**Chapter 10: Marketing Analytics**

**Multiple Choice**

1. Data that are highly organized and can be represented as tables made up of rows (observations for a single unit of the population) and columns is said to be \_\_\_\_\_.

a. orderly

b. normal

c. demographic

d. structured

e. None of these

Answer: d

1. The discovery, interpretation, and communication of meaningful patterns in data is called marketing \_\_\_\_\_.

a. research

b. analysis

c. patterns

d. database

e. analytics

Answer: e

1. There are four “act” might be considered part of the marketing analytics process. Which of the following is not one of them?

a. Get the data

b. Clean the data

c. organize and merge the data

d. Analyze

e. Act

Answer: b

1. Big \_\_\_\_ is the accumulation and analysis of massive quantities of information that for our purposes in marketing is generally related to human behavior and interactions.

a. research

b. information

c. plans

d. data

Answer: d

1. Big data has the three Vs. Which of the following is not one of these?

a. Verification

b. Volume

c. Variety

d. Velocity

Answer: a

1. In 2005 an open-source (available for free to everyone) framework called \_\_\_\_\_ was developed to analyze bid data by a nonprofit called Apache Software Foundation.

a. Cloud

b. Hadoop

c. Artificial Intelligence

d. IBM Watson

e. Deep Vision

Answer: b

1. Data analytics is classified into three types. Which of the following is not one of those types?

a. Descriptive

b. Analytical

c. Predictive

d. Prescriptive

Answer: b

1. In this type of analytics, we summarize data in rudimentary forms to discern patterns.

a. Descriptive

b. Analytical

c. Predictive

d. Prescriptive

Answer: a

1. Cross tabulation is which type of analytics?

a. Descriptive

b. Analytical

c. Predictive

d. Prescriptive

Answer: a

1. This form of analytics uses more powerful tools to provide more insight and more robust decision-making tools.

a. Descriptive

b. Analytical

c. Predictive

d. Prescriptive

Answer: c

1. A more advanced form of analytics that predicts what customers or potential customers will do in response to various marketing programs or classify them into market segments or other subgroups.

a. Descriptive

b. Analytical

c. Predictive

d. Prescriptive

Answer: d

1. An umbrella term for analytic techniques that facilitate fast pattern discovery and model building, particularly with large datasets.

a. Data mining

b. Neural network

c. Artificial intelligence

d. Machine learning

e. Deep learning

Answer: a

1. A modeling technique that mimics the processes of the human brain and is capable of learning from experience to find patterns in data.

a. Data mining

b. Neural network

c. Artificial intelligence

d. Machine learning

e. Deep learning

Answer: b

1. Where machines can learn by experience and acquire skills without human involvement.

a. Data mining

b. Neural network

c. Artificial intelligence

d. Machine learning

e. Deep learning

Answer: d

1. A subset of machine learning where artificial neural networks, algorithms inspired by the human brain, learn from large amounts of data as in machine learning but now we add backpropagation where machines learn from their mistakes.

a. Data mining

b. Neural network

c. Artificial intelligence

d. Data learning

e. Deep learning

Answer: e

1. The study of "intelligent agents": any device that perceives its environment and takes actions that maximize its chance of successfully achieving its goals.

a. Data mining

b. Neural network

c. Artificial intelligence

d. Machine learning

e. Deep learning

Answer: c

1. Through a process called \_\_\_\_\_, the neural network makes adjustments to improve future predictions and is thus capable of learning and adjusting.

a. backpropagation

b. selective editing

c. recursive analysis

d. regression to the mean

e. data editing

Answer: a

1. \_\_\_\_\_ targeting is the use of online and offline data to understand a consumer’s habits, demographics, and social networks in order to increase the effectiveness of online advertising.

a. Analytical

b. Predictive

c. Prescriptive

d. Behavioral

e. Artificial

Answer: d

1. \_\_\_\_\_ pricing is a pricing strategy in which businesses vary prices for products or service based on current level of demand or demand at the specific moment.

a. Natural

b. Monopoly

c. Surge

d. Variable

e. Artificial

Answer: c

1. Graphic tools that make data understandable to a wider audience than just analysts and data scientists.

a. Infographics

b. Data visualization

c. Artificial intelligence

d. Video analysis

Answer: b

1. A collection of imagery, charts, and minimal text that gives an easy-to-understand overview of a topic.

a. Infographics

b. Data visualization

c. Artificial intelligence

d. Video analysis

Answer: a

1. There are three types of marketing dashboards. Which of the following is not one of them?

a. Strategic

b. Detailed

c. Tactical

d. Operational

Answer: b

1. \_\_\_\_\_ dashboards monitor performance towards high-level goals.

a. Strategic

b. Detailed

c. Tactical

d. Operational

Answer: a

1. \_\_\_\_\_ dashboards use past data to identify trends that can impact future plans.

a. Strategic

b. Detailed

c. Tactical

d. Operational

Answer: c

1. \_\_\_\_\_ dashboards are the most specific and are often used to track the performance of a department—say, manufacturing or sales—within a company.

a. Strategic

b. Detailed

c. Tactical

d. Operational

Answer: d

1. This is where forms harvest online conversations and collect personal details from social networking sites, resume sites, and online forums, where people might discuss their lives.

a. Harvesting

b. Mining

c. Scraping

d. Hacking

e. All of the above

Answer: c

1. The “right to be \_\_\_\_\_” allows individuals to have information, videos, or photos about themselves deleted from Internet records so that they can’t be found by search engines or other Internet programs.

a. erased

b. bypassed

c. uncounted

d. forgotten

e. private

Answer: d

**True/False**

1. Structured data can be shown in an Excel spreadsheet.

Answer: True

1. Unstructured data is widely used by marketing researchers.

Answer: False

1. Big online sellers have extensive information about you.

Answer: True

1. Data generated by these traditional means remain extremely important for addressing the “why” that big data typically do not deliver.

Answer: True

1. Predictive analytics find the best course of action in a given situation.

Answer: False

1. Machine learning is an umbrella term for analytic techniques that facilitate fast pattern discovery and model building, particularly with large datasets.

Answer: False

1. There is nothing new about data mining.

Answer: True

1. Surge, dynamic, demand, and time-based pricing are all names for the same thing.

Answer: True

1. Data visualization a collection of imagery, charts, and minimal text that gives an easy-to-understand overview of a topic.

Answer: False

1. Marketing spreadsheets are designed to provide teams with a real-time window into marketing performance.

Answer: False

1. What is the downside to big data?

Answer: The downside to big data is the associated loss of privacy. Big data almost assuredly includes detailed information about the behavior and activities of specific, identifiable individuals.

**Essay Questions**

1. Discuss the advantages of being able to analyze the huge or smaller volumes of data available to companies.

Answer: Being able to analyze the huge or smaller volumes of data available to companies pays big rewards based on better consumer targeting, better experiences for their customers and better decisions regarding all elements of the marketing mix, ultimately resulting in increased revenues and profits.

1. We wish to estimate the likelihood that an individual will buy or not buy our new product or service based on their personal characteristics. Discuss how this might be approached.

Answer: A statistical tool, such as discriminant analysis, can be used for this purpose. The model would be developed with data on the characteristics of actual buyers and non-buyers or on the characteristics of those expressing different levels of likelihood to purchase the new product in survey research.

1. Describe machine learning.

Answer: Machine learning is where machines can learn by experience and acquire skills without human involvement. According to Mueller and Massaron “Machine learning relies on algorithms to analyze huge datasets. Currently, machine learning can't provide the sort of AI that the movies present. Even the best algorithms can't think, feel, present any form of self-awareness, or exercise free will. What machine learning can do is perform predictive analytics far faster than any human can as a result, machine learnings can help human work more efficiently.”

1. Describe deep learning.

Answer: Deep learning is a subset of machine learning where artificial neural networks, algorithms inspired by the human brain, learn from large amounts of data as in machine learning but now we add backpropagation where machines learn from their mistakes. Like the way we learn from experience, the deep learning algorithm would perform a task repeatedly, each time looking at its errors and making adjustments to improve predictions.

1. Discuss the right to privacy as it applies to the Internet.

Answer: The “right to privacy” is the right to have information that was never made public to remain private. The “right to be forgotten” allows individuals to have information, videos, or photos about themselves deleted from Internet records so that they can’t be found by search engines or other Internet programs.