Marketing and Advertising in E-Commerce

Contents

Learning Objectives

Upon completion of this chapter, you will be able to:

1. Describe factors that influence online consumer behavior.
2. Explain how consumer behavior can be analyzed for creating personalized services.
3. Understand consumer market research in e-commerce.
4. Describe the objectives and characteristics of Web advertising.
5. Describe the major advertising methods used on the Web.
6. Learn mobile marketing concepts and techniques.
7. Describe various online advertising strategies and types of promotions.
8. Understand some implementation issues.

OPENING CASE
IKEA USES MOBILE AND AUGMENTED REALITY

IKEA (ikea.com) is a global leader in retail furniture sales. It is a Swedish multinational company that designs and sells a wide variety of ready-to-assemble furniture and is the world's largest furniture retailer. IKEA sells furniture through a series of 392 stores in 48 countries as well as online using Web-based and mobile catalogs.

The Problem

Because of the personal nature of furniture and how it fits into an individual's home or apartment, a key issue is ensuring that whatever is purchased will fit in both size and style. This is difficult because the product is never in the home environment until after purchase (Teixeira and Gupta 2015). This creates the possibility of regret for purchases which can spawn decreased brand satisfaction or costly reverse logistics (returns). Customers at the store must picture the furniture in their home, and customers in their home must picture the furniture available on the website at that location. This creates distinct disadvantages for sales of furniture, creates cognitive dissonance before and after the sale, and lengthens the overall sales cycle. If customers were confident in how furniture would look in their home, it would make the selection process easier and quicker.

The Solution

IKEA recognized that its customers, typically in younger demographics, were quickly adopting mobile technologies and were very comfortable with the use of mobile apps. Additionally, the company had studied the possible uses of augmented reality. The company decided that a mobile-based augmented reality application would be a viable solution to the concern about how furniture fit and feel in a customer's home (Allen 2016).

The company launched its augmented reality app for both Apple's iOS and Android in 2013 and have been making significant updates to it through 2016 (see **ikea.com/ms/en_CA/customer-service/about-shopping/free-ikea-apps/index.html**). The app allows customers to take pictures of their surroundings and then select from a wide array of IKEA furniture and place it within those surroundings. This idea calls back to early IKEA catalogs that encouraged customers to cut out pictures of furniture and hold them up in their home environment to see how things would look. Customers are able to select different patterns and adjust the size and perspective of furniture pieces. See a video of how the app works at **youtu.be/xC6t2eEPkPc**.

The Results

The app was very well-received by customers. Due to its popularity, IKEA has continued to add additional furniture items (over 200 in 2017) for customers to virtually evaluate. As of early 2017, the app had been downloaded more than 200,000 times across both platforms. The company credits the use of augmented reality for increases in overall sales, as well as decreases in the amount of time sales are being considered (Carpenter 2016). The company plans to continue to update the application to keep it current with its existing catalog of furniture items.

> ### LESSONS LEARNED FROM THE CASE
>
> Some items are difficult to sell online, but by using technology we can make this process easier for customers. The adoption of mobile devices and their ability to use augmented reality systems presents unique opportunities to some retailers, including those that sell home furnishings. IKEA was able to leverage an augmented reality application to boost sales, increase customer confidence, and decrease post-sale regrets.

10.1   ONLINE CONSUMER BEHAVIOR

Companies are operating in an increasingly competitive environment. Therefore, sellers try to understand customers' needs and influence them to buy their products and services. Customer acquisition and retention are key success factors, both offline and online. This is particularly important for online businesses, as most interactions with their customers are online. For a summary of factors affecting consumer behavior, see **iresearchservices.com/5-common-factors-influencing-consumer-behavior/**.

A Model of Online Consumer Behavior

For decades, market researchers have tried to understand consumer shopping behavior and develop various models to summarize their findings. A consumer behavior model is designed to help vendors understand how a consumer makes a purchasing decision. Through understanding the decision process, a business may be better able to influence the buyer's decision through improved product design or advertising.

Consumers can be divided into two groups: individual consumers and organizational buyers including governments, private corporations, resellers, and nonprofit organizations. These two types of buyers tend to have different purchasing behaviors and usually are analyzed differently. In this chapter, we focus on individual buyers. An individual consumer behavior model often includes *influential internal and external factors* that affect the buyer's *decision process* and the process for making a purchasing decision. Figure 10.1 shows a consumer behavior model, and this video (**youtu.be/dcV9y_LLdR8**) explains the process.

- **Influential factors.** Factors influencing purchasing decisions fall into five major dimensions. They are *consumer factors, environmental factors, merchant and intermediary factors, product/service factors* (which include market stimuli), and *EC selling systems*. The first three dimensions are not controllable by the sellers, while the last two are mostly controlled by the sellers. The dimensions are shown in Fig. 10.1. The influential factors affect the buyers' decision process.
- **The attitude–behavior decision process.** The second part in a consumer behavior model is the decision-making process, which usually starts with awareness of the situation and a positive attitude and ends with the buyer's decision to purchase and/or repurchase (see the oval part in Fig. 10.1). A *favorable attitude* would lead to a stronger *buying intention*, which in turn would result in the *actual buying behavior*. Previous research has shown that the links between attitude, purchase intention, and actual purchase behavior are quite strong. Marketers are working to control as much of this process as possible, and one way is to try to move as much of the experience online as possible. These tactics also involve converging the online and physical environments to establish an ideal marketing playing field (van Bommel et al. 2014).
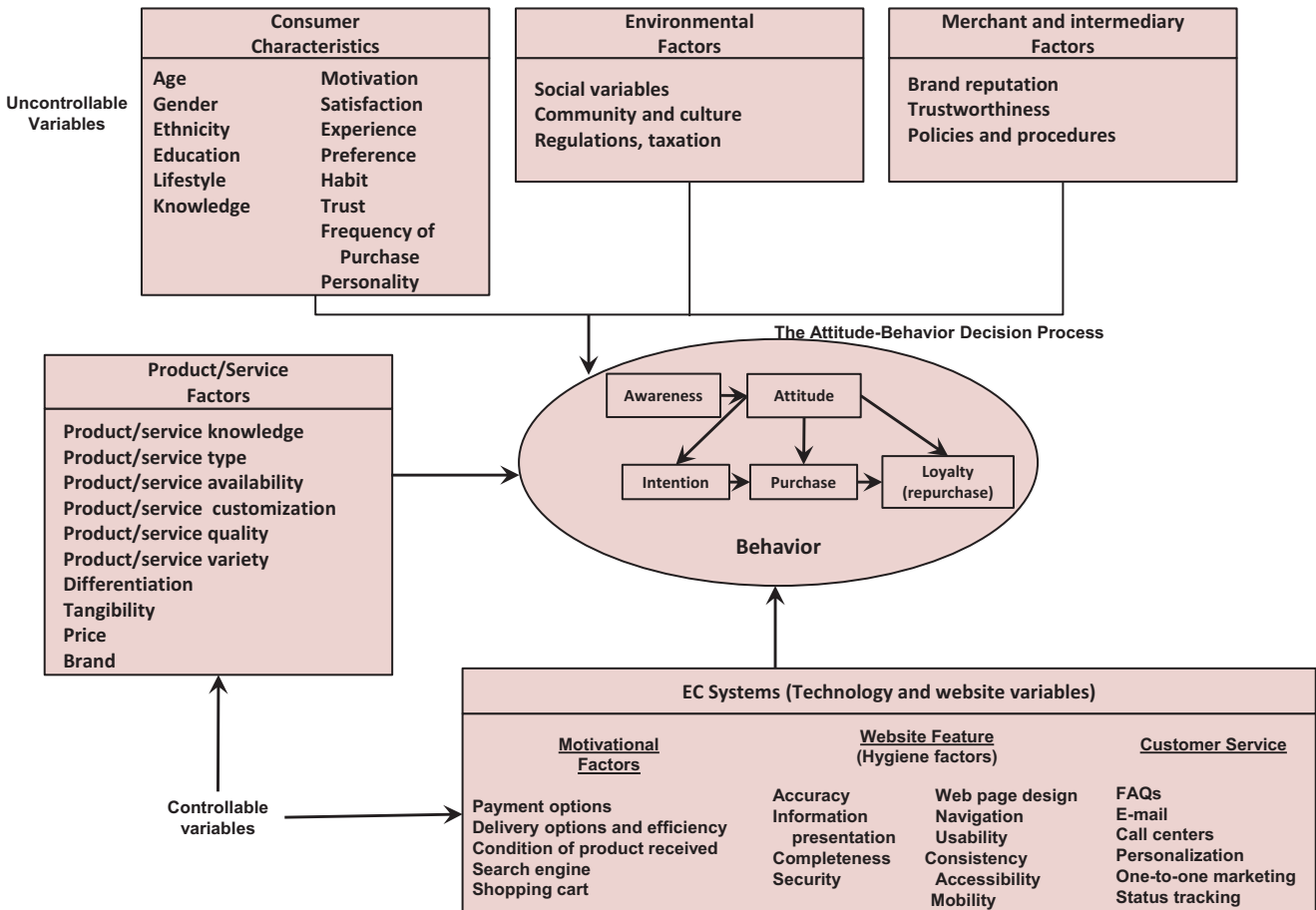

Fig. 10.1 EC and SC behavior model

The Major Influential Factors

Major influential factors of consumer purchasing behavior fall into the following categories:

Consumer Characteristics

Consumer (personal) characteristics, which are shown in the top-left portion of Fig. 10.1, refer to demographic factors, individual preferences, and behavioral characteristics of the consumer. Several websites provide information on customer buying habits online (e.g., **emarketer.com**, **clickz.com**, and **comscore.com**). The major demographics that such sites track are gender, age, marital status, education level, ethnicity, occupation, and household income, which can be correlated with Internet usage and EC data. Both men and women have been found to perceive information differently depending on their levels of purchase confidence and internal knowledge. Marketers also study the psychological variables such as personality and lifestyle characteristics. Several studies show that shopping experience has a significant effect on consumer attitude and intention to purchase and repurchase online (e.g., Chiu et al. 2014).

Merchant and Intermediary-Related Factors

Online transactions may also be affected by the merchant that provides the product/service. This group of factors includes merchant reputation, size of the transaction, trust in the merchant, and so on. For example, a customer may feel more secure when making a purchase from Amazon.com (due to its reputation) than from an unknown seller. Other factors such as marketing strategy and advertising can also play a major role.

Product/Service Factors

The second group of factors is related to the product/service itself. The consumer's decision to make a purchase is affected by the nature of the product/service in the transaction. These may include the price, quality, design, brand, and other related attributes of the product.

EC Systems

The EC platform for online transactions (e.g., security protection, payment mechanism, and so forth) offered by the merchant and the type of computing environment (e.g., mobile vs. desktop) may also have effects. EC design factors can be divided into payment and logistics support, website features, and consumer services. These can be classified into *motivational* and *hygiene* factors with motivational factors being important than hygiene factors in attracting online customers. Another factor that we include here is the type of EC. For example, consumer behavior in m-commerce may be unique and so is behavior during social shopping. Understanding these factors highlights the importance of designing user interfaces that are reactive to the device being used, with a focus on ensuring mobile availability as detailed in a study by Pantano and Priporas at **sciencedirect.com/science/article/pii/S0747563216302448**.

- **Motivational factors.** Motivational factors are the functions available on the website to provide direct support in the purchasing process (e.g., search engines, shopping carts, and multiple payment methods).
- **Hygiene factors.** Hygiene factors are functions available on the website whose objective is to make the website functional and serviceable (e.g., ease of navigation, show items added to the cart); their main purpose is to protect consumers from risks or unexpected events in the transaction process (e.g., security breaching and site technical failure).

Environmental Factors

The environment in which a transaction occurs may affect a consumer's purchase decision. As shown in Fig. 10.1, environmental variables can be grouped into the following categories:

- **Social variables.** People are influenced by family members, friends, coworkers, and current styles. Therefore, social variables (such as customer endorsements, word of mouth) play an important role in EC. Of special importance in EC are Internet communities and discussion groups, where people communicate via chat rooms, electronic bulletin boards, tweeting, and newsgroups.

- **Cultural/community variables.** The influence of culture on buying behavior varies from country to country. It makes a big difference in what people buy if a consumer lives near Silicon Valley in California or in the mountains in Nepal. Chinese shoppers may differ from French shoppers, and rural shoppers may differ from urban ones.
- **Other environmental variables.** These include aspects such as available public information, government regulations, legal constraints, and situational factors. For example, tax rates may affect online shopping (see Einav et al. 2014).

Lately, attention has been given to customers' behavior in the mobile environment. For more information, see **mobile-marketer.com**.

Enhancing Customer Loyalty

One factor that has a significant impact on consumer behavior, both online and offline, is loyalty. Customers who have had positive past experiences with a brand or retailer will show that brand or retailer preferential treatment during the buying process. This is because the customer shortcuts some of the evaluation process steps because they have trust based on previous outcomes. A report by Bain & Company (available for download **bain.com/Images/Value_online_customer_loyalty_you_capture.pdf**) shows the importance of loyalty in the e-commerce environment. The report shows several key factors in customer loyalty:

- Loyalty is needed for repeat buyers, and repeat buyers drive firm profitability.
- Repeat purchasers spend more and have larger transactions.
- Repeat customers generate referrals and drive more business.
- Loyal customers will buy additional products, even if they are dissimilar from the original product.

With these facts in mind, it becomes apparent that maintaining or growing customer loyalty is an important part of any e-commerce business. While many experts suggest methods to increase customer loyalty (see Kissmetrics 2016; Charlton 2015; Thompson, 2015), many agree that the most important factors are:

- Recognition of customer importance
- Honest engagement and customer service
- Convenience in using e-commerce systems
- Economic factors such as discounts or access to special promotions

By building customer loyalty, businesses are able to leverage our understanding of consumer behavior models, explicitly specifically decision and purchase models. Jackie Huba presents some interesting points on online customer loyalty in this video **youtu.be/UMWw6V_ZtvI**.

SECTION 10.1 REVIEW QUESTIONS

1. Describe the major components of the model of online consumer behavior.
2. List some major personal characteristics that influence consumer behavior.
3. List the major environmental variables of the purchasing environment.
4. List and describe five major merchant-related variables.
5. Describe the relationships among attitude, intention, and actual behavior in the behavior process model.
6. Why is loyalty an important part of the purchase decision model?

10.2   PERSONALIZATION AND BEHAVIORAL MARKETING

As the Internet provides a huge amount of data for customer profiling, one-to-one marketing becomes effective. There are three generic strategies for one-to-one marketing: *personalization*, *behavioral targeting*, and *collaborative filtering*.

Personalization in E-Commerce

Personalization refers to the matching of advertising content and vendors' services with customers based on their preferences and individual needs. Personalized content on a website has been found to increase conversion rates (see **searchenginewatch.com/article/2334157/How-Personalizing-Websites-With-Dynamic-Content-Increases-Engagement**). The matching process is based on the *user profile*. The **user profile** describes customer preferences, behaviors, and demographics. It can be generated by getting information directly from the users; for example, observing what people are doing online through the use of tools such as a **cookie**—a data file that, frequently, without the knowledge of users, is placed on their computers' hard drives. Alternatively, profiles can be built from previous purchase patterns. Profiles can be structured from market research or by making inferences from information known about similar consumers.

One-to-one matching can be done by methods such as *collaborative filtering* (discussed later in this section). Many vendors provide personalization tools that help with customer acquisition and retention. An example of these vendors is Magnify360 (**magnify360.com**).

Web Cookies for Data Collection

Cookies are small files sent from a website and stored in a designated area in your computer. They allow companies to save certain information for future use. The use of cookies is a popular method that allows computers to look smarter and simplifies Internet access. According to Webopedia, "the main purpose of cookies is to identify users and possibly prepare customized Web pages for them" (per **webopedia.com/TERM/C/cookie.html**).

Are cookies bad or good? The answer is "both." When users revisit Amazon.com or other sites, they are greeted by their first name. Amazon.com knows the users' identity by using cookies. Vendors can provide consumers with considerable personalized information if they use cookies that signal a consumer's return to a site. Cookies can provide marketers with a wealth of information, which then can be used to target specific ads to them. Thus, marketers get higher rates of "click-throughs," and customers can view information that is relevant to them. Cookies can also prevent repetitive ads because vendors can arrange for a consumer not to see the same ad twice. Finally, advanced data mining companies (e.g., provided by SPSS and Sift), can analyze information in cookie files so companies can better meet their customers' needs.

However, some people object to cookies because they do not like the idea that "someone" is watching their activity on the Internet. Users who do not like cookies can disable them. On the other hand, some consumers may want to keep the "friendly" cookies. For example, many sites recognize a person as a subscriber by accessing their cookies so that they do not need to reregister every time they visit the site.

Cookies can be removed if the user does not like them. For instructions on deleting cookie files from your Internet browser (e.g., Internet Explorer, Google Chrome, Firefox), see **whitecanyon.com/delete-cookie**.

Example: Using Cookies at DotMailer

DotMailer (**dotmailer.com**) is a marketing automation platform that focuses on e-mail campaigns. Like most other companies, DotMailer tracks cookies on their website. The policy states that:

> Cookies are small text files which a website may put on your computer or mobile device when you first visit a site or page. The cookie will help the website, or another website, to recognize your device the next time you visit. Web beacons or other similar files can also do the same thing. We use the term "cookies" in this policy to refer to all files that collect information in this way.

The company further categorizes the cookies it uses into three groups:

1. Essential cookies—so subscribers can access content
2. Performance cookies—to evaluate website use and performance
3. Functionality cookies—to remember user preferences

So are these cookies harmful? Like their uses on so many other sites, the jury is still out. In many cases the uses of cookies are benign and are only meant to help a website run more effectively and give the business a basic understanding of its users.

Individuals that are concerned about their online privacy can always block the use of cookies (see this site for details **allaboutcookies.org/manage-cookies**). If you are interested in more information about how cookies work, visit **allaboutcookies.org**.

Other Methods for Data Collection

While cookies been the primary method for tracking user activity online historically, there are new technologies that offer other ways to track users. These new technologies are being used as customers begin to restrict the use of cookies in their browsers and as the available technologies allow greater specificity and understanding of user behavior using these new software ideas. In an article in Kompyte, Sergio Ramirez (2015) details the following five methods that can, that are, or that could be used to track users:

1. Using the user's IP address as a unique identifier
2. Using LocalStorage, a new feature in HTML5
3. Using canvas fingerprinting, a method to embed material in Web pages that changes as the user advances
4. User behavior, identifying the user paste on a profile of their type of behavior online
5. Using ETAG, matching past user behavior on server logs with active user behavior

For additional research in this area, see **consumer.ftc.gov/articles/0042-online-tracking**

Using Personalized Techniques to Increase Sales

It has become a common practice for vendors to provide personalized services to customers in order to increase customer satisfaction and loyalty. A prime example is Amazon.com, which provides many personalized services where the most common activity is product recommendations. Amazon.com automatically generates such recommendations based on the buyers' purchasing and browsing histories, and upon the purchasing history of other customers with similar purchasing histories.

Personalized services can be facilitated when the companies know more about their customers. TowerData (**towerdata. com**) offers a service that helps businesses learn more about their customers, so they can personalize content (go to **intelligence.towerdata.com**). For a free e-book about the 40 best ways to personalize website, see **qubitproducts.com/content/40-best-ways-to-personalize**.

CASE 10.1: EC APPLICATION
USING AI AT THE NORTH FACE

The Problem

Online retailing is a crowded and competitive space. Businesses must work diligently to provide shopping experiences for customers that will meet their needs and keep them coming back. One issue that many retailers struggle with is personalization of the shopping experience based on customer needs. These systems are especially limited within the mobile environment. Retailers that are truly able to customize interactions with customers and recommendations of products have the opportunity to prosper.

The North Face (**thenorthface.com**) is an outdoor clothing and equipment company that offers a wide variety of products for both the professional and casual user. The company identified a deficiency in the personalization of its e-commerce experience and decided to do something about it.

The Solution

To solve this issue, The North Face partnered with IBM's Watson supercomputer and Fluid's Expert Personal Shopper (XPS) software to create an artificial intelligence recommendation system. The system relies on Fluid's cognitive computing platform that allows for rapid, complex personalization based on user requests and interactions. Visitors to The North Face site can provide basic information about their needs in a jacket (see **thenorthface.com/xps**), and products would then be recommended or even potentially customized to meet those needs (Marshall 2016). This system allows the company to better understand customer needs and behaviors. This data can then be used in the initial interaction with the customer and potentially future interactions as well (Greengard 2016).

The initial product launch was in late December 2015, and during that time over 55,000 customizations were performed with a session time of approximately 2 minutes. Because of the interactivity, there was a 60% click-through rate, and 75% of users enjoyed the system and said they would use it again (see **fluid.com/portfolio/the-north-face-xps**)

Questions

1. Why is personalization important for retailers and shoppers?
2. How is The North Face using artificial intelligence?
3. Why would this system generate repeat purchases?

Behavioral Marketing and Collaborative Filtering

A major goal of marketing is to enhance customer value through delivering the right product or service to the customer. One of the most popular ways of matching ads with customers is *behavioral marketing*, which is identifying customer behavior on the Web and designing a marketing plan accordingly.

Behavioral Targeting

Behavioral targeting uses consumer browsing behavior information, and other information about consumers, to design personalized ads that may influence consumers better than mass advertising does. It also assumes that users with similar profiles and past shopping behavior may have similar product preferences. Google tests its "interest-based advertising" to make ads more relevant and useful. Representative vendors of behavioral targeting tools are **predictad.com**, **criteo.com**, and **conversantmedia.com**. A major method of behavioral targeting is *collaborative filtering*.

Collaborative Filtering

When new customers come to a business, it would be useful if a company could predict what products or services are of interest to them without asking or viewing their previous records. A method that attempts to do just that is **collaborative filtering**. Using proprietary formulas, collaborative filtering automatically connects the preferences and activities of many customers that have similar characteristics to predict preferences of new customers and recommend products to them. For a free tutorial of 119 slides about collaborative filtering from Carnegie Mellon University, see Cohen (Undated). Many commercial systems are based on collaborative filtering.

Amazon's "Customers who bought this item also bought…" is a typical statement generated by collaborative filtering, which intends to persuade a consumer to purchase the recommended items by pointing to preferences of similar consumers.

Trouvus Inc., a provider of collaborative filtering software, describes how their product works in this short video **youtu.be/u_V9o2HDCTE**.

Other Methods

In addition to collaborative filtering, a few other methods for identifying users' profiles are described below:

Rule-Based Filtering

A company queries consumers about their preferences via multiple choice questions and uses the collected information to build patterns for predicting customers' needs. From this information, the collaborative filtering system derives behavioral and demographic rules such as, "If the customer's age is greater than 35, and the customer's income is above $100,000, show the Jeep Cherokee ad; otherwise, show the Mazda Protégé ad."

Content-Based Filtering

This technique allows vendors to identify customer preferences by the attributes of the product(s) they buy or intend to buy. Knowing the customers' preferences, the vendor will recommend products with similar attributes to the user. For instance, the system may recommend a text-mining book to customers who have shown interest in data mining or recommend more action movies after a consumer has rented one in this category.

Activity-Based Filtering

Filtering rules can also be built by logging the user's activities on the Web. For example, a vendor may want to find potential customers who visit bookstores more than three times a month. This can be done by analyzing the website's visiting level and activities. For a comprehensive discussion and more information about data collection, targeted advertising, and 104 companies that catch data, and so forth (including an infographic), see Weise (2016).

Legal and Ethical Issues in Collaborative Filtering

A major issue in using collaborative filtering for personalization is the collection of information from users without their consent or knowledge. Such a practice is illegal in many countries (e.g., the United States) because of the violation of privacy laws. Permission-based practices solve this problem. In fact, empirical research indicates that permission-based practices are able to generate better positive attitude in mobile advertising (Lin et al. 2015).

Social Psychology and Morphing in Behavioral Marketing

Cognitive styles that define how people process information has become a subject of research in Internet marketing and advertising. The underlying rationale is that people with different cognitive styles have different preferences in website design and marketing messages. Specifically, an attempt is made to connect the Web with users in their preferred cognitive style. This can make one-to-one advertising messages more effective. MIT designed an empathetic Web that is utilized to figure out how a user processes information and then responds to each visitor's cognitive style.

CASE 10.2: EC APPLICATION
NETFLIX USES TECHNICAL AND SOCIAL SYSTEMS SO YOU CAN FIND SOMETHING TO WATCH

A key benefit of streaming TV companies is the variety of their catalog of movies and shows and an individual's ability to view those on demand. Unfortunately, this is also a disadvantage; with so many options, how can an enjoyable selection be found? There are several ways to address this problem, and industry leader Netflix (**netflix.com**) has applied several of them. Two ways that may be used are software-based systems that recommend movies and shows based on an individual's past preferences, and the other option is social: allowing users to make recommendations to others.

The Technical Approach

There are another number of challenges to a technical approach of recommending content to individual users. These challenges are detailed by Raimond and Basilico (2016) and include:

- Challenge 1: Uneven video availability
- Challenge 2: Cultural awareness
- Challenge 3: Language
- Challenge 4: Tracking quality

But another significant issue is the wide variability in the amount of content available based on different regions. Because of different contract stipulations with content providers, some content is available in some countries, but not others. For example, a BBC show may be available in the United States but not in England. This means that recommendation software must segment users by geographic location as well.

The system uses a very detailed algorithm that looks at both content descriptors as well as preferences in peer groups. Different pieces of content are grouped based on their type, genre, age, rating, cast, and so on. These data points can be used to make a recommendation if an individual has expressed a preference for one of these categories. For example, if a user likes the movie *Predator* with Arnold Schwarzenegger, the system may recommend other movies starring Schwarzenegger. The system also looks at peer groups. Based on an individual's past preferences, they can be filtered into similar groups of users. Then other movies that were like by this peer group, but not watched yet by the individual user, can be recommended. These systems interact with each other and also are tied to viewing regions (Popper 2016).

The Social Approach

In 2014 Netflix launched social recommendations that allowed users to share their feelings about different content available within the Netflix platform. The idea was that when searching for a movie to watch, users would trust reviews by both known and unknown individuals. The rollout initially focused on an integration with Facebook and allowed people to publicize their like or dislike for content they had recently seen (Page 2014). Functionality was later added to the Android app that also made it easy to place these recommendations.

In addition to efforts from Netflix itself, a number of third-party websites and apps have taken up the challenge of helping users find something good to watch. Examples include **agoodmovietowatch.com**, **whatisonnetflix.com**, and **netflixrou-lette.net**.

Understanding what users want is a very complicated matter. Making recommendations is an important part of customer satisfaction when a large amount of choice exists or the product offerings are complex. Netflix follows both a technical and social approach to attempt to keep users satisfied with their viewing options.

Questions

1. Why does making choices get harder when you have more options?
2. Why does Netflix use both a technical and a social approach two recommendations?
3. How do the technical recommendations work?
4. Why is it important for Netflix to be able to make appropriate recommendations for their users?

SECTION 10.2 REVIEW QUESTIONS

1. Define and describe the benefits and costs of personalization.
2. Describe how websites can track users and the benefits to companies of this tracking.
3. Define behavioral targeting and find a sample application on the Internet.
4. Define collaborative filtering and find a sample application on the Internet.
5. Explain how one-to-one advertising is done using cookies and behavioral targeting.

10.3   MARKET RESEARCH FOR E-COMMERCE

In order to sell more effectively, it is important to conduct proper market research to find information and knowledge about consumers and products. The market researcher's goal is to identify marketing opportunities and problems, to provide input for marketing planning, to find out how to influence the purchasing process, and to evaluate the success of promotions and advertisements. Market research aims to investigate the behavior of customers on the Web (see Strauss and Frost 2014). Market researchers gather information about competition, regulations, pricing, strategies, and consumer behavior.

Objectives and Concepts of Online Market Research

Investigation of EC markets can be conducted through conventional methods (e.g., in-person surveys; focus groups), or it can be done by using the Internet. Internet-based market research is frequently faster, allowing researchers to reach remote or diverse audiences. In addition, market researchers can conduct very large studies on the Web at a much lower price than using offline methods. Telephone surveys can cost as much as $50 per interview, and their quality may be poor. Such cost can accumulate to thousands of dollars when several hundred respondents are needed. An online survey will cost a fraction of a similarly sized telephone survey and can expedite research considerably. On the other hand, the increased sample size in online surveys can increase the accuracy of the results. McDaniel and Gates (2014) provide a comprehensive review of online market research technologies, methods, tools, issues, and ethical considerations.

What are Marketers Looking for in EC Market Research?

By looking at a customer's personal profile that includes observed behaviors on the Web, it is possible for marketers to predict online buying behavior. For example, companies want to know why some customers are online shoppers and why others are not. Major factors that are used for predicting customer online purchasing behavior are (in descending order of importance) product information requested, number of related e-mails, number of orders made, products/services ordered, and gender.

Typical questions that online market research attempts to answer are: What are the purchase patterns for typical individuals, and what are the patterns for specific groups? How can we identify those who are real buyers from those who are just browsing? What is the optimal Web page design? Knowing the answers to these questions can help a vendor advertise properly, price items, design a website, and provide appropriate customer service. Online marketing research can provide data to help answer these questions. More information about market research on the Web can be found in the tutorials at **webmonkey.com** and **inc.com/guides/biz_online/online-market-research.html**.

Representative Market Research Approaches

To conduct online marketing, it is necessary to know what the customer wants or needs. Such information can be collected by:

- Soliciting information from customers online (e.g., via interviews, questionnaires, use of focus groups, or blogging)
- Observing what customers are doing on the Web by using transaction logs and cookies
- Using data, text, and Web mining or collaborative filtering techniques to analyze the available data

Data Collection and Analysis

Specific methods for collecting online data include e-mail communication with individual customers, questionnaires placed on websites, monitoring conversations in social networks, and tracking customers' movements on the Web.

Online Surveys

An online survey is a major method for collecting EC data, and it is considered the most cost-effective mode of survey research. It has several other advantages, including lower overall preparation and administration costs, better control of the process of filling out the questionnaire (which may lead to fewer response errors, and easier follow-up), and more flexibility in the questionnaire design. In addition, the cycle time can be much shorter. However, online surveys also have some limitations, including the lack of anonymity, data errors due to nonresponses, reporting biases, and poor data privacy.

Web-Based Surveys

A special type of online survey is done by placing questions on selected websites and inviting potential consumers to reply. For example, General Mills used a Web-based survey to help understand how consumers use Chex cereal. Web surveys may be passive (a fill-in questionnaire) or interactive (respondents download the questionnaires, add comments, ask questions, and discuss issues). The surveys may include both approaches.

Online Focus Groups

Several research firms create panels of qualified Web visitors to participate in online focus groups. For example, see NPD Group, Inc. (go to **npd.com/wps/portal/npd/us/about-npd/consumer-panel**). This panel consists of 2 million consumers recruited online and verified by telephone to provide information for NPD's consumer tracking services. The use of preselected focus group participants helps to overcome some of the research limitations (e.g., small sample size and partial responses) that sometimes limit the effectiveness of Web-based surveys.

Hearing Directly from Customers

Instead of using focus groups, a company may ask customers directly what they think about a product or service. Companies can use chat rooms, social network discussion groups, blogs, wikis, podcasts, and electronic consumer forums to interact with consumers. For example, toymaker LEGO used a market research company to establish a direct survey on an electronic bulletin board where millions of visitors read each other's comments and share opinions about LEGO toys. The researchers analyzed the responses daily and submitted the information to LEGO. Netflix is using this approach extensively by encouraging customers to report their likes and dislikes. Software tools can facilitate obtaining input directly from customers. For examples, see **millwardbrowndigital.com**, a leading provider of media analytics and marketing solutions.

Data Collection in Social Networks and Other Web 2.0 Environments

Collecting data in social networks and Web 2.0 environments provides new and exciting opportunities. Here are some methods:

- **Polling.** People like to vote (e.g., the US television show *American Idol*), expressing their opinions on certain issues. People provide opinions on products, services, performances of artists and politicians, and so forth. Voting is popular in social networks.
- **Blogging.** Bloggers can raise issues or motivate others to express opinions in blogs.
- **Chatting.** Community members love to chat in public chat rooms. By following the chats, you can collect current data.
- **Tweeting.** Following what travels on Twitter can be enlightening.
- **Live chat.** Here, you can collect interactive data from customers in real time.
- **Chatterbots.** These can be partially interactive. You can analyze logs of communications. Sometimes people are more honest when they chat with an avatar.
- **Collective wisdom (intelligence).** This is a type of community brainstorming. It is used in crowdsourcing where communication is encouraged.
- **Find expertise.** Expertise is frequently found in the Web 2.0 environment; many times it is provided for free (e.g., Yahoo! Answers).
- **Folksonomy.** This social tagging makes data easier to find and access.
- **Data in videos, photos, and other rich media.** Places where these media are shared contribute to valuable data collection.
- **Discussion forums**. Subgroups in social networks use a discussion format where members exchange opinions on many topics.

Example: Xiaomi's Data Collection from Social Media in China

Xiaomi, Inc. (**mi.com/en**) is a Chinese company that designs and sells smartphones and consumer electronics. The company has grown unprecedentedly to become one of the top five smartphone brands in China in three years. It sold 18.7 million smartphones in 2013, only three years after its launch. A key to its success story is the effective use of social media as a marketing research tool. Xiaomi engages fans on social media sites. For example, the company organized a flash sale in 2014, using social media to notify their fans about their upcoming sale. According to the company's global director of marketing, social media is very important to Xiaomi, as it is the most direct and effective way to interact with its fans. Within a year, the market research website had enrolled over 6 million registered users (called Mi Fen). The company analyzed user contributions on the Xiaomi website to design a user interface called MIUI. Xiaomi's first smartphone model was released in August 2011, which received more than 300,000 preorders. Two years later, its sales reached $5 billion in 2013 and started entering the market of other electronic products. Xiaomi's success story shows the importance of market research on social media. By November 2014, the Millet Forum (**bbs.xiaomi.cn**) had more than 221 million posts from its 30 million members. For more information about Xiaomi and its social media engagement, see **thenextweb.com/asia/2014/04/09/xiaomis-social-media-strategy-drives-fan-loyalty-books-it-242m-in-sales-in-12-hours**.

Observing Customers' Movements Online

To avoid some of the problems of online surveys, especially the reporting bias that occurs when people give false or biased information, some marketers choose to learn about customers by observing their behavior rather than by asking them questions. Keeping track of consumer's online behavior can be done by using transaction logs (log files) or cookie files. This allows activity-based filtering to be done.

Transaction Logs

A **transaction log** (for Web applications) is a user file that records the user's activities on a company's website from the computer log. A transaction log can be further analyzed with log file analysis tools (e.g., from Oracle) to get a good idea about online visitors' activities, such as how often they visit the site.

Note that, as customers move from site to site, they establish their **clickstream behavior**, a pattern of their movements on the Internet, which can be seen in their transaction logs (see upcoming discussion of clickstream analysis).

Cookies and Web Bugs

Cookies and Web bugs can be used to supplement transaction log methods. Cookies allow a website to store data on the user's personal device. When the customer returns to a site visited previously, the website can find what the customer did in the past from the cookie. The customer can be greeted by their name, or a targeted ad can be sent to them. For a comprehensive description of cookies, including examples and privacy concerns, see the Indiana University Knowledge Base (**kb.iu.edu/d/agwm**). Cookies are frequently combined with **Web bugs** that are tiny (usually invisible) objects concealed in a Web page or in e-mail messages. Web bugs transmit information about the user and his or her movements to a monitoring site (e.g., to find out if the user has viewed certain content on the Web page). Many believe that cookies and Web bugs are an invasion of a user's privacy.

Spyware

Spyware is software that enters your computer like a virus does, without your knowledge. It then enables an outsider to gather information about your browsing habits. Originally designed to allow freeware authors to make money on their products, spyware applications are typically bundled together with freeware that is downloaded onto users' computers. Many users do not realize that they are downloading spyware with the freeware. The best defense against spyware is to install antivirus software, which should detect and remove any viruses or other harmful intrusions.

Web Analytics and Mining

Web analytics deal with the monitoring, collecting, measuring and evaluating, and reporting tasks related to Internet data and activities (e.g., see Kahn 2015 and Batrinca and Treleaven 2014). Web analytics help us understand and optimize Web usage. Such analysis is done, for example, by retailers for market research. For example, see IBM Coremetrics (**ibm.com/software/marketing-solutions/coremetrics**; now part of IBM Customer Experience Analytics). A company can also use Web analytics software to improve its website's look and operation. Web analytics can provide quick feedback from customers to help marketers decide which products to promote. For tutorials on data, text, and Web mining, see **mydatamine.com**, **tutorialspoint.com/data_mining/index.htm**, and the video series "Introduction to Data Mining" that begins at **youtube.com/watch?v=EtFQv_B7YA8**.

For details and methods used, see Alhlou et al. (2016). A special type of Web analytics is *clickstream analysis*, or just *click analysis*.

Clickstream Analysis

Clickstream data are data that describe which websites users visit, in what order, and the time spent on each. This is done by tracking the succession of "clicks" each visitor makes. Clickstream analysis is a widely used component of overall website and e-commerce system analysis. It provides a detailed set of information about user activities online, specifically how they respond to a website or e-commerce store. By evaluating this data, site owners can get a better picture of their users' aggregate interest and activity patterns. These patterns can help influence a variety of areas including website design, e-commerce system design, and product/recommended product placement. These systems generate a huge amount of data, and this type of analysis is usually associated with big data analytics and tools such as Hadoop that allow for the evaluation and understanding of what has been recorded.

Several companies offer tools that enable such an analysis. For example, Analytics 10 from Webtrends, Inc. (**analytics.webtrends.com**) features several advanced tools for analyzing clickstream data (**webtrends.com/solutions/digital-measurement/streams**). Finally, **clickstreamr.com** configures Google Analytics standards and can be used for such analysis.

Web Mining

Web mining refers to the use of data mining techniques for both Web content and usage in Web documents in order to discover patterns and hidden relationships. Web mining has the potential to change the way we access and use the information available on the Web. For mining the social web, see Khan (2015).

The growth of more advanced Web-based systems and social media has enabled the generation of significant amounts of customer data concerning online activities, patterns, and behavior. As the amount available information grows, so does the ability to analyze that information and the potential business uses that this information can be used for. For an infographic that details the type of information that Google collects and how it may be used, see **welivesecurity.com/wp-content/media_files/Google-Privacy-Infographic-780p.jpg**.

Limitations of Online Market Research and How to Overcome Them

Online market research has technical and behavioral limitations. One technical problem with online market research is that there may be an abundance of data. To use data properly, one needs to organize, edit, condense, and summarize them. However, such a task may be expensive and time-consuming. One solution to this problem is to automate the process by using data warehousing and data mining.

Behavioral limitations of online research methods are responding biases, sample representatives that are hard to control, and the ethics and legality of Web tracking. As Web-based surveys often use an "open call" to recruit respondents, the response rate is hard to know, and the respondent control is limited. Anonymity in Web-based surveys may encourage people to be more honest in their replies. However, anonymity may result in the loss of valuable information about the demographics, preferences, and behaviors of the respondents. To overcome some of the above limitations, online market research methods need to be designed carefully and rigorously. Small companies without proper expertise may outsource their market research to large and experienced companies that have specialized market research departments and expertise.

Privacy Issues in Market Research

Collecting data from customers, sometimes without their knowledge, may constitute an invasion of privacy. For an overview, guidelines, and standards, see **esomar.org/knowledge-and-standards/codes-and-guidelines.php** and **marketingresearch. org/issues-policies/mra-code-marketing-research-standards**.

Biometric and Smartphone Marketing Helps Market Research

Many households have several users; thus, the data collected may not represent any one person's preferences (unless, of course, we are sure that there is one user per device, as in the case of smartphones). Potential solutions are using biometric marketing or smartphones to access individuals.

A **biometric** is one of an individual's unique physical or behavioral traits that can be used to authenticate an individual. By applying the technology to computer users, we can improve security and learn about the user's profile. The question is how to do it. Indeed, there are programs by which users identify themselves to the computer by biometrics, and these are spreading rapidly. Note that utilizing the technology for market research involves social and legal acceptability.

Mobile market research is a method of collecting data though mobile devices including mobile phones, smartphones, and tablets. Typical methods for collecting information are through apps, short message systems (SMS), WAP, mobile Web, and location-based services. A major advantage of mobile market research is that it can be conducted virtually anywhere at any time. However, it does suffer from the limitation that it is hard to define the sampling frame and cannot access the sample without the users' mobile devices. Privacy protection is another key concern for conducting mobile market research. Hence, an organization called ESOMAR has released guidelines for conducting mobile market research (**esomar.org**).

As mobile adoption continues to grow, so does the field of mobile research. While some of these tools are based on the mobile device itself, others are simply conversions of Web-based tools that can be used in the mobile environment (as responsive websites or apps). In the mobile environment, several of these tools may in fact have greater efficiency. Mobile users can take surveys in physical locations or can react to surveys or requests for information based on their location data. For more information about how mobile marketing can be conducted, see **mmra-global.org**.

SECTION 10.3 REVIEW QUESTIONS

1. Describe the objectives of market research.
2. Describe the role of transaction logs and clickstream analysis.
3. Define cookies, Web bugs, and spyware, and describe how they can be used in online market research.
4. Describe how the issue of privacy relates to online market research.
5. Describe the limitations of online market research.
6. Describe how biometrics and smartphones can improve market research.

10.4   WHY WEB ADVERTISING

Advertising on the Web plays an extremely important role in e-commerce. Internet advertising is growing very rapidly, especially in B2C, and companies are changing their advertising strategies to gain a competitive edge. Since the Internet provides interactivity, online ads are also useful for brand building directly through response ads. Based on a 2016 IAB Internet Advertising Report conducted by the professional service network PricewaterhouseCoopers (**pwc.com**), online ad revenue reached a record high of $17.6 billion in Q3 of 2016 in the United States alone, which is a 20% increase from the previous year (see **iab.com/news/q3-2016-internet-ad-revenues-hit-17-6-billion-climbing-20-year-year-according-iab**). In the full year of 2015, mobile advertising jumped 66% from the previous year and overall advertising grew 20.4% for a total of $59.6 billion (see **iab.com/wp-content/uploads/2016/04/IAB_Internet_Advertising_Revenue_Report_FY_2015-final.pdf**).

Search, display/banner ads, and mobile ads are the three most popular types of Internet ads. Social media advertising is another fast-growing area. Statistical trends and predictions reported by **Statistica.com** in late 2016 indicate that in social media advertising:

- Revenue in 2016 will be $14.8 billion.
- A 32.2% increase over 2015.
- There is a predicted a 20% increase in 2017.
- The revenue from each mobile user will grow from $55.95 in 2016 to $65.91 in 2017 (a 17.8% increase).

When individual social media networks are examined, we find (LePage 2016a):

- By the third quarter of 2016, Facebook brought in $6.8 billion in advertising revenue, up from $4.3 billion the year before.
- Twitter advertising revenue totaled $545 million in Q3 of 2016, an increase of 60% year-over-year.
- LinkedIn Marketing Solutions revenue increased 26% year-over-year to $175 million in Q3 of 2016.
- Instagram has over 500 million active monthly users.
- By the third quarter of 2016, Facebook brought in $6.8 billion in advertising revenue, up from $4.3 billion the year before.
- 150 million people use Pinterest every month.
- The number of YouTube channels earning 6 figures per year is up 50% year-over-year.

All these numbers indicate the fast-growing trend in online and mobile advertising. In this section, we concentrate on generic Web advertising.

Overview of Web Advertising

Advertising is the delivery of ads to Internet users in order to influence people to buy a product or a service. Traditional advertising (also known as marketing communication) is an impersonal, one-way mass communication. Telemarketing and direct mail ads attempted to overcome the deficiencies of mass advertising, but they are expensive and their response rate was not too high. For example, a direct mail campaign costs about $1 per person and has a response rate of only 1% to 3%. This makes the cost per responding person in the range of $20 (for a 5% response) to $100 for 1% response. Such an expense can be justified only for high-ticket items (e.g., cars). For a video on how to calculate the cost of responses, see **youtu.be/AcPbfP7Cxg0**.

One of the problems with direct mail advertising was that the advertisers knew very little about the recipients. Market segmentation by various characteristics (e.g., age, income, gender) helped a bit but did not solve the problem. The concept of **interactive marketing** enables marketers and advertisers to interact directly with customers.

On the Internet, a consumer can click an ad to obtain more information or send an e-mail to ask a question. The customer can chat live with the merchant (person or avatar) or with peers in a social network chat room. The Internet enables truly one-to-one advertising.

The Advertising Cycle

Many companies are treating advertising as a cyclical process, as shown in Fig. 10.2. The cyclical process requires a plan to determine the target audience of a campaign and how to reach that audience. Analyzing a campaign after its completion assists a company in understanding the campaign's success or failure. This knowledge is then used for planning future campaigns.

Before we describe the steps in the cycle as it is implemented in Web advertising, let us learn some basic Internet advertising terminology.
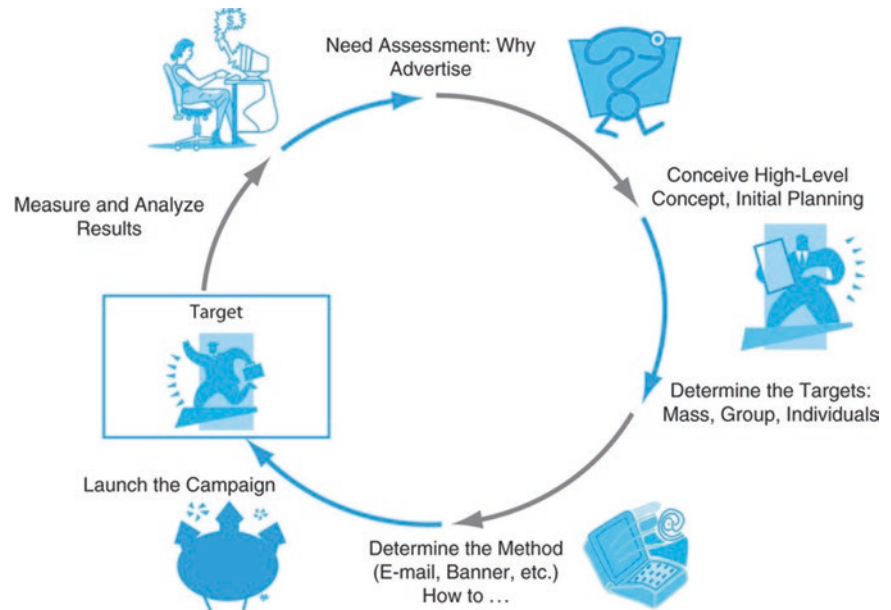
Basic Internet Advertising Terminology

The following terms and their definitions will be of use as you read about Web advertising.

- **Ad views**: The number of times users call up a page that has a banner on it during a specific period; known as *impressions* or *page views.*
- **Click (ad click)**: A count made each time a visitor clicks on an advertising banner to access the advertiser's website.
- **CPM (cost per mille, i.e., thousand impressions)**: The fee an advertiser pays for each 1,000 times a page with a banner ad is shown.
- **Conversion rate**: The percentage of clickers who actually make a purchase.
- **Click-through rate/ratio (CTR)**: The percentage of visitors who are exposed to a banner ad and click on it.
- **Hit**: A request for data from a Web page or file.
- **Landing page**: The page a viewer is directed to after having clicked on a link. In online marketing, this page is used to convert the person from a viewer to a buyer.

Why Internet Advertising?

The major traditional advertising media are television, newspapers, magazines, and radio. However, the market is changing, as many consumers are spending more time on the Internet (about a 32% annual growth) and using mobile devices. For children, the time spent online has overtaken the time spent watching television (Coughlan 2017). Internet advertising is getting more attention. The advertising revenue of Internet advertising exceeded that of broadcast TV, cable TV, and newspapers in 2013, and we can foresee this trend continuing. Hence, online advertising is a clear choice for the future.

Advertising Online and Its Advantages

The major advantages of Internet ads over traditional media advertising are the ability to interact one-to-one with customers and the ability to use rich media (e.g., videos) to grab attention. In addition, ads can be changed easily, and campaigns are usually less costly. In comparison with traditional media, the Internet is the fastest-growing communication medium by far. Worldwide, as of April 2016, the number of Internet users was getting close to 3.6 billion (see **internetlivestats.com/internet-users/**). Of course, advertisers are interested in such a fast-growing community.

Other reasons why Web advertising is growing rapidly include:

- **Cost.** Online ads usually are cheaper than ads in traditional media.
- **Media richness.** Web ads can include rich and diversified media (e.g., videos, animation). In addition, ads can be combined with games and entertainment.
- **Easy updating.** Updating can be done quickly and inexpensively.
- **Personalization.** Web ads can be either one-to-one or addressed to population segments.
- **Location-based.** Using wireless technology and GPS, Web advertising can be location based.
- **Linking to shopping.** It is easy to link from an online ad to a vendor's webstore. Usually, it can be done in one click.

Traditional Versus Online Advertising

Each advertising medium, including the Internet, has its advantages and limitations. Bilos et al. in 2014 compares traditional advertising against Internet advertising (including social networks). They concluded that not only is Internet advertising more cost efficient but also the business impact of Internet ads is larger than traditional ads.

The synergy between TV and online advertising can help attract more attention than either medium on its own. It has been found that a TV campaign increases brand awareness by 27%, whereas a combined TV and online campaign increases it by 45%. A TV campaign increases intent to purchase by 2%, whereas a combined TV and online campaign increases it by 12%.

The impact of Internet ads on newspaper viability is devastating. Many newspapers are disappearing, merging, or losing money. One solution is to increase their digital ads, as the *New York Times* is doing. For more details, see **absolutemg. com/2014/12/23/traditional-media-balancing-effect**.

Internet ads are subject to limitations such as screen size, space, and policies.

SECTION 10.4 REVIEW QUESTIONS

1. Define Web advertising and the major terms associated with it.
2. Describe the reasons for the growth in Web advertising.
3. Describe emerging Internet advertising approaches.
4. List the major benefits of Web advertising.
5. Draw and explain the advertising cycle.
6. What is the impact of online advertising on the viability of newspapers and TV?

10.5   ONLINE ADVERTISING METHODS

A large number of online advertising methods exist. For a list and description, please see **en.wikipedia.org/wiki/Online_ advertising**. Next, we discuss the three major categories of ads.

Major Categories of Ads

Ads can be classified into three major categories: *classified*, *display*, and *interactive*.

Classified Ads

These ads usually use text, but lately may include photos. The ads are grouped according to classification (e.g., cars, rentals). They are the least expensive.

Classified ads can be found on special sites (e.g., see classified ads at **craigslist.org** and **backpage.com**), as well as on online newspapers, e-markets, and portals. In many cases, posting regular-size classified ads is free, but placing them in a larger size, in color, or with some other noticeable features is done for a fee. For examples, see **traderonline.com** and **adver- tising.microsoft.com.**

Display Ads

These are illustrated advertisements that use graphics, logos, colors, or special designs. These ads are usually not classified, but they can be combined. Display ads are popular offline in billboards, yellow pages, and movies. They are becoming very popular on the Internet as well. All major search-based advertising companies (e.g., Google, Yahoo!, Microsoft) are leveraging their online positions in search advertising into the display ad business.

Interactive Ads

These ads use online or offline interactive media to interact with consumers and to promote products, brands, and services. This is most commonly performed through the Internet, often using video as a delivery medium.

There are several variations in each of these categories. The major methods are presented next.

Banners

A **banner** is a display that is used for advertising on a Web page (words, logos, etc. embedded in the page). A banner ad is frequently linked to an advertiser's Web page. When users "click" on the banner, they are transferred to the advertiser's site. A banner must be designed to catch a consumer's attention. Banners often include images and sometimes video clips and sound. Banner advertising, including pop-up banners, is a popular advertising method on the Web.

There are several sizes and types of banners. The sizes, which are standardized by the Interactive Advertising Bureau (IAB) (**iab.com**), are measured in pixels. **Random banners** appear randomly, not as a result of some action by the user. Companies that want to introduce their new products (e.g., a new movie or CD) or promote their brand use random banners. **Static banners** stay on a Web page regularly. Finally, **pop-up banners** appear in a separate window when its affiliated Web page is activated.

If an advertiser knows something about a visitor, such as his/her user profile, or area of interest, the advertiser will try to match a specific banner with that visitor. Obviously, this kind of targeted, personalized banner is usually most effective. Such **personalized banners** that are tailored to meet the need of target customers are being developed, for example, by Conversant (**conversantmedia.com**).

Live banners are ads where the content can be created or modified at the time the ads pop up instead of being preprogrammed like banner ads. They usually are rich media. For details and examples, see **en.wikipedia.org/wiki/Live_banner**.

Benefits and Limitations of Banner Ads

The major benefit of banner ads is that, by clicking on a banner, users are transferred to an advertiser's site, frequently directly to the shopping page of that site. Another advantage of using banners is the ability to customize them for individual surfers or a market segment of surfers. In many cases, customers are forced to see banner ads while waiting for a page to load, or before they can get the page they requested (a strategy called *forced advertising*). Finally, banners may include attention-grabbing rich multimedia.

The major disadvantage of banners is their cost. If a company demands a successful marketing campaign, it will need to pay high fees for placing banners on websites with high traffic.

However, it seems that viewers have become somewhat immune to banners and simply ignore them. The click-through rate has been declining over time. Because of these drawbacks, it is important to decide where on the screen to place banners (e.g., right side is better than left side, top is better than bottom). Companies such as QQ.com and Taobao.com in China have built behavior labs to track eye movements of consumers to understand how screen location and Web page design may affect viewer attention. Ad blocking tools are also available to install on a browser to remove all banner ads when a Web page is accessed. This also reduces the number of click-throughs.

Pop-Up and Similar-Type Ads

One of the most annoying phenomena in Web surfing is the increased use of pop-ups and similar ads. A **pop-up ad**, also known as *ad spawning*, appears due to the automatic launching of a new browser window when a visitor accesses or leaves a website, when a delay occurs. Pop-ups cover the user's current screen and may be difficult to close. They may include images, audio, or video. They can gain a user's immediate attention, but their use is controversial. Many users strongly object to this advertising method, which they consider to be intrusive. Most browsers provide some options that allow the viewer to block pop-up windows. Some users resort to using specialized applications to block pop-ups and other ads (see **adblockplus.org**). Legal attempts have also been made to control pop-ups because they are basically a form of spam.

Several other tactics, some of them very aggressive, are being used by advertisers, and their use is increasing. These tactics may be accompanied by music, voice, and other rich multimedia.

Pop-Up Videos

Along with the increase in popularity of free viral videos (e.g., on YouTube) comes the pop-up commercial before them. Some can be skipped; others cannot. These commercials usually last for 10 to 20 seconds. These pop-ups may or may not be related to the content of the video you want to watch. Sometimes, video ads come with an incentive, called *incentivized video ads*, which will be described later. In place of standardized videos, some sites, like Hulu, are allowing users to select the video ad that is most interesting to them.

E-Mail Advertising

E-mail marketing refers to the use of e-mails for sending commercial messages to users. E-mail marketing may occur in different formats and for different purposes. Typical e-mail marketing formats are:

1. Using **e-mail advertising** means that ads are attached to e-mails
2. Sending e-mail messages for facilitating vendor-customer relationships (CRM types)
3. Sending e-mail messages for attempting to acquire new customers
4. Sending messages via microblogs or other social media platforms

E-mail messages may be combined with brief audio or video clips to promote a product; some messages provide links that users can click on to make a purchase. Sending coupons and special offers is done by all major retailers, including department stores and supermarkets. Airlines, banks, educational institutions, and anyone else who can get your e-mail will send you e-mail ads.

Major Advantages and Limitations of E-Mail Advertising

The major advantages of e-mail advertising are:

- Low cost
- Target fans of your brand
- Market segmentation
- Calls to action
- Easy to create
- Easy to track
- Easy to share
- Immediacy
- Return on investment

For more details, see **pure360.com/10-benefits-of-email-marketing**, or download a report on e-mail marketing maturity at **pure360.com/maturity-benchmarking-report-2015**.

Using an infographic, Hanford (2016) explains the benefits of e-mail marketing for customer acquisition and retention, increased sales, and CRM.

Limitations

A major limitation of e-mail ads is that these messages are often treated as spam and are blocked by the user's spam control software. In general, using e-mail to send ads (sometimes floods of ads) without the receivers' permission is considered *spamming*.

As the volume of e-mail increases, consumers' tendency to screen and block messages is on the rise as well. Today, most e-mail services permit users to block messages from specific sources or automatically filter certain ads as junk mail.

Implementing E-Mail Advertising

A segmented list of e-mail addresses can be a very powerful tool for a company, helping it to target a group of people that share common characteristics. In many cases, the mailing list is based on membership and loyalty programs, such as an airline's frequent flyer program. For information on how to create a mailing list, consult **topica.com**.

E-mail can also be sent to mobile devices. Mobile phones, in particular, offer advertisers a real chance to advertise interactively and on a one-to-one basis with consumers—anytime, anyplace. Now e-mail ads are targeted to individuals based not only on their user profiles but also on their physical location at any point in time.

A wide variety of software systems exist to help businesses manage e-mail marketing campaigns. These systems allow users to create and send messages, track responses, build customer data, and maintain regulatory compliance. Some leaders in the field are **constantcontact.com**, **mailchimp.com**, and **infusionsoft.com**.

E-Mail Hoaxes

E-mail hoaxes are very popular; some of them have been going on for years (e.g., Neiman Marcus's cookie recipe, the Nigerian Letters, the Homeland Security cashier check hoax). Some of these are scams. For details, see US Federal Trade Commission (**ftc.gov**).

Fraud

Fraud may happen in e-mail ads. For example, a person may receive an e-mail stating that his or her credit card number is invalid or that his or her MSN service will be terminated unless another credit card number is provided by the recipient of the mail. For protection against such fraudulent practices, see **scambusters.org**.

Regulatory Compliance

In the United States, marketers are also required to maintain compliance with the CAN-SPAM act that also users to remove themselves from mailing lists; see **ftc.gov/tips-advice/business-center/guidance/can-spam-act-compliance-guide-business**.

Search Engine Advertisement and Optimization

Search engines are a good mechanism for most people to find information and, therefore, a good platform for online advertising. Placing online ads on Web pages that show results from querying a search engine is known as **search advertising**. If the search result includes your company and product, it is a free advertisement for you. The problem is that the results of a search may include thousands of items, and your product may be not on the first or second page of the results. Note that search advertising includes mobile search and social network search (see **pipl.com**).

Keyword advertising links the appearance of ads with keywords specified by the advertiser. It includes "pay per click." Businesses select the keywords to which they want their advertisements to be searched and matched. Advertisements appear on the screen along with the search results when the chosen keywords are searched. This can substantially increase the likelihood that the advertisement will be viewed and possibly acted on because of its high relevance to user interests. For an example of how this works, see **google.com/adwords/how-it-works/ads-on-google.html**. Google is using two major methods (to be described later) to implement its advertisement strategy. In fact, more than 92% of Google's revenue is in Q3 of 2016 and was generated from advertising.

Other search engines also focus on this type of advertising. The second largest US search engine is Bing (a Microsoft product). In mid-2016, Bing held 21% of the search engine market. For an example of keyword advertising works with Bing, see **advertise.bingads.microsoft.com/en-us/solutions/tools/keyword-planner**.

Search Engine Optimization (SEO)

Search engine optimization (SEO) is a process that improves the visibility of a company or brands on the results page displayed by a search engine. Ideally, the results should be in the top 5 to 10 on the first page. Companies hire search optimizers or try to optimize by themselves. SEO can increase the number of visitors to a website, and therefore companies are willing to pay for this service. For how to do this, see Duermyer (2016). SEO is performed in all types of online searches, including video search, social network search, and image search. According to Google AdWords, "to get your ads to appear when people search for your product or service, the keywords you choose need to match the words or phrases that people use, or should be related to the content of the websites your customers visit." Figure 10.3 shows the general process of SEO. For further details, see Amerland (2015) and **blog.kissmetrics.com/minimalist-seo**. For a free e-book on SEO, visit **offers.hubspot.com/learning-seo-from-the-experts**.

Fig. 10.3 The process of
search engine optimization
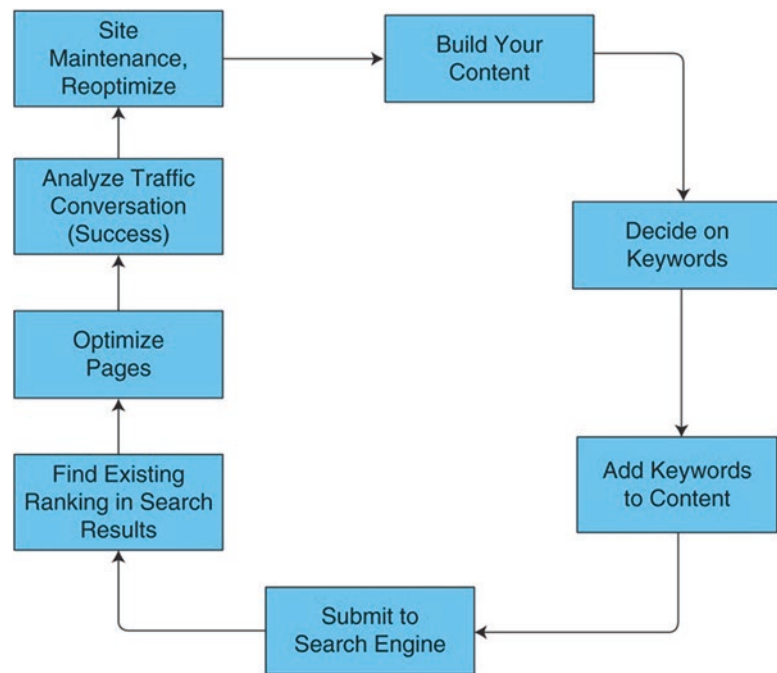
Sponsored Ads (Paid Inclusion)

In addition to optimizing your Web pages so that they will appear on the first page of the search results, you can buy keyword ads to appear on the first page of the results. This is referred to as *paid inclusion* or *sponsored ads*. Your ads will show up on the first page of the results, at the top of the page, or on the right side based on the amount you decide to spend. Google uses auctions (first page bids) to sell the best locations to advertisers. For how keywords work in Google, see **support.google. com/adwords/answer/1704371?hl=en**; for Bing, see **secure.azure.bingads.microsoft.com**.

Google: The Online Advertising King

Google provides several methods of search engine advertising to their clients, generating most of its billions of dollars in revenue and profits from them. Google uses a behavioral marketing algorithm to determine users' interests while they search for information and then targets (matches) advertisements to them. Google is continuously improving its matching algorithms (see Williams 2016).

Google's major advertising platform is composed of two programs: Google's AdWords and AdSense, and it can be supported by Google Analytics.

Google's Major Advertising Methods: AdWords and AdSense

The mechanisms of how AdWords and AdSense work are described below:

Google AdWords

AdWords is an advertising program for sponsored ads. Whenever you use Google to search for something, you will notice URLs with colored backgrounds, titled "sponsored links" on the right hand side or on the top of the page. These include Google AdWords participants. According to Google.com, these URLs are created by advertisers who select a few key terms related to their brands. They also choose how much they want to spend to "buy" these key terms (up to a daily dollar limit). Google uses ranking algorithms to match the advertisers' selected key terms with the searchers' search activities. Typically, if a searcher types in a selected keyword, a banner ad will appear in the sponsored links column.

Then, if the searcher clicks on the ad (to go to the advertiser's page), the sponsor vendor is billed according to the agreed upon rate (payments are made from the prepaid budget). For details and success stories, see **adwords.google.com**. Google AdWords is a "pay-per-click" type of advertising. You pay only if people click on your ads. How it works: You create your ads and choose your keywords (you can also target your ads); when someone searches on Google using your keyword, your ad may appear next to the search results; you gain more customers.

Since all advertisers like their ads to appear on the first page of the search results, Google devised a bidding system that determines which ads are shown where and how fees are calculated.

Despite its success, AdWords by itself does not provide the best one-to-one targeting. Better results may be achieved in many cases through a complementary program—AdSense (both are offered on mobile devices).

Google AdSense

Google's AdSense is an *affiliate program*. In other words, website publishers can earn money by displaying targeted Google ads on their website. In collaboration with Google, participating website owners (publishers) can add search engines to their own sites. Then, when someone is searching for a term related to the content of the affiliated websites, they can see the Google ad and, if interested, will be directed to the advertisers' text, video, or image ads, which are crafted by Google.

The matching of the displayed ad to content of the affiliates is based on Google's proprietary algorithm. This matching algorithm is known to be fairly accurate. The key for success is the quality and appearance of both the affiliate's pages and the ads, as well as the popularity of the affiliate's sites. Hundreds of thousands of companies and individuals participate in the affiliate program. Google provides the affiliates with analytic tools and procedures that help convert visitors to customers (see the information at **google.com/adsense**). Google's affiliates earn money when visitors click on the ads. The advertisers pay Google. Google shares the revenue generated from advertisers with the affiliates. For a tutorial video on using AdSense, visit **youtu.be/TmFB_kz8fyc**.

AdSense has become a popular method of advertising on websites because the advertisements are less intrusive than in other programs, and the content is often better targeted. For an example of a site using AdSense, see **rtcmagazine.com**.

Google's success is attributed to the accuracy of the matches, the large number of advertisers in its network, the ability to use ads in many languages, and the clarity of the ads. Google offers several types of AdSense programs. See details at **webopedia.com/TERM/A/adsense.html**. Competing programs are offered by eBay and Yahoo! (see eBay Partner Network at **partnernetwork.ebay.com**). For an overview on how AdSense works, see **google.com/adsense/start/how-it-works.html**.

Example: Using Cookies at DotMailer

Google the AdWords platform is meant to help businesses advertise their websites and products by purchasing keywords within the Google search engine. Many times these activities help drive traffic to a website and offer a good return on investment (ROI) for the owner. In some cases, however, the return is much more than expected.

In 2016, Charismatico Dancewear, Dresses, and Costumes (**charismatico-dancewear.com**) engaged the help of an AdWords consulting firm to try to drive traffic to their website. As a part of the consultative process, it was determined that this company filled a unique niche in the market with its showgirl dresses. Based on this knowledge of the company, it was possible to identify seldom-used keywords at low values that could be used to support the company's unique selling proposition.

Over the course of one year, following this strategy the company was able to leverage its AdWords usage and earned over $345,000 from just over $22,000 in marketing spend. For more information, see **aliraza.co/google-adwords-case-study**

Viral Marketing

Viral marketing (viral advertising) refers to electronic *word-of-mouth* (WOM) marketing—the spreading of a word, story, or some media. It is a marketing strategy where a company encourages the spreading of information and opinions from person to person about a product or service. This can be done by e-mails, text messaging, in chat rooms, via instant messaging, by posting messages on social network walls (e.g., Facebook), and in discussion groups or by microblogging (e.g., using Twitter). It is especially popular in social networks. Having people forward messages to friends, telling them about a good product is an example of viral marketing. Viral marketing has been used offline for generations, but now, being online, its speed and reach are multiplied and is done at minimal cost to vendors, because the people who transmit the messages are usually paid nothing. The process is analogous to the spread of computer (or regular) viruses using a self-replication process. Viral messages may take the form of text messages, video clips, or interactive games.

An ad agency supplies Internet users with something of value for free, which encourages them to share with others, so as many people as possible can see the message. For example, advertisers might distribute a small e-game or a video embedded within a sponsor's e-mail sent to thousands of people hoping that they will forward it to tens of thousands of people. Viral marketing also was used at the pioneering of Hotmail (now closed), a free e-mail service that grew from zero to 12 million subscribers in its initial 18 months, and to more than 50 million subscribers in about four years. Each e-mail sent via Hotmail carried an embedded advertisement to the recipient to sign up for a free Hotmail account. Facebook's initial reputation was achieved in a similar way, but much faster. Viral marketing can be effective, efficient, and relatively inexpensive when used properly. eWOM can also influence consumer judgment about products. For further details, see **learnmarketing.net**. For six steps to an effective viral marketing strategy, see Burton (2016). For a strategy, see Wright (2014).

eWOM constitutes a multitude of activities, which can be divided into specific categories (see Weisfeld-Spolter et al. 2014). One category is a "higher degree" of e-word of mouth (e.g., viral marketing, e-referral marketing), and the other is "lower degree" marketing (e.g., social networks, brand communities).

One of the downsides of eWOM marketing is that many customers complain about receiving unsolicited e-mails, comparing them to telemarketing calls. Consumers may use spam blockers to filter out unsolicited e-mails, which may appear to be spam.

The messages circulated in viral marketing may be in different formats and serve different purposes. A typical one is a text message about a product or service sent for persuading consumers.

Example: Netflix Socks

Netflix is a streaming video service with fans who are sometimes concerned with "first-world problems" such as falling asleep while watching television. In collaboration with MakeIt, the company created a DIY set of socks with accelerometers that could determine if the user had fallen asleep, allowing the show they were watching to be paused. Netflix shared all these details with users and even included patterns for knitting. This low-cost, low-effort activity quickly went viral. To see the video: **youtube.com/watch?v=PMtqy8edUq8**. Viral campaigns are so important that they even receive industry awards.

For details, see **webbyawards.com/winners/2016/advertising-media/individual/viral-marketing/**.

Video Advertising

Video advertising refers to the insertion of video ads into advertisements or regular online contents. The Internet Advertising Bureau (IAB) believes in the importance of video ads and created a guide to the topic; see **slideshare.net/hardnoyz/iab-guide-to-video-advertising-online** and the accompanying document transcript. Video ads are common in Internet TV programs.

Video ads are growing rapidly, mainly due to the popularity of YouTube and similar sites. Online video is growing nearly 42% annually, while TV viewing continues to fall. For statistics, see **marketingcharts.com**.

Video ads appear all over the Web both as unsolicited pop-ups and when you give permission to see a demo or information about a product. Video ads have become very popular in the Web 2.0 environment and in social networking. An April 2016 IAB report shows a growth of digital video ads revenue of 85% from 2014 in the United States (download a copy at **iab.com/wp-content/uploads/2016/04/2016-IAB-Video-Ad-Spend-Study.pdf**).

The major reason for the popularity of videos is that almost everyone who uses the Internet now watches online videos. Videos are also viewed on all mobile devices (e.g., smartphones, tablets), and they can be posted on Twitter. Social media and the accessibility to increased broadband mobile access are also reasons for the growth of online video usage. Watching videos on mobile devices has become very popular on airplanes and other public transportation.

There are primarily two approaches to incorporating videos in Web advertising: (1) per-product videos that are embedded in regular product pages, adding product details, and (2) editorial-style videos that allow consumers to discover such products. Many retailers are adding product-specific videos to their e-commerce sites. For a complete overview of video marketing and advertising, see **webvideomarketing.org/video-advertising** and Le Vu (2016).

According to a Cisco survey, most large online retailers are using videos to help sell products. Forrester Research found that most major retailers are making product videos central to their marketing strategies. According to a statistical digest (per Insivia 2017):

- By 2017, online video will account for 74% of all online traffic.
- 55% of people watch videos online every day.
- Using the word "video" in an e-mail subject line boosts the open rates by 19%.
- Including video in a landing page can increase conversion by 80%.
- Almost 50% of Internet users look for videos related to a product or service before visiting a store.
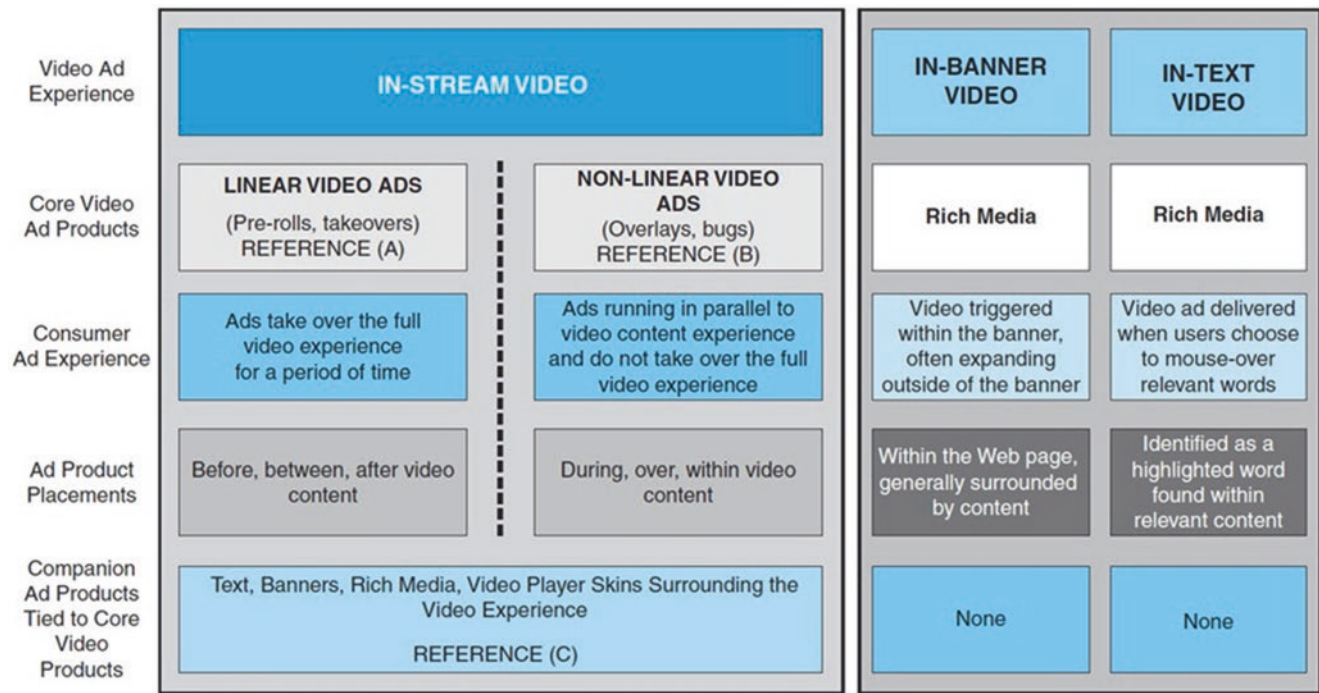
Fig. 10.4 IAB model of video advertising (Source: Interactive Advertising Bureau. "A Digital Video Advertising Overview." January 2008. iab.net/media/file/dv-report-v3.pdf (accessed April 2016). Used with permission)

Some of the leading companies in this area are YouTube, Vimeo, Dailymotion, and Veoh. Figure 10.4 illustrates the IAB Model of video advertising. For information on Google's video advertising platform, see **google.com/ads/video**.

Almost any video that you click on is preceded by a 10 to 30 second commercial that can be skipped only some of the time. This kind of "forced view" commercial has been found to be effective because people are used to seeing commercials when watching TV programs. More TV shows are coming to the Internet, frequently with video ads.

Viral Videos

A **viral video** is a video that is spread rapidly through the process of online information sharing. These videos become popular when they are circulated via e-mail, SMSs, blogs, discussion forums, and so forth. This way, people share videos that receive more attention, sometimes drawing millions of viewers in a short time. Popular sites that are used for sharing viral videos include YouTube (**youtube.com**) and Vimeo (**vimeo.com**). For the top viral video ad campaigns, see **www.visible-measures.com/insights/charts/adage**.

Viral videos are liked (or disliked) so much that viewers send them to others, spreading the word about them quickly across the Internet. Marketers are using viral videos by inserting ads in videos or by using ads as pop-ups prior to the start of presentations; see **adage.com/section/the-viral-video-chart/674**. Note that if the reactions to a video are positive, the buzz can be useful, but negative reactions can hurt the brand. *Baseline* magazine (**baselinemag.com**) periodically provides a list of the 10 best viral marketing videos. For viral video marketing case studies (the best virals of 2016), see **time.com/4602738/best-viral-videos-2016/**.

Consumer-Generated Videos

Many companies are utilizing user-generated videos for their online ads and even for their TV commercials.

YouTube is the largest advertising platform for video ads. It has billions of videos and is growing rapidly. YouTube permits selected marketers to upload videos with ads to the site. Google's AdSense ad distribution network also offers ad-supported video clips. Another way for advertisers to use viral video is by creating contests (see **onlinevideocontests.com**).

Example: QuickBooks' Small Business Big Game Competition
Beginning in 2016, QuickBooks, a provider of small and medium-sized business accounting software, offered its users the chance to win a TV spot during the Super Bowl. The company narrowed down the applicants and then allowed the public to

vote on their favorite ad. In 2016, Death Wish Coffee Company won with their depiction of Vikings and coffee. See the video at **deathwishcoffee.com/blogs/news/54920833-thank-you-for-voting-we-won**.

Interactive Videos

The term **interactive video** refers to a technique that is used to mix user interaction with videos. The interaction is controlled by a computer for entertainment, advertisement, or educational activities. Interactive videos are popular because:

- Increased bandwidth enables rapid downloading of videos.
- Good search engines find videos that have been developed.
- Both the media and advertisers have increased the use of videos.
- Incentives such as contests and gifts are offered for the use of interactive videos.

The following are representative types of interactive videos:

Video Click-Throughs
VideoClix.tv and Clickthrough.com have developed tools that allow people who watch videos to click on any person, place, banner ad, and so forth in the video.

Live Interactive Videos
In live interactive videos, you can see certain events in real time and sometimes interact with those in the video. For example, GE presented the company's annual report in a banner ad during a live Webcast of its annual meeting. Viewers were able to interact with the presenters, asking questions or making comments.

Example: Interactive Dressing Room
Metail.com created an interactive online video dressing room. It includes a wide variety of women's fashions and styles. The animated models appear with your selected brands, and you can control their movements (e.g., turn them around). For details, see **metail.com**.

Augmented Reality in Advertising

Augmented reality (AR) can be utilized by advertisers and marketers, especially in the fashion industry.

Examples of AR Applications
In the opening case, IKEA used an augmented reality application to help customers visualize how furniture would look in their homes. Several examples of interactive applications are provided at **en.wikipedia.org/wiki/Augmented_reality**. These include real estate and architecture, product and industries design, tourism, and more. Companies such as Nissan, Best Buy, Walt Disney, and Burger King have experimented with using AR in advertising. For more examples, see Schrack (2016).

Retailers in the clothing, fashion, and jewelry industries are using this technology, because in their industries, visualization is critical. For example, ClothiaCorp combines AR with real-time merchandise recommendations. It allows shoppers to "try on" clothing and share the "how they look" with family and friends, in real time.

Advertising in Chat Rooms and Forums

Chat rooms can be used for advertising. For example, Mattel Corp. sells about one-third of its Barbie dolls to collectors. These collectors use chat rooms to make comments or ask questions that are subsequently answered by Mattel's staff. The Xiaomi case in this chapter runs a smartphone forum for its product design and advertising.

Advertisers sometimes use online fantasy sports (e.g., available at Yahoo!, ESPN, and more) to send ads to specific sports fans (e.g., fans of the National Football League or Major League Baseball). Online fantasy sports attract millions of visitors every month.

CASE 10.3: EC APPLICATION
SUPPORTING MARKETING CAMPAIGNS WITH SOFTWARE SYSTEMS

The Problem

As the options and opportunities for online advertising grow, so does the complexity. Businesses have the ability to market online in a vast number of ways. This can include everything from search engine marketing, e-mail marketing, to social media marketing. Keeping track of all of these activities may be difficult, especially for small businesses. Managing data, calculating efficiency, placing orders, and generating reports on results can be a heavy burden.

The Solution

To help resolve these issues, there are many software applications and services that are available to help businesses manage this workload. Many of these applications are specific to the type of marketing being undertaken.

- **Search engine marketing example: Kenshoo** (**kenshoo.com**)
  Kenshoo allows you to manage, automate, and optimize multiple search engine marketing campaigns. The system provides a suite of tools that allow you to plan, execute, and evaluate keyword purchases across a number of search engines including Google Bing Yahoo and AOL. The system has advanced workflows that allow for the automation of this process with intelligent agents that suggest the most beneficial mix of keywords and search engine providers.
- **Social media example: Hootsuite** (**hootsuite.com**)
  HootSuite is an integrated package that allows you to manage all of your social media marketing activities from one central location. The system allows you to have oversight of all current running campaigns, the ability to schedule campaigns, interact with customers, and collaborate with your team. The system helps you manage any amounts being spent and allows you to collect and analyze data on your social media endeavors.
- **E-mail marketing example: MailChimp** (**metail.com**)
  MailChimp is a comprehensive e-mail marketing system that allows users to create marketing e-mails using well-designed templates and special interactive features, send those messages to defined user groups, and track the results of those messages. Campaigns of multiple messages can be created, and different rules can be set for users based on their levels of interaction. The system also allows you to generate detail reports on the results of your campaigns.

Questions

1. Why would businesses want to use supportive software systems for their online marketing activities?
2. For each of the selected systems, what is the main advantage?
3. For each of the name systems, go online and find an alternative.

SECTION 10.5 REVIEW QUESTIONS

1. Define banner ads and describe their benefits and limitations.
2. Describe the issues surrounding pop-ups and similar ads.
3. Explain how e-mail is used for advertising.
4. Describe the search engine optimization technique and what it is designed for.
5. Describe Google's AdWords and AdSense.
6. Describe video ads and their growing popularity.
7. Describe augmented reality advertising.

10.6 MOBILE MARKETING AND ADVERTISING

As the adoption of mobile devices grows, so does the growth of mobile commerce and the associated advertising. Mobile devices both in the United States and internationally are becoming more and more ubiquitous.

In 2016, it was estimated that there were more than 2.6 billion smartphone users worldwide, and 37% of all website visits came from mobile devices (see **deviceatlas.com/blog/16-mobile-market-statistics-you-should-know-2016**). In fact, the number of mobile users exceeded the number of desktop Internet users for the first time (see **smartinsights.com/mobile-marketing/mobile-marketing-analytics/mobile-marketing-statistics**). Other important developments include:

- 77% of Americans own a smartphone.
- 1 out of 10 US users only uses a smartphone for Internet access.
- Younger Americans are more likely to have smartphones and use them more frequently.

(from pewinternet.org/fact-sheet/mobile)

This is a major shift in end user behavior and expectations for e-commerce. These changes demand a response from businesses that market to individuals and employ e-commerce systems. Because of the volume of traffic and users in this mobile market, businesses must address this market if they wish to maintain their existing market share.

The rapid growth of mobile devices provides another arena for EC marketing and advertising. For example, the ratio of mobile handsets, including smartphones, to desktop and laptop computers is approximately 2 to 1 and growing. A 2016 estimation by eMarketer indicates that the global annual mobile ad spending has an increase of 38%, reaching $43.6 billion in 2016, and is predicted to reach $67 billion in 2017, a 54% growth. This represents a great opportunity for online mobile marketing and advertising. (See **emarketer.com/Article/Digital-Ad-Spending-Surpass-TV-Next-Year/1013671** and **emarketer.com/Article/Three-Agencies-Release-Estimates-2017-Ad-Spending/1014804**.)

Mobile Marketing and Mobile Commerce

Mobile marketing and advertising are generally considered a subset of both mobile commerce and mobile marketing. Mobile marketing takes several forms, such as using SMS (e.g., Twitter), as well as games and videos. Their major elements are described next.

Defining Mobile Marketing

Mobile marketing is frequently defined as the use of mobile devices and wireless infrastructure as a means of marketing and advertising. The marketer intends to access potential customers through wireless information channels. The Mobile Marketing Association (**mmaglobal.com**) provides definitions of advertising, apps, messaging, m-commerce, and CRM on all mobile devices, including smartphones and tablets.

Mobile marketing includes sales, market research, customer service, and advertising, all supported by mobile computing. Companies can devise contests where customers describe the quality of a new product, and the sellers can post coupons and promotions. You can make ads interactive since mobile computing provides a direct link between vendors and consumers.

Mobile Advertising

Mobile advertising (m-advertising) is defined by the IAB (2016) as "Advertising tailored to and delivered through wireless mobile devices such as smartphones (e.g. Blackberry, iPhone, Android, etc.), feature phones (e.g. lower-end mobile phones capable of accessing mobile content), and media tablets (e.g. iPad, Samsung Galaxy Tablet, etc.)." Mobile advertising ranges from simple text messaging to intelligent interactive messaging on mobile devices. It involves several key players, such as the advertisers, mobile ad networks, mobile apps, and mobile devices.

Figure 10.5 shows how mobile ads work. A company hires a mobile advertiser to create a mobile ad and specifies the promotional criteria. The mobile ad is then sent to a mobile advertising network. The original network forwards these ads to multiple mobile networks and keeps track of the distribution and responses to these ads. The ad will reach the mobile user through proper mobile devices and apps. The user's response is then transmitted to the advertiser and the company through mobile networks.

Fig. 10.5 The process of mobile advertising
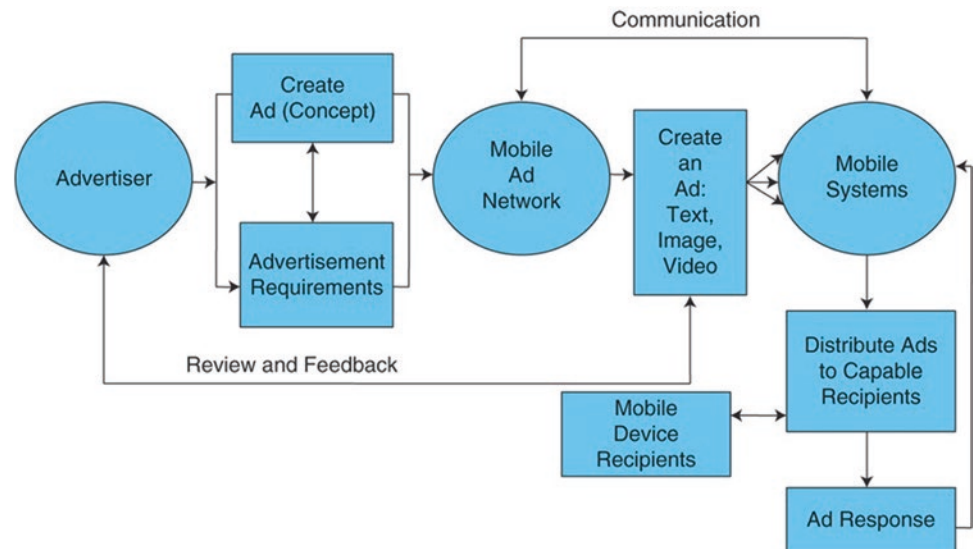
Interactive Mobile Advertising

Interactive mobile advertising refers to the delivery of interactive marketing contents via mobile devices, mostly tablets and smartphones. The inclusion of the word "interactive" points to the fact that this is a two-way communication that may include a customer response (e.g., placing an order or asking a question). For a comprehensive guideline, see the IAB Mobile Web Advertising Measurement Guidelines at **iab.com/guidelines/iab-measurement-guidelines**.

Types of Mobile Ads

Mobile ads may appear in different forms. The most popular one is short text messages. Other forms include rich media advertising, advergaming, and ads appearing during TV shows and movies on mobile devices.

Short Message Ads

SMS ads are commercial messages sent in the form of short text messages. They are quite popular and SMS mobile banner ads are growing rapidly due to the increased popularity of smartphones and 4G networks. Several major advertising portals have been launched by both private mobile advertisers and portals (e.g., D2 in Japan). This type of ad is best for existing customers that have opted into the system because they see particular value in the products or services being offered.

One advantage of SMS is that users can send them quickly and privately from any place and almost any time. A major drawback, however, is that short messages may interrupt and annoy the recipients.

Location-Based Ads

Location-sensitive businesses can take advantage of this feature to deliver location-based ads. Location-based mobile ads have the potential to change many existing advertising paradigms by using the GPS system available in phones. Marketers may be able to determine the location of consumers and based on that location target advertisements to them.

This adds another layer to the ability to target an individual consumer. Not only can marketers understand an individual's preferences, but they can now isolate that consumer at a particular place and time.

For example, if a fast food restaurant knows a customer's preferences for food items, they can now note when that user is close to the restaurant and then target advertisements and potentially coupons to the user based on this confluence of preferences and location.

Location-based ads are also potentially beneficial for brick-and-mortar locations. By knowing when an individual is in a store, it is possible to converge the physical experience and the virtual experience using a mobile app or other location-based tools.

For example, a-mobile app may be able to remember personal information like clothing sizes, and this information can be integrated into the selection process at a store.

There are several mobile location-based advertising techniques that are available, and the most often cited are:

- Hyper-contextual targeting—using location targeted ads to provide additional experiences
- Geo-aware targeting—using real-time location information to target specific advertisements
- Place-based targeting—using locations and a specific time frame to provide access to features
- Geo-fencing—targeting users with in particular geographic boundaries
- Geo-conquesting—targeting users when they are close to a location and convincing them to move to a different location

Each of these strategies has unique properties that could be implemented depending on the specific marketing and advertising goals of a business. While some of these techniques are very specialized, others could be used by a wide variety of retailers or other businesses (Mobile Ads 2016).

Mobile Marketing and Advertising Campaigns

There are basically four classes of online campaigns: information, entertainment, raffles, and coupons. These classes focus on one or more of the following six objectives:

1. **Building brand awareness.** Increase customers' ability to recognize and recall a brand.
2. **Changing brand image.** Change the customers' perception of the brand.
3. **Promoting sales.** Stimulate quicker or greater purchase of products or services.
4. **Enhancing brand loyalty.** Increase consumers' commitment to repurchase the brand.
5. **Building customer databases.** Collect data about the mobile device, data network, or profiles of customers.
6. **Stimulating mobile word of mouth.** Encourage customers to share ads with other customers via their mobile devices.

Obviously, these are the same types of campaigns and objectives underlying traditional marketing approaches. Currently, SMS and e-mails are the principal technologies used to deliver advertisements to mobile devices. However, richer content and advertising is expanding with improved bandwidth.

Recent mobile marketing campaigns conducted by retailers have been very successful. For example, the "Singles Day" (November 11, 2016) sales resulted in over $17.8 billion, with 84% generating from mobile devices. (See **https://techcrunch.com/2016/11/11/alibaba-singles-day-2016**.)

Mobile Marketing Implementation Guidelines

Although organizations such as the Direct Marketing Association have established codes of practice for Internet marketing, including the use of mobile media, most industry pundits agree that the codes are not well suited for the dynamic nature of mobile commerce. Therefore, the mobile media industry has established a set of guidelines and "best practices" for mobile advertising. The Global Code of Conduct from the Mobile Marketing Association (MMA; **mmaglobal.com**) is indicative of the types of practices promoted by the industry. The basic principles of the code include four sections: Notice, choice and consent, customization and constraints, and enforcement and accountability. For practical tactics by large advertising companies, see Eslinger (2014). See also Rowles (2017).

Tools to Support Mobile Advertisement

A large number of applications, tools, and methods are available to support advertising in m-commerce. There are millions of applications (apps) that have been developed for iPhone and Android-based mobile devices that can be downloaded from App Stores (e.g., Google Play and Apple store). Applications include features such as: finding products, places, or events. For details and a marketing glossary, see **where2getit.com**.

Mobile Ad Trends

Several positive predictions have been made about the future of mobile ads. According to **entrepreneur.com/slide-show/254425** and Van Camp (2016), the following are the important trends that advertisers need to watch:

1. Content marketing will improve the mobile marketing experience.
2. Instead of Big Data, it's about accurate data on mobile—and this data will be coveted.
3. Video on mobile is growing, and targeting by location is key.
4. Higher-resolution video will be supported and available.
5. Virtual reality will create new ad formats.
6. Mobile accessories/wearables will increase functionality and marketing opportunities.
7. Beyond cross-screen, mobile marketers will align unified screens with in-store touch points.

Example: Innovative Sticker Advertising

In addition to these five trends, we also see the increasing importance of mobile social media, such as **whatsapp.com**, **wechat.com**, and **line.me/en**. Creative advertising methods such as stickers offer new ways of advertising. A sticker is a small image (like an "emoticon") that can be used to show certain emotions such as love, hate, and so forth. It is very popular for Line users. Line allows a business to develop a set of eight sponsored fun stickers (with company logo or advertising messages) at a fixed cost. Line users can download free chat stickers from Google Play and iTunes.

Note: For a comprehensive collection of articles about mobile advertising, see **mashable.com/category/mobile-advertising** and Mobile Commerce Daily (**mobilecommercedaily.com**).

Marketing Through Apps

Traditional e-commerce activities could be expected to take place within a website, but mobile commerce may be different. While websites can be designed to be responsive to both desktop and mobile devices, some cases may demand a mobile app instead of a traditional website. Advantages of apps over responsive websites (from VentureBeat 2016) include:

- Apps have the benefit of being resident on a user's smartphone, and they can be designed to work perfectly within that operating system environment.
- Users may also be more comfortable using an app on a smartphone for security reasons.
- Interface design for an app may be more intuitive.
- Apps are generally the best choice when there is a mobile commerce transaction that will take place often or when the transaction has detailed steps or configurations that are needed.
- Faster response times are possible with an app.
- Apps are always available on a smartphone reminding the customer of the business.

Some companies may choose to have both a responsive website and an app, giving the customer the choice of which method they want to use. Many experts believe that because of its inherent flexibility and ability to be customized, the app has the upper hand versus the website. Apps are generally more time-consuming and expensive for businesses to create, but many feel that these costs are outweighed by the benefits that have been presented.

There are many examples of innovative mobile applications with ties to mobile Commerce. These applications can serve as customized catalogs, auction clients, product configuration systems, menus and food ordering lists, augmented reality systems, or gamified commerce (see **practicalecommerce.com/articles/78916-13-Innovative-Mobile-Commerce-Apps**).

SECTION 10.6 REVIEW QUESTIONS

1. Why is it important for businesses to respond to the growth of mobile devices?
2. Define mobile marketing (provide at least three definitions). Why are there several definitions?
3. What drives mobile advertising?
4. What is the role of SMS in mobile ads?
5. Define interactive mobile advertising.

6. Describe the process of mobile advertising.
7. What are the benefits of location-based ads?
8. What are the similarities and differences between traditional media and mobile marketing/ad campaigns?
9. What are the trends in mobile advertising in the near future?
10. When are mobile apps superior to responsive websites?

10.7   ADVERTISING STRATEGIES AND PROMOTIONS

Several advertising strategies can be used on the Internet. In this section, we present some major strategies and implementation concerns.

Permission Advertising

One solution to the flood of ads that people receive via e-mail that is used by advertisers is **permission advertising** or *permission marketing* (or the *opt-in approach*), in which users register with vendors and agree to accept advertisements (see **returnpath.com**). For example, one of the authors of this book agreed to receive a number of e-commerce newsletters via e-mail, knowing that some would include ads. This way, the authors of this book, for example, can keep abreast of what is happening in the field. The authors also agreed to accept e-mails from certain research companies, newspapers, travel agencies, and more. These include ads. The vendors publish and send valuable (and usually free) information to us. Note that some vendors ask permission from consumers to send them other users' recommendations, but they do not ask whether they can use historical purchasing data to create the recommendations.

For extensive information from Seth Godin, see **sethgodin.com/permission/thanks.asp**, or for a short video that summarizes the concepts, see the video at **youtu.be/V8xw9J0EbhA**.

Other Advertising Strategies

Many advertising strategies exist both for wired and wireless advertisement systems. For examples, see **www.opentracker.net/article/online-advertising-strategies** and **ultracart.com/resources/articles/ecommerce-advertising.**

Affiliate Marketing and Advertising

Affiliate marketing is a type of "performance-based-marketing" used mainly as a revenue source for the referring organization and as a marketing tool for the sellers. Earlier in this chapter, we introduced Google's AdSense. This is an example of *affiliate marketing*. However, the fact that the vendor's logo is placed on many other websites is free advertising as well. Consider Amazon.com, whose logo can be seen on more than 1 million affiliate sites! Moreover, CDNow (a subsidiary of Amazon.com) and Amazon.com both are pioneers in the "get paid to view" or "listen to" commercials also used in affiliate marketing.

Affiliate Networks

A key to successful affiliate advertising is to have a good affiliate partner network. An **affiliate network** is a network created as a marketplace where publishers (affiliates) and merchants (affiliate programs) can collaborate. Examples of affiliate networks are: Rakuten LinkShare (**linkshare.com**) and CJ Affiliate by Conversant (**cj.com**). For the Top Affiliate Marketing Networks of 2016, see **mthink.com/top-20-affiliate-networks-2016**.

Ads as a Commodity: Paying People to Watch Ads

In some cases, people are paid by advertisers (money or discounts) to view ads (also called "*ads as a commodity*"). This approach is used, for example, at Bing Rewards (get rewards for watching videos, playing games) at CreationsRewards searching the Web with Bing, and others. The HitBliss app pays you to watch commercials (but you must pay attention!). Consumers usually need to show some personal interest in the material viewed and then they receive targeted ads based on their personal interests. Each banner is labeled with the amount to be paid if the consumer reads the ad. If interested, the consumer clicks the banner to read it, and after he or she passes some tests to assure they read the content, the customer is paid for the effort. Readers can sort and choose what they read, and the advertisers can vary the payments to reflect the frequency and enthusiasm of the readers. Payments may be cash, credit, or product discounts. This method is used with smartphones, too.

Personalized Ads

Since the Internet contains too many irrelevant ads, customized ads can help. The heart of e-marketing is a customer database, which includes registration data and information gleaned from site visits. Companies use the one-to-one approach to send customized ads to consumers. Using this feature, a marketing manager can customize display ads based on user profiles.

Advertising as a Revenue Model

Many of the dot-com failures from 2000 to 2002 were caused by a revenue model that contained advertising income as the only or the major revenue source. Many small portals failed, but several large ones are dominating the field: Google, Facebook, AOL, and Yahoo!. However, even these heavy-traffic sites only started to show a significant profit after 2004. Too many websites are competing with limited advertising money. Thus, almost all portals are adding other sources of revenue.

However, if careful, a small site can survive by concentrating on a niche area. For example, NFL Rush (**nflrush.com**) is doing it well. It generates millions of dollars in advertising and sponsorship fees by concentrating on NFL fans, mostly kids 6 to 13 years old. The site attracts millions of visitors by providing comprehensive and interactive content and a chance to win prizes. It directs you to the NFL Shop for each team where sponsors such as Visa and U.S. Bank pay for the free games and the prize.

An important component in a revenue model is the *pay-per-click (PPC)* formula.

Pay per click (PPC) is a popular Internet advertising payment formula where advertisers pay sites only when someone clicks on their ad. Payments are made to search engines and other sites (e.g., affiliates). For tips on how to economize the cost of using PPC, see **advertise.com/ad-solutions/contextual/overview**.

Choose-Your-Own-Ad Format

AdSelector is a format created in 2010, which lets viewers choose their own ads. The AdSelector allows consumers to select what ads they like to view within the video clips (they are presented with two or three options). This model has been in use mostly for online videos with Hulu leadership. Users like this option and, according to research, are twice as likely to click on an ad. Recently the video content streaming service Hulu.com began using a similar system that allows viewers to select the commercial they would like to watch before beginning a program (Hulu, LLC 2015).

Live Web Events for Advertising

Live Web events (concerts, shows, interviews, debates, webcasts, videos), if done properly, can generate tremendous public excitement and drive massive traffic to a website. Some of the best practices for successful live Web events are:

- Carefully planning content, audiences, interactivity levels, and schedules
- Including as much rich media as possible
- Conducting appropriate promotions via e-mails, social media sites, and streaming media, as well as conducting proper offline and online advertisements
- Preparing for quality delivery
- Analyzing audience feedback so that improvements can be made

A global event can allow a product to debut in different locations. Facebook is experimenting with real-time ads in live videos (see **digiday.com/platforms/facebook-live-real-time-ads**).

Note: Web-based seminars, often called *webinars*, are becoming more popular to promote more knowledge-intensive products (see **gotomeeting.com**).

Localization in Advertising

The reach of Internet marketing is quite broad. An ad may be viewed around the world. This is an advantage but could also be a drawback because culture differences may cause different interpretations of the same message in different communities. Hence, localization of ad messages is an important consideration for advertisers.

Localization in EC refers to the transformation and adaptation of Web content media products and advertising materials to fit the Web environment of a certain region or country. It is usually done following a set of international guidelines. An important aspect is that of language localization. Web page translation (see **lionbridge.com**) is just one aspect of localization. However, several other aspects, such as culture, are also important. For example, a US jewelry manufacturer that displayed its products on a white background was astonished to find that this display might not appeal to customers in some countries where a blue background is preferred.

If a company aims at the global market where there are millions of potential customers, it must make an effort to localize its Web pages. This may not be a simple task because of the following factors:

- Many countries do business in English, but the English used may differ in terminology, spelling, and culture (e.g., United States versus United Kingdom versus Australia).
- Without a proper translation program, accented characters cannot be converted to English and other languages. Thus, the translation may be inaccurate. If text includes an accented character, the accent will disappear when converted into English, which may result in an incorrect translation.
- Hard-coded text and fonts cannot be changed, so they will stay in their original format in the translated material.
- Graphics and icons look different to viewers in different countries. For example, a US mailbox resembles a European trash can.
- When translating into Asian languages, and so forth, significant cultural issues must be addressed, for example, how to address older adults in a culturally correct manner.
- Date formats that are written as mm/dd/yy (e.g., June 8, 2016) in the United States are written as dd/mm/yy (e.g., 8 June 2016) in many other countries. Therefore, "6/8" would have two meanings (June 8 or August 6), depending on the location of the writer.
- Consistency in document translation in several different documents can be very difficult to achieve.

For more details on localization, download the 2016 State of E-Commerce Localization Report at **translatemedia.com/us/blog-usa/state-ecommerce-localisation-2016-report/** or watch an interesting video on "How to Conduct Successful Cross-border E-commerce in China" at **youtu.be/L7ZwMwHfqzI**.

Developing an Online Advertising Plan

Advertising online is a competitive necessity for most businesses these days. With so many different media and advertising methods available, a challenge is to develop an effective advertising plan within budget constraints. A life cycle process composed of six steps to build and maintain an advertising plan is illustrated in Fig. 10.6.

1. **Determine the goal of the advertising project:** The goal needs to be specific—is it for gaining brand awareness, traffic to the website, or higher revenue?
2. **Identify the target customers:** A group of target customers must be determined for the advertising plan. As we have discussed in this chapter, customer segmentation is useful for reducing costs and increasing effectiveness. Depending on the nature of the campaign, segmentation may be based on demographics or other criteria.

Fig. 10.6 Life cycle of advertising plans
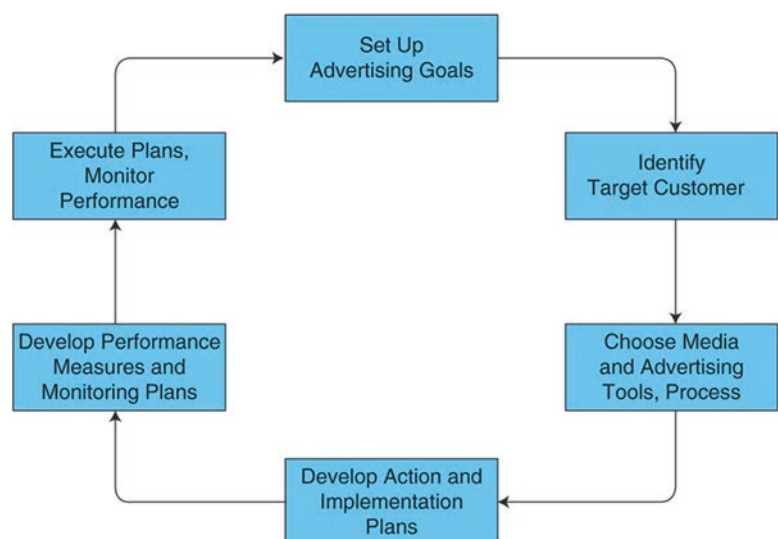
3. **Choose media and advertising tools:** Once the target customer is chosen, the advertising plan should select proper media and tools that can access the target customers. For instance, many firms use mobile social media to enhance their brand awareness in the younger generation in Taiwan.
4. **Develop action and implementation plans:** After choosing media and tools, a number of implementation issues must be planned, such as budget, time frame for advertising, advertising designs (e.g., video), and so on.
5. **Develop performance measurement and monitoring plans:** In order to ensure that the money spent on advertising is not wasted, performance measurement and monitoring plans must be developed before the plan is put into action. The performance measurement must be clearly defined and objectively measurable.
6. **Execute plans and evaluate performance:** After the advertising plan is approved, attention must be given to its execution, and finally, its performance must be evaluated to see whether the originally planned goals are achieved. For preparing a promotion plan, see The Balance (2016); for mobile marketing, see Wong (2016); and for a social media marketing plan, see LePage (2016b).

Many publications and vendors generate planning templates and e-books on creating one marketing plans. Some of these resources are listed below:

- The Essential Guide to Internet Marketing (**offers.hubspot.com/essential-guide-internet-marketing**)
- The Beginner's Guide to Online Marketing (**wrike.com/blog/beginners-guide-to-online-marketing-free-ebook**)
- Online marketing strategy toolkit (**smartinsights.com/solution/online-marketing-strategy**)
- Online Advertising Plan Template (**demandmetric.com/content/online-advertising-plan-template**)
- 25 Actionable Social Media Strategies You Can Implement Today (**blog.bufferapp.com/social-media-strategies-ebook**)

SECTION 10.7 REVIEW QUESTIONS

1. Describe permission advertising.
2. Describe video ads and their sudden increase in appearance.
3. Discuss the process and value of affiliate marketing.
4. How does the "ads as a commodity" strategy work?
5. Describe other kinds of online advertising methods.
6. What is localization? What are the major issues in localizing Web pages?
7. Describe choose-your-own-ad format.
8. Describe the six-step process life cycle for an advertising plan.

MANAGERIAL ISSUES

Some managerial issues related to this chapter are as follows:

1. **Do we focus on value-creating customers?** Understanding customers, specifically what they need and how to respond to those needs, is the most critical part of consumer-centered marketing. This was not possible before the solutions for database marketing, one-to-one marketing, and customer relationship marketing became available. What tools do we use to satisfy and retain customers and monitor the entire process of marketing, sales, maintenance, and follow-up services? Do we focus resources effectively on VIP customers (e.g., giving them high priority)?
2. **Which Internet marketing/advertising channel(s) do we use?** An increasing number of online methods are available from which advertisers can choose. These include banners, search engines, video ads, blogging, social networks, and more. Businesses must be able to quantitatively determine the results of a channel to determine its comparative ROI.
3. **Should we use social media channels?** Social media marketing is growing quickly. Firms need to determine if these networks allow access to markets more efficiently than other methods. They must also determine if they are able to manage any additional required management efforts associated with social media.
4. **What metrics do we use to guide advertisers?** A large amount of information has been developed to guide advertisers as to where to advertise, how to design ads, and so on. Specific metrics such as CPM (cost per million impressions), click-

through rate, stickiness, and actual purchase rate may be used to assess the effectiveness of advertising and calculate the return on investment from an organization's online advertising campaign. The metrics can be monitored by third-party monitoring companies. For example, the Mobile Marketing Association and IAB developed the industry standards for measuring mobile ad delivery.

5. **What is our commitment to Web advertising?** Once a company has committed to advertising on the Web, it must remember that a successful program requires the collaboration of the marketing, legal, and IT departments. In addition, coordination with non-Web advertising as well as support from top management is needed.

6. **Should we integrate our Internet and non-Internet marketing campaigns?** Many companies are integrating their TV and Internet marketing campaigns. For example, a company's TV or newspaper ads direct the viewers/readers to their website, where short videos and sound ads, known as *rich media*, are used. With click-through ratios of banner ads down to less than 0.5% at many sites, innovations such as the integration of offline and online marketing are needed to increase click-through rates/ratios.

7. **Who will conduct the market research?** B2C requires extensive market research that may be costly and difficult to conduct. Thus, it may be necessary to outsource some or all of the marketing research activities. If a company owns a large-scale customer database, the research on the internal database itself can be an important market research activity, and data mining techniques may be helpful.

8. **Should we use mobile coupons?** Consumers and advertisers are curious about mobile coupons, but current usage is still low. Advertisers do not yet feel pressured to launch a nationwide coupon effort, but they should start to plan for it. Forrester Research Corp. claims that Instagram is the king of social engagement. Mobile coupons are gaining more popularity. The advantage of mobile coupons is that you can see them when you need them. Showing the coupon to a vendor may be sufficient to get the discount (there is no need to print the coupons). In general, the benefits of mobile coupons are larger than their limitations.

   Many large retailers (e.g., Walmart) offer coupons on their websites. Smaller companies may use intermediaries that have coupons of many companies in their database.

9. **What ethical issues should we consider in online marketing?** Several ethical issues relate to online advertising. One issue that receives a great deal of attention is spam. Another issue is the selling of mailing lists and customer information. Some people believe that not only does a company need the consent of customers before selling a list, but that the company should also share the profits derived from the sale of such lists with the customers. Using cookies without an individual's consent is considered by many to be unethical. The negative impacts of advertising need to be considered.

SUMMARY

In this chapter, you learned about the following EC issues as they relate to the chapter's learning objectives.

1. **Factors influencing online consumer behavior.** Consumer behavior in EC is similar to that of any consumer behavior, but it has some unique features. It is described in a stimuli-based decision model that is influenced by factors that include the consumer's personal characteristics, environmental characteristics, product/service features, merchants and intermediaries, and the EC systems (logistics, technology, and customer service). All of these characteristics and systems interact to influence the decision-making process and produce an eventual buyer decision.

2. **Online personalization.** Using personalized Web pages, customers can interact with a company, learn about its products or services in real time, or receive customized products or services. Companies can allow customers to self-configure the products or services they want. Customization also can be done by matching products with customer profiles. Personalization includes the recommendation of products (services) and delivering content that customers want.

3. **EC consumer market research.** Several fast and economical methods of online market research are available. The two major approaches to data collection are (1) soliciting voluntary information from customers and (2) using cookies, transaction logs, or clickstream data to track customer movements on the Internet and discover their interests. Understanding market segmentation by grouping consumers into categories is also an effective EC market research method. However, online market research has several limitations, including data accuracy and representation of the statistical population generated by using an incorrect sample.

4. **Objectives and characteristics of Web advertising.** Web advertising attempts to attract surfers to an advertiser's site. Once at the advertiser's site, consumers can receive information, interact with the seller (e.g., chat with an online representative), and in many cases, are given a chance to easily place an order. With Web advertising, ads can be customized

to fit groups of people with similar interests (segmentation) or even individuals (one-to-one). In addition, Web advertising can be interactive, is easily updated, can reach millions at a reasonable cost, and offers dynamic presentation and rich multimedia.

5. **Major online advertising methods.** Banners are the most popular online advertising method. Other frequently used methods are pop-ups and similar ads, e-mail (including e-mail sent to mobile devices), classified ads, registration of URLs with search engines, and advertising in chat rooms. Some of these are related to search results obtained through search engines, such as keyword advertising (especially on Google). Social network communities provide new opportunities for marketing by enabling segmentation, viral marketing, user-generated ads, and more. Advertising in videos is gaining popularity as well.

6. **Mobile marketing.** With the increased use of mobile devices comes the opportunity to reach individuals wherever they are at any time. Despite the small screen size, advertisers use clever designs to show not only banners but video ads as well. Mobile ads are designed for the young generation, and some of these are interactive. The younger generation is especially active in viral advertising. Next technologies also allow for the creation of specific mobile apps that may provide benefits for customers. Location-based systems may allow better targeting.

7. **Various advertising strategies and types of promotions.** The major advertising strategies are ads associated with search results (text links), affiliate marketing, monetary or other types of incentives for customers to view ads, viral marketing, ads customized on a one-to-one basis, and online events and promotions. Web promotions are similar to offline promotions. They include giveaways, contests, quizzes, entertainment, coupons, and so on. Customization and interactivity distinguish Internet promotions from conventional ones. It is also important that marketing projects are localized to meet the unique needs of different cultures.

8. **Implementation topics.** In permission marketing, customers are willing to accept ads in exchange for special (personalized) information or monetary incentives. Ad management deals with planning, organizing, and controlling ad campaigns and ad use. Ads can be localized to culture, country, and so forth. Market research can be facilitated by feedback from bloggers, chats in social networks, recommendations of friends, reading members' opinions, and so forth. Advertising is enhanced by user-generated ad content, viral marketing, and better segmentation.

KEY TERMS

Ad views
Affiliate marketing
Affiliate network
Banner
Behavioral targeting
Biometrics
Click (ad click)
Clickstream behavior
Clickstream data
Click-through rate/ratio (CTR)
Collaborative filtering
Conversion rate
Cookie
CPM (cost per mille, i.e., thousand impressions)
E-mail advertising
E-mail marketing
Hit
Interactive marketing
Interactive video
Landing page
Live banner
Localization
Mobile advertising (m-advertising)
Mobile marketing

Mobile market research
Pay per click (PPC)
Permission advertising
Personalization
Personalized banner
Pop-up ad
Pop-up banner
Random banners
Search advertising
Search engine optimization (SEO)
Spyware
Static banner
Transaction log
User profile
Viral marketing (viral advertising)
Viral video
Web bugs
Web mining

DISCUSSION QUESTIONS

1. How can you describe the buying decision process when the customer is online and looking for an iPhone? What can a webstore do to attract this customer to purchase from their store?
2. Discuss the advantages and limitations of three methods of data collection about individual online consumer behavior.
3. Why is personalization becoming an important element in EC? What techniques can be used to learn about consumer behavior? How can personalization be used to facilitate customer service? Give an example.
4. Watch the videos "Wherever You Want to Go" (from BMW; **youtube.com/playlist?list=PL53450A123A3ADCE2**) and Burger King's "Sign and Race" (**youtube.com/watch?v=qab5PH43sok**), and also find articles about them. Write a report on what made these videos so successful.
5. Discuss why banners are popular in Internet advertising. What kinds of products may or may not be suitable for banners?
6. Discuss the advantages and limitations of using keyword advertising with a search engine.
7. Explain why online ad management is critical. What are the major concerns for a company managing its own online ad program?
8. Discuss the evolving landscape of mobile advertising. Select a topic and explain its importance.
9. Discuss the potential ethical implications of location-based advertising.
10. Discuss the benefits of video ads in the social networking environment.

TOPICS FOR CLASS DISCUSSION AND DEBATES

1. Discuss the similarities and differences between data mining, text mining, and Web mining for online market research.
2. Some say that people come to social networks to socialize, and they will disregard, disable, or not accept ads. Others say that people do not mind the ads, but they ignore them. Discuss.
3. What strategic implications do you see for companies that use videos, mobile devices, and social networks as platforms for advertising? Discuss.
4. Debate: Will traditional advertising (TV, newspapers, billboards) disappear in the future?
5. Debate: Netflix.com, Amazon.com, and others view historical purchases as input in their recommendation systems. Some believe that this is an invasion of privacy.
6. Some people claim that they trust traditional media advertising (e.g., newspaper) over online ads (e.g., Richter 2014). Others disagree. Debate the issue.
7. Will advertising be more effective as an app or a website in a mobile environment?

INTERNET EXERCISES

1. Examine a market research website (e.g., **nielsen.com**). Discuss what might motivate a consumer to provide feedback to market research questions used by this company.
2. Enter **marketingterms.com** and conduct a search by keywords and by category. Look at their marketing glossary. Check the definitions of any 10 key terms in this chapter.
3. Enter **2020research.com**, **infosurv.com**, and **marketingsherpa.com** and identify areas about market research on consumer behavior. Write a summary of your findings.
4. Enter **yume.com** and find their video ad activities and reports. Write a summary.
5. Enter **selfpromotion.com** and **nielsen-online.com**. What Internet traffic management, Web results, and auditing services are provided? What are the benefits of each service? Compare the services provided and their costs.
6. Enter **adweek.com**, **wdfm.com**, **ad-tech.com**, **adage.com**, and other online advertising websites to find new developments in Internet advertising. Write a report based on your findings.
7. Enter **clickz.com** and find its market research topics. Summarize your findings.
8. Enter **adobe.com/marketing-cloud.html**. How does this product help with site optimization? What other services does it provide?
9. What resources do you find to be most useful at **targetmarketingmag.com**, **clickz.com**, **admedia.org**, **marketresearch.com**, and **wdfm.com**? Describe useful information for online marketing that you have found from these websites.
10. Enter **zoomerang.com** and learn how it facilitates online surveys. Examine the various products, including those that supplement the surveys. Write a report.
11. Enter **pewinternet.org** and **pewresearch.org**. What research do they conduct that is relevant to B2C? To B2B? Write a report.
12. Enter **hootsuite.com** and sign up for a free trial of the system. Write a report.
13. Enter **mailchimp.com** and sign up for a free trial of the system. Write a report.

TEAM ASSIGNMENTS AND PROJECTS

1. **Assignment for the Opening Case**

   Read the opening case and answer the following questions:

   (a) Why are some items difficult to sell online?
   (b) What is augmented reality?
   (c) Why is augmented reality a good fit for online furniture sales?
   (d) How could IKEA enhance their augmented reality app to make it more convenient for customers?

2. Apple is encroaching onto Google's turf by buying Quattro Wireless, a mobile advertising company, and by initiating the iAd mobile device platform. Research the reason for Apple's venture into the field and the Apple vs. Google battle. Give a presentation to the class.
3. The field of video ads is growing rapidly, with many companies introducing innovative models and services (e.g., see **yume.com**). The class examines the major models and services available, including mobile ads and video clips on Twitter. Write a report.
4. Each team will choose one advertising method and conduct an in-depth investigation of the major players in that part of the ad industry. For example, direct e-mail is relatively inexpensive. Visit **thedma.org** to learn about direct mail. Also visit **ezinedirector.com** and similar sites. Each team will prepare and present an argument as to why its method is superior.
5. In this exercise, each team member will enter **pogo.com** and a similar site to play games and win prizes. Relate the games to advertising and marketing. Write a report.
6. Enter **autonlab.org** and download tools for conducting data mining analysis (these downloads are free). Write a report about the capabilities of the tools.

7. Watch the video "Beginning Analytics: Interpreting and Acting on Your Data" at **youtube.com/watch?v=Hdsb_uH2yPU** and answer the following questions:

   (a) To what metrics does the video refer?
   (b) How can Google Analytics be used?
   (c) What can analytics contribute to competitive intelligence?
   (d) Why is the average time spent on a site so important?
   (e) What decisions can be supported by analytics?
   (f) What have you learned from this video?
   (g) Compare Bing's Content Ads with Google's AdSense. Give a presentation.

8. Watch the video "Complete Google AdWords Tutorial 2016" at **youtu.be/zhSnj3jR_6c** and answer the following questions:

   (a) What is required to setup an AdWords account?
   (b) How is AdWords integrated with your website?
   (c) How do you bid on keywords?
   (d) How can you control costs?
   (e) How can you evaluate your results?

CLOSING CASE: ROLEX USES NEW MEDIA MARKETING

Rolex (**rolex.com**) is a purveyor of luxury watches founded in 1905. Historically, the company's business strategy has always been to produce an exceptionally high-quality product and market that product to a high-end clientele. *Forbes* ranked Rolex 64th in its list of the world's most powerful brands in 2016 (Forbes 2016). Rolex does not concentrate on volume of sales, but instead concentrates on being able to maintain a high margin on each individual sale. Prices for new Rolex watches can range significantly in retail stores but are generally available between 3000 and $12,000.

The Problem

Because of its notoriety and high-end segmented brand strategy, Rolex did not need to use Web-based marketing or social media to grow sales or interest in the brand. While the company dabbled in Internet advertising beginning in 2006, they did not focus on the Web as a marketing channel until 2012 (Bhasin 2016). The company recognized that in order to maintain its brand identity with younger demographics, it would need to be active in the types of media that those individuals were consuming. Specifically, the company did not want to become the "old man's watch" (see NewsCred 2014 and Paton 2014).

Even with this goal in mind, the company's marketing department wanted to ensure that Rolex launch online and, especially in social media, was very deliberate. One of the company's marketing axioms is that no advertising should be haphazard, but instead all uses of the brand image should be deliberate and curated. To this end, the brand's activities both online and in social media have been reserved. The brand works through planned, distinct marketing campaigns that are used to highlight the history, quality, and luxury of Rolex. (See **mashable.com/2014/04/17/rolex-marketing-strategy/#4YfvzomoFPqD** for both historical and new media examples.)

The Solution

Rolex began its foray into social media with a deliberate launch of a YouTube channel in 2012. The channel included well-produced videos that focused on the unique characteristics of Rolex watches, as well as their premier status through the use of celebrity referrals. After seeing success with YouTube, the company branched out into Facebook in 2013. Using this social media network, the company continued a minimalist approach focusing on brand quality and testimonials. Additionally, the company used the Facebook platform to gather data on brand mentions to help determine the interest and preferences of potential customers.

In 2014 and 2015 the brand added custom Pinterest and Instagram pages that display select product images as well as allowing shared photos from customers. While the company has adopted a number of social media systems, the company has shunned Twitter. This is consistent with Rolex his brand strategy that embraces focused, limited marketing efforts (Soliday 2016).

Results

Quantifying the benefits of Web-based marketing and social media attention is a challenge with a product that has such a small number of sales like Rolex. It is difficult for the company to directly attribute these marketing efforts to individual sales. However, the company feels that its overall advertising efforts are more importantly focused on building and maintaining the Rolex brand. Marketing managers feel that the company's activities online and in social media have been consistent with their historical approach to brand building but have extended that philosophy into a new medium. The company plans to continue their work online and evaluate their use of different social media outlets as they evolve.

Questions

1. Why is Rolex not interested in a mass-market advertising strategy?
2. Why does Rolex limit its marketing activities online?
3. How does the company maintain its brand image online?
4. What steps could the company take to improve its image using social networks?

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