

Chapter 2: Research Design and Data Sources

TRUE/FALSE

1. The research design is the basic plan that guides the data collection and analysis phase of the research project.

ANS: T

The research design is the framework that guides the type of information to be collected, possible data sources, and the collection procedure.

PTS: 1 DIF: Easy REF: pg 54

2. Exploratory research presupposes that a sound causal model of the marketing system exists in the mind of the decision maker.

ANS: F

Exploratory research is used for a variety of purposes in clarifying the nature of the situation, decision, and alternatives. Causal models generally require experimentation.

PTS: 1 DIF: Challenging REF: pg 54-55

3. Descriptive research can be sub-classified into conclusive research and causal research.

ANS: F

Descriptive research and causal research are subsets of conclusive research.

PTS: 1 DIF: Moderate REF: pg 57

4. Descriptive studies are often used to determine buyer perceptions of product characteristics and audience profiles for media, such as television and magazines.

ANS: T

From descriptive studies, marketers can learn the characteristics of buyers, their perceptions of product attributes, and their audience profile.

PTS: 1 DIF: Easy REF: pg 57

5. Product usage studies describe the proportion of total sales received by both a company and its competitors, in terms of units, volume, and total dollar sales.

ANS: F

It is market-share studies that provide such information. Product usage studies describe consumption patterns.

PTS: 1 DIF: Easy REF: pg 57

6. Although data regarding a possible association among variables can be used for predictive purposes, these data are not adequate to establish a causal relationship.

ANS: T

Just because two variables display an association does not mean that one causes the other.

PTS: 1 DIF: Easy REF: pg 58

7. In terms of research, “accuracy” refers to a design that minimizes systematic error and also minimizes the reliability of collected evidence.

ANS: F

In designing marketing research, the goal is to minimize systematic error and maximize reliability.

PTS: 1 DIF: Moderate REF: pg 58

8. The distinguishing features of a cross-sectional design are that it is intended to be done just once and participants cannot typically be matched to specific responses or participants in another study.

ANS: T

Cross-sectional designs are the most popular and familiar type of research design and involve taking a sample of a population at one point in time.

PTS: 1 DIF: Moderate REF: pg 58

9. The main sources of data for causal research are 1) questioning respondents through surveys, and 2) conducting experiments.

ANS: T

Although surveys can be used for causal research, experiments can provide stronger support for a causal relationship.

PTS: 1 DIF: Moderate REF: pg 60

10. The primary reason experiments are preferred in causal research over surveys of respondents is that, in experiments, key variables can be measured, whereas in survey research the key variables are manipulated.

ANS: F

An experimental design is preferred because the variables can be manipulated and not just measured as with survey research.

PTS: 1 DIF: Challenging REF: pg 60

11. Performance monitoring research may involve a special (ad hoc) study or a continuous research program.

ANS: T

The purpose of performance-monitoring research is to track and report relevant changes along marketing-related dimensions. Data is gathered by special (ad hoc) studies or a continuous research program.

PTS: 1 DIF: Moderate REF: pg 60-61

12. Continuous performance monitoring requires a cross-sectional research design.

ANS: F

Cross-sectional designs are done ad hoc at a single specific time, whereas longitudinal designs are done over time. By definition, then, continuous performance monitoring requires a longitudinal design.

PTS: 1 DIF: Moderate REF: pg 61

13. A traditional panel is a fixed sample of respondents measured over time, although the variables measured are different each time; whereas an omnibus panel is a fixed sample in which the same variables are measured over time.

ANS: F

It is the reverse. Both types of panel involve a fixed sample of respondents, but with a traditional panel, the same variables are repeatedly measured over time, whereas with an omnibus panel, different variables are measured over time.

PTS: 1 DIF: Challenging REF: pg 61

14. Longitudinal data can be misleading because surveys at two points in time, conducted with different respondents in the sample, can mask even dramatic changes taking place in the population or indicate great changes when none are taking place.

ANS: F

It is cross-sectional studies that can be misleading in this way. Because longitudinal data utilizes the same respondents, it is a truer measure of change taking place in the population than multiple cross-sectional studies that use different respondents.

PTS: 1 DIF: Moderate REF: pg 62

15. One of the problems that occurs with longitudinal panels is that of unrepresentative sampling, which occurs when the panel does not represent the target population.

ANS: T

Because panel members serve long term it is difficult to get individuals to participate, especially in higher income professions. Therefore, it is difficult for the panel to remain representative.

PTS: 1 DIF: Easy REF: pg 64

16. An advantage of observation methods in collect data is that it allows for the recording of behavior when it occurs and eliminates errors associated with respondents' recall of behavior.

ANS: T

Typically, observing the behavior of respondents is less costly and more accurate than memory recall.

PTS: 1 DIF: Easy REF: pg 66-67

17. A valid simulation means that the model's behavior corresponds to the system it is designed to represent.

ANS: T

The overriding objective of a simulation is to observe how the simulation units imitate the behavior of the marketing system units that they represent.

PTS: 1 DIF: Moderate REF: pg 68

18. Secondary data are collected specifically for purposes of the research needs at hand.

ANS: F

Primary data are collected specifically for the research needs at hand. Secondary data are already collected and often published, typically for some other purpose.

PTS: 1 DIF: Easy REF: pg 69

19. Services that evaluate television commercials use two basic approaches—the recruited audience method and the normal viewing environment method. With the recruited audience method, respondents are recruited and asked to evaluate television ads in their home.

ANS: F

With the recruited method, respondents are recruited and brought to a viewing center.

PTS: 1 DIF: Moderate REF: pg 71

20. One of the “last frontiers” of scanner-based research is to assess the effects of pricing on purchase behavior.

ANS: F

One of the last frontiers is *advertising*, because its impact is much more difficult to quantify. Pricing research using scanner data is relatively easy since the price of a product can be modified on a store-by-store basis or even over time.

PTS: 1 DIF: Challenging REF: pg 75

21. Single sourcing of data is a syndicated marketing research concept that has gained credibility as technology has allowed the gathering of more resources and data under one roof.

ANS: T

Because single sourcing can provide almost real-time data, it has gained credibility. The disadvantage, however, is finding someone who can interpret such huge volumes of data.

PTS: 1 DIF: Easy REF: pg 75-76

22. Survey research should be used only if the data cannot be collected via more efficient secondary data sources.

ANS: T

The first step in data collection should be to determine whether secondary data already exists.

PTS: 1 DIF: Easy REF: pg 78

23. The advantage of primary data over secondary data is savings in cost and time.

ANS: F

Compared to designing a primary research study and conducting the study, collecting secondary data is less costly and less time consuming.

PTS: 1 DIF: Easy REF: pg 78

24. A tract is the smallest area for which census data are available.

ANS: F

A block is the smallest area for which census data are available.

PTS: 1 DIF: Challenging REF: pg 82

25. Although research designs are applicable to both domestic and international situations, there are differences in implementation of research designs caused by variations in available technology, research institutions, and culture across countries.

ANS: T

While research designs can be the same, applying those research designs in other countries can be problematic.

PTS: 1 DIF: Easy REF: pg 93-94

MULTIPLE CHOICE

1. The research design is the framework that specifies all of the following except
- the type of information to be collected
 - possible data sources
 - the collection procedure
 - the systematic and random error

ANS: D

The research design is the basic plan that guides the data collection and analysis phase of the research project. Error can't be determined until after the data is collected.

PTS: 1 DIF: Moderate REF: pg 54

2. Exploratory research
- identifies the sampling frame and sampling procedure
 - aids the early stages of the decision-making process and investigates how to hold down cost and time expenditure
 - provides information that helps the manager evaluate and select a course of action
 - is essential to ensure that marketing programs are proceeding in accordance with preset plans

ANS: B

Exploratory research is used in the early stages of decision-making to help identify the problem or opportunity and the alternatives that may be feasible.

PTS: 1 DIF: Moderate REF: pg 54-55

3. Conclusive research
- identifies the sampling frame and sampling procedure
 - aids the early stages of the decision-making process and investigates how to hold down cost and time expenditure
 - provides information that helps the manager evaluate and select a course of action
 - is essential to ensure that marketing programs are proceeding in accordance with preset plans

ANS: C

Conclusive research provides the information about the various alternatives so managers can decide among them.

PTS: 1 DIF: Moderate REF: pg 57

4. Exploratory research is appropriate for all of the following research objectives except
- portraying the characteristics of marketing phenomena and determining the frequency of occurrence
 - identifying or developing a more precise formulation of problems or opportunities
 - gaining a perspective regarding the breadth of variables operating in a situation
 - establishing priorities regarding the potential significance of various problems or opportunities

ANS: A

Conclusive research is used for portraying the characteristics of marketing phenomena and determining the frequency of occurrence, not exploratory research.

PTS: 1 DIF: Moderate REF: pg 57

5. The vast majority of research studies involve the type of conclusive research called
- exploratory research
 - descriptive research
 - causal research
 - experimental research

ANS: B

Most of the marketing studies rely heavily on an amalgam of respondent interviews and data available from secondary data sources, which is descriptive research.

PTS: 1 DIF: Moderate REF: pg 57

6. Studies that describe user characteristics for particular products and services are
- consumer profile studies
 - psychographics
 - situational analyses
 - marketing potential studies

ANS: A

Consumer profiles are conducted to describe user characteristics.

PTS: 1 DIF: Easy REF: pg 57

7. _____ studies describe the size of the market, the buying power of consumers, the availability of distributors, and buyer profiles for a product.
- Consumer profile
 - Market share
 - Market potential
 - Distribution research

ANS: C

It is market potential studies that provide information about the size of a market, the buying power of consumers, the availability of distributors, and profiles of the buyer.

PTS: 1 DIF: Moderate REF: pg 57

8. _____ studies determine the proportion of total sales received by both a company and its competitors, in terms of units, volume, and total dollar sales
- Consumer profile
 - Market share
 - Market potential
 - Distribution research

ANS: B

Market share studies provide information about the size of a particular company's sales compared to the competition and to the industry.

PTS: 1 DIF: Moderate REF: pg 57

9. Effective descriptive research is marked by a clear statement of the
- a. decision problem
 - b. specific research objectives
 - c. detailed information needs
 - d. all of the above

ANS: D

Effective descriptive research includes a clear statement of the decision problem, specific research problems, and detailed information needs.

PTS: 1 DIF: Easy REF: pg 58

10. Systematic error refers to
- a. a constant bias in the measurement process
 - b. error due to sampling
 - c. random non-sampling error
 - d. inadvertent errors in coding and editing of data

ANS: A

Systematic error incorrectly influences decisions in one direction due to a constant bias in the measurement process.

PTS: 1 DIF: Moderate REF: pg 58

11. The extent to which the measurement process is free from random errors is called
- a. systematic error
 - b. reliability
 - c. validity
 - d. accuracy

ANS: B

Reliability refers to the absence of random error in the research measurement process.

PTS: 1 DIF: Moderate REF: pg 58

12. All of the following statements about cross-sectional designs are true except
- a. it is a type of exploratory research that facilitates identification of problems or opportunities
 - b. it involves taking a sample of population elements at one point in time
 - c. it is the most popular and familiar type of research design
 - d. it involves no individual-level identification of participants from one study to another.

ANS: A

Cross-section designs are a type of descriptive research, not exploratory research.

PTS: 1 DIF: Moderate REF: pg 58

13. The implicit causal model is typically based on _____ and represents key assumptions underlying supposed cause-and-effect relationships in the marketing system.
- a. cross-sectional surveys
 - b. the experience and judgement of the decision-maker
 - c. hypotheses tested by laboratory experiments
 - d. conclusive research which has a low level of systematic error

ANS: B

While descriptive research can aid in developing a causal model, the decision-maker's experience and judgment is needed.

PTS: 1 DIF: Challenging REF: pg 59

14. _____ research examines the degree to which marketing variables are associated with output measures of interest, such as sales, profit, ad awareness, or market share.
- a. Exploratory
 - b. Descriptive
 - c. Causal
 - d. Market potential

ANS: B

Descriptive research examines the degree of association among various variables in an effort to determine significant relationships.

PTS: 1 DIF: Challenging REF: pg 58-59

15. _____ is a type of conclusive research designed to gather evidence regarding the cause-and-effect relationships operating in a marketing system.
- a. Exploratory research
 - b. Descriptive research
 - c. Causal research
 - d. Experimental research

ANS: C

The objective of causal research is to gather information regarding a cause-and-effect relationship.

PTS: 1 DIF: Easy REF: pg 59

16. The main source(s) of data for causal research include:
- a. simulation
 - b. experimentation
 - c. questioning of respondents through surveys
 - d. all of the above
 - e. both b and c

ANS: E

The main sources of data for causal research are questioning respondents through surveys and conducting experiments.

PTS: 1 DIF: Challenging REF: pg 60

17. Once a course of action is selected and the marketing program is implemented, _____ research is needed to ensure the execution of the marketing program is meeting pre-set expectations.
- a. exploratory
 - b. market share
 - c. performance-monitoring
 - d. causal

ANS: C

Performance-measuring research is needed to measure the results of marketing decisions to ensure deviations from pre-set plans have not occurred.

PTS: 1 DIF: Easy REF: pg 60

18. In longitudinal research with a traditional panel,
- a. the same variables are repeatedly measured over time with different samples
 - b. the same variables are repeatedly measured over time with the same sample
 - c. different variables are measured over time with different samples
 - d. different variables are measured over time with the same sample

ANS: B

With the traditional panel, the same variables are measured over time with the same sample.

PTS: 1 DIF: Challenging REF: pg 61

19. In longitudinal research panels, new members tend to increase or over-report the behavior being measured, such as watching television or food purchasing. This is called
- unrepresentative sampling
 - response bias
 - endogeneity
 - observation error

ANS: B

Research has indicated that new members on a panel are often bias in their initial responses, because they pay more attention to the behaviors being measured.

PTS: 1 DIF: Challenging REF: pg 64

20. The most common source of marketing data is
- observation of respondents
 - secondary data
 - communication with respondents
 - laboratory experimentation

ANS: C

Respondents are the major source of marketing data, and communication is the most common respondent method used.

PTS: 1 DIF: Moderate REF: pg 64| pg 66

21. All of the following statements about focus groups is true except
- they are free-flowing unstructured situations designed to stimulate ideas and insights into a problem situation through group interaction
 - they typically involves posing probing, open-ended questions
 - they typically lasts 1 to 2 hours
 - they involve extensive questioning of respondents individually

ANS: D

In-depth interviews, not focus groups, uses extensive questioning of respondents individually.

PTS: 1 DIF: Moderate REF: pg 66

22. Case histories involve
- recognizing and recording relevant objects, events, and important and commonplace activities
 - intense investigation of prior situations that are analogous or appear relevant to the current one
 - creating an analogous version of a real-world phenomenon through a likeness or formal model
 - directly manipulating key variables and observing the effect on dependent variables

ANS: B

Case histories is an established method in behavioral sciences, because past history can shed light on current events.

PTS: 1 DIF: Easy REF: pg 67

23. Marketing simulation involves
- recognizing and recording relevant objects, events, and important and commonplace activities
 - intense investigation of prior situations that are analogous or appear relevant to the current one

- c. creating an analogous version of a real-world phenomenon through a likeness or formal model
- d. directly manipulating key variables and observing the effect on dependent variables

ANS: C

Marketing simulation is an effective way of examining market behavior through creating models.

PTS: 1 DIF: Easy REF: pg 67

24. A particularly thorny issue in marketing simulation is _____, which is the idea that what a firm does affects consumers, whose decisions also affect the firm and its competition, all of whom are making multiple decisions over time.
- a. endogeneity
 - b. response bias
 - c. sensitivity analysis
 - d. unrepresentative sampling

ANS: A

Endogeneity creates a thorny issue for marketing simulations, because modeling cannot really represent the multiplicity of interactions that occur with consumers, the competition, and the market.

PTS: 1 DIF: Challenging REF: pg 68

25. Which of the following is not an advantage of simulation over other data sources?
- a. Development of the model is relatively simple and straightforward.
 - b. It allows evaluation of alternative marketing strategies.
 - c. Simulation can be conducted in complete secrecy.
 - d. It can be used as a training device within the organization.
 - e. Simulation encourages creativity since radical strategy changes can be evaluated.

ANS: A

A major limitation of market simulation is the difficulty of developing a valid simulation model.

PTS: 1 DIF: Challenging REF: pg 68

26. Experimentation involves
- a. recognizing and recording relevant objects, events, and important and commonplace activities
 - b. intense investigation of prior situations that are analogous or appear relevant to the current one
 - c. creating an analogous version of a real-world phenomenon through a likeness or formal model
 - d. directly manipulating key variables and observing the effect on dependent variables

ANS: D

The advantage of experimentation is that researchers can imply cause-and-effect since key variables are controlled.

PTS: 1 DIF: Easy REF: pg 69

27. All of the following statements about experiments are true except
- a. they study one or more independent variables
 - b. their objective is to measure the effects of dependent variables on an independent variable
 - c. they involve consciously controlling independent variables
 - d. they allow key variables to be directly manipulated rather than simply occurring

ANS: B

Experimentation involves manipulating independent variables, while controlling other independent variables, in order to measure the impact on a dependent variable.

PTS: 1 DIF: Challenging REF: pg 69

28. Syndicated data sources
- are low-cost sources of secondary data
 - provide primary data for subscription clients
 - include government publications, trade association data, books, and periodicals
 - provide standardized data to an array of clients

ANS: D

Syndicated sources are primarily for-profit organizations that maintain consumer panels to collect standardized data for an array of clients.

PTS: 1 DIF: Moderate REF: pg 70

29. The proliferation of scanner data has caused significant changes in how marketing research is conducted. These changes include all of the following except
- greater emphasis by marketers on consumer attitudes and awareness
 - a large number of trained professionals who can analyze and interpret the data
 - significantly better data in volume/share tracking, promotion tracking, and consumer purchases
 - availability of timely data

ANS: B

The wide use of scanner data created a shortage of trained professionals.

PTS: 1 DIF: Challenging REF: pg 74

30. Which of the following is not a component of MDSS?
- standardized data inputs and outputs
 - database management
 - display formats
 - statistical analyses
 - modeling

ANS: A

The MDSS system is a computer-based, interactive system used by managers to aid in decision-making. A good MDSS should allow for user-friendly interaction and should be flexible, so that the manager can sort, average, total, or otherwise manipulate the data to look at them from a unique perspective, revealing both expected and unsuspected relationships.

PTS: 1 DIF: Challenging REF: pg 77

31. In conducting marketing research, the first step in determining data needs should be to
- collect primary data
 - search for internal secondary data
 - search for external secondary data
 - purchase syndicated data

ANS: B

Internal secondary data should be searched first thoroughly before turning to external secondary sources, because internal data is cheaper and often more relevant.

PTS: 1 DIF: Moderate REF: pg 78

32. All of the following would be disadvantages of secondary data (relative to primary data) except
- data fit
 - cost

- b. level of aggregation
- d. accuracy

ANS: C

Cost is an advantage since secondary data tend to be less costly than collecting primary data.

PTS: 1 DIF: Easy REF: pg 79

33. The degree of fit between secondary data and the information needs of a project is influenced primarily by
- a. cost and timeliness of the data
 - b. response bias and sampling error
 - c. accuracy of the data
 - d. units of measurement and definition of classes

ANS: D

The degree of fit can range from completely inadequate to quite close and is influenced by units of measurement and definition of classes.

PTS: 1 DIF: Challenging REF: pg 79

34. A marketing manager has found secondary data on the spending habits of teenagers broken down by gender and also by race, independently, but needs it broken down by both (e.g., African American females versus European American males). This is an example of the secondary data problem of
- a. level of aggregation
 - b. difference in units
 - c. unrepresentative sampling
 - d. systematic bias

ANS: A

Level of aggregation refers to data not broken down or cross-tabulated in a way that is consistent with a researcher's information needs.

PTS: 1 DIF: Moderate REF: pg 80

35. In evaluating the *accuracy* of secondary data, all of the following are important to consider except
- a. the source of the data
 - b. the date the data were collected
 - c. the purpose of the publication of the data
 - d. general evidence regarding the quality of the data, such as research design

ANS: B

The three criteria in evaluating the accuracy of secondary data are the source of data (e.g., original or acquired source), the purpose of a publication (to detect those who would misrepresent and distort statistics to support a position or belief), and the general evidence regarding the quality of the data. The date data were collected may impact its applicability, but does not reflect on its accuracy.

PTS: 1 DIF: Challenging REF: pg 80-81

36. U.S. Bureau of the Census data is reported in three main headings, including all of the following except
- a. people
 - b. business
 - c. demographics
 - d. geography

ANS: C

The three main headings of U.S. census data are people, business, and geography.

PTS: 1 DIF: Moderate REF: pg 82

37. A metropolitan statistical area (MSA) is a city or a Census Bureau-defined urbanized area with _____ or more inhabitants.
- a. 50,000
 - b. 100,000
 - c. 300,000
 - d. 500,000

ANS: A

By definition, a MSA has 50,000 or more inhabitants.

PTS: 1 DIF: Challenging REF: pg 85

38. Beginning in 2005, the U.S. Census Bureau conducted the American Community Survey (ACS) to
- a. collect data of community interest during decennial censuses
 - b. decrease non-response error to the census through Title 13 mandatory response to the survey
 - c. increase data collection to better facilitate segmentation of local housing and business data by community
 - d. replace the “long form” of the decennial census with annual collection of sample data

ANS: D

Beginning in 2005, the Census Bureau conducted the American Community Survey (ACS), a “rolling census” to collect sample data every year on the population characteristics formerly gathered in the “long-form” questions. This culminated in the first short-form only census in 2010. The ACS survey includes a maximum of 48 “person questions” per household member, covering topics such as age, race, Hispanic origin, educational attainment, veteran status, disabilities, and income.

PTS: 1 DIF: Moderate REF: pg 90

39. Secondary international data sources are helpful in providing all of the following types of general information except
- a. economic indicators
 - b. political stability
 - c. socioeconomic data
 - d. exchange-rate fluctuations

ANS: C

Data are often not comparable across countries, as the definitions used for variables are sometimes different (particularly so for socioeconomic categories), and the timeframes in which the data are collected may be different.

PTS: 1 DIF: Moderate REF: pg 95

40. Although there are countless sources of marketing data, they can all be categorized into at least one of the following basic groups except
- a. segmentation
 - b. analogous situations
 - c. experimentation
 - d. secondary data

ANS: A

The basic groups are respondents, analogous situations, experimentation, and secondary data.

PTS: 1 DIF: Challenging REF: pg 96

SHORT ANSWER

1. In describing the user characteristics of a product for a consumer profile study, what types of information should be included in the profile?

ANS:

Profiles should include demographic, socioeconomic, geographic, and psychographic characteristics, as well as consumption rates.

PTS: 1 DIF: Moderate REF: pg 57

2. Explain the difference between traditional research panels and omnibus research panels in longitudinal studies.

ANS:

Both panels use the same sample respondents. Traditional research panels measure the same variables over time, whereas omnibus panels measure different variables over time.

PTS: 1 DIF: Moderate REF: pg 61

3. Identify the four major categories of data sources for marketing research applications.

ANS:

Data sources can all be categorized into at least one of four basic groups: communication with respondents, analogous situations, experimentation, and secondary data.

PTS: 1 DIF: Challenging REF: pg 64

4. What are the advantages of using internal secondary data?

ANS:

Three advantages of internal secondary data are their low cost, their accuracy, and their easy availability.

PTS: 1 DIF: Moderate REF: pg 70

5. Discuss the relative advantages and disadvantages of secondary data.

ANS:

Advantages of secondary data include lower financial and time costs. Disadvantages relate to the extent the data fit the information needs of the project in terms of aggregation, accuracy, and timeliness.

PTS: 1 DIF: Easy REF: pg 79

ESSAY

1. Describe some purposes for which exploratory research is used.

ANS:

Exploratory research is used to facilitate problem recognition and definition, formulate hypotheses, and narrow possibilities. It is appropriate when the research objectives include identifying or more precisely formulating problems or opportunities, gaining perspective on the breadth of variables operating in a situation, establishing priorities regarding the potential significance of various problems or opportunities, gaining management and researcher perspective concerning the character of the problem, formulating possible courses of action, and gathering information on the possible pitfalls associated with doing conclusive research. Students should include at least a few of these possible uses.

PTS: 1 DIF: Moderate REF: pg 54-55

2. Discuss when descriptive research is appropriate.

ANS:

Descriptive research is appropriate when the research objectives include portraying the characteristics of marketing phenomena and determining the frequency of occurrence, determining the degree to which marketing variables are associated, or making predictions regarding the occurrence of marketing phenomena.

PTS: 1 DIF: Moderate REF: pg 57

3. Discuss the advantages of using marketing simulation compared to collecting primary data.

ANS:

Advantages of marketing simulation compared to collecting primary data include lower costs, that it can be conducted with complete non-disclosure within an organization, that it allows for the evaluation of alternative marketing strategies, that the consequences of changes in the marketing system can be evaluated without risk of making changes to the real system, and that it can be used as a training device for members of the organizations.

PTS: 1 DIF: Challenging REF: pg 68

4. What is the objective of experimentation?

ANS:

The objective of experimentation is twofold: to measure the effects of the independent variables on a dependent variable and to simultaneously control for other variables that might confuse one's ability to make valid causal inferences.

PTS: 1 DIF: Challenging REF: pg 69

5. Technology has changed the way marketing research is now conducted. Discuss specifically the changes spurred by the proliferation of scanner data.

ANS:

Changes induced by the proliferation of scanner data include:

1. better data in volume/share tracking, promotion tracking, and consumer purchases
2. proliferation of high-quality, user-friendly analysis packages
3. shortening of reaction time by advertisers since data can be gathered on an on-going basis
4. availability of timely data
5. ability to determine short-term effects of pricing, trade deals, and certain promotions
6. greater emphasis by marketers on consumer attitudes and awareness tracking
7. accurate and effortless tracking of consumer panel members' data
8. shortage of trained professionals who can analyze and interpret scanner data

PTS: 1

DIF: Challenging REF: pg 74