12			
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			
Diff: 3 Page Ref: 12			
33) Which BI analytic application provides the following business value: <i>Personalize customer relationships for higher satisfaction and retention</i> ?  A) customer segmentation B) fraud detection C) customer attrition D) channel optimization			
Answer: A			
Diff: 2 Page Ref: 13			
34) Which BI analytic application provides the following business value: <i>Prevent loss of high-value customers</i>			
and let go of lower-value customers?			
A) customer segmentation			
B) fraud detection  C) systemer attrition			
C) customer attrition D) channel optimization			
Answer: C			
Diff: 2 Page Ref: 13			

35) Which BI analytic application provides the following business value: <i>Interact with customers based on their preference and your need to manage cost</i> ?  A) customer segmentation B) fraud detection C) customer attrition D) channel optimization Answer: D Diff: 2 Page Ref: 13
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  Diff: 2 Page Ref: 14
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 Diff: 2 Page Ref: 16
38) Most operational data in Enterprise Resources Planning (ERP) systems are stored in systems.  A) OLTP B) OLAP C) TPS D) DSS Answer: A Diff: 2 Page Ref: 18
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  Diff: 2 Page Ref: 19

discover ke A) business B) business C) business D) operation Answer: A	eroach to real-time, on-demand BI, commonly called, ey business events. s activity management (BAM) s performance management (BPM) s best practices onal control agge Ref: 20	uses Web services to
		alytical tools,
	nteractive	
decisions, a	ocess of business intelligence is based on the of data than dinally to actions.  Transformation age Ref: 9	o information, then to
data wareh Answer: B	are the collection of tools for manipulating, mining, and analouse. Susiness analytics age Ref: 10	lyzing the data in the
Answer: u	can connect to the BI system via the, such as a browse ser interface age Ref: 10	ा.
databases o Answer: D	is a process of searching for unknown relationships or information data warehouses, using intelligent tools.  Data mining age Ref: 10	nation in large
emerging p tools in its	susiness performance management (BPM)	

performa Answer:	are a type of user interface that provide a comprehensive visual view of corporate ince measures, trends, and exceptions.  Dashboards
Diff: 2	Page Ref: 12
making i Answer:	are now extremely compressed; faster, more informed, and better decision s therefore a competitive imperative.  Business cycle times Page Ref: 12
repetitive Answer:	is a business rules-based system that uses intelligence to recommend solution to e decisions, such as pricing.  Automated Decision Systems (ADS)  Page Ref: 14
when a p Answer:	example of ADS is an alert, which is a warning or action that is activated predefined or unusual event occurs.  event-driven Page Ref: 15
and a par Answer:	cal partnerships required for are a partnership between functional area heads thership between potential customers and providers.  BI governance Page Ref: 16
(ROI) an Answer:	each potential BI project in the portfolio, it is important to use return on investments d total cost of ownership measures to estimate the ratio. cost-benefit Page Ref: 16
projects. Answer:	BI governance Page Ref: 16
Answer:	ne Transaction Processing (OLTP) systems handle a company's business. routine on-going Page Ref: 18
managen Answer:	t operational data in supply chain management (SCM) or customer relationship ment (CRM) systems are stored in systems.  OLTP  Page Ref: 18
company Answer:	and foremost, the fundamental reasons for investing in BI must be with the 's business strategy. aligned Page Ref: 19



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

Answer: See Table 1.1 in the textbook.

Diff: 2 Page Ref: 6

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

Diff: 1 Page Ref: 10

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.

Diff: 2 Page Ref: 10

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.

Diff: 2 Page Ref: 12

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

Answer: See Table 1.2 in textbook.

Diff: 3 Page Ref: 13