



MODUL PERKULIAHAN ELEARNING
MATA KULIAH - MCM 205 – ECOMMERCE (3 SKS)

PERTEMUAN 11 – *ELEARNING*

Teknologi *Mobile* dalam eCommerce dan karakteristik-karakteristik sebuah mCommerce

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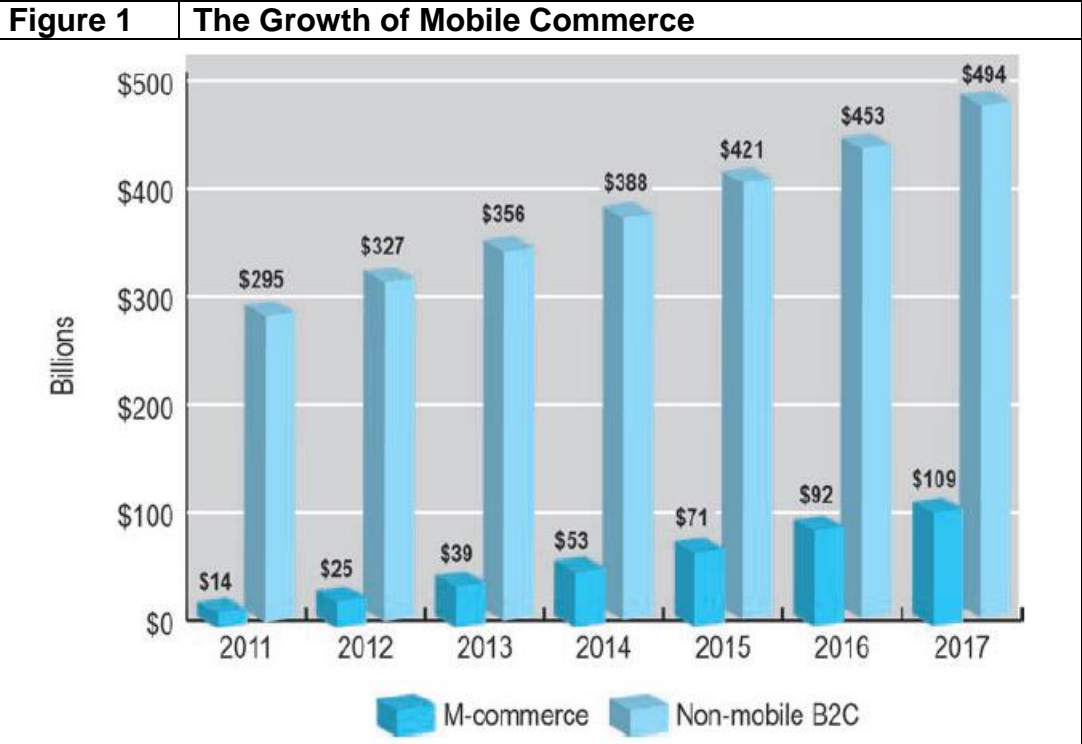
Sumber penulisan modul:

Kenneth C. Laudon and Carol Guercio Traver. 2014. e-Commerce Business Technology Society. 10th Edition. New Jersey: Pearson. Halaman 168-171; 227-233; 443-458.

Overview: M-commerce Today

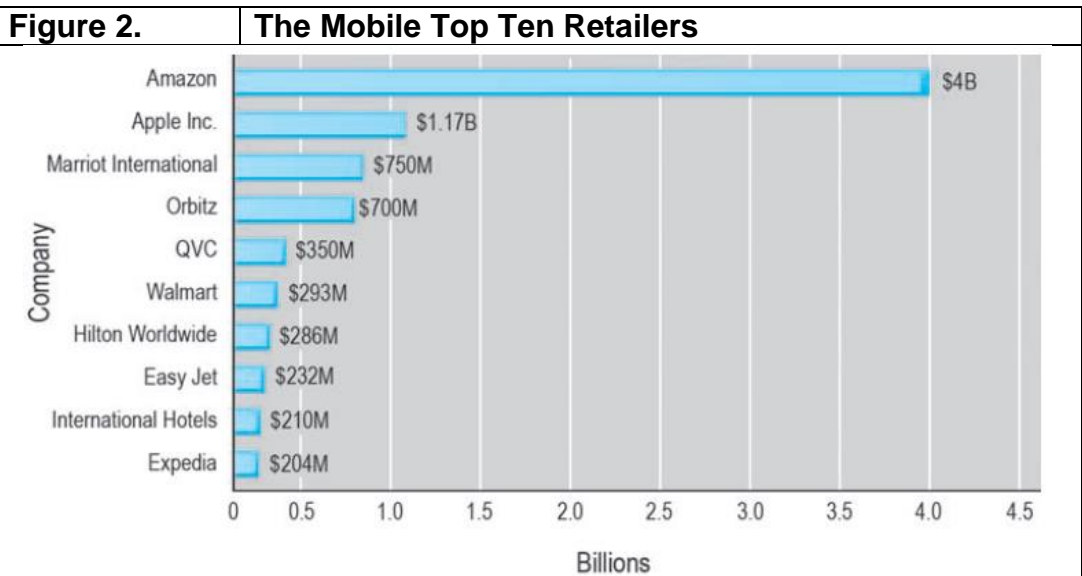
It's a short number of steps from owning a smartphone or tablet, to searching for products and services, browsing, and then purchasing. The resulting mobile commerce is growing at over 50% a year, significantly faster than desktop e-commerce at 12% a year. The high rate of growth for mobile commerce will not, of course, continue forever, but analysts estimate that by 2017, mobile commerce will account for 18% of all e-commerce. **Figure 1** describes the expected growth of mobile commerce to 2017.

A study of the top 400 mobile firms by sales indicates that 73% of mobile commerce is for retail goods, 25% for travel, and 2% for ticket sales. **Figure 2** lists the top ten companies in terms of mobile sales in 2012. Not surprisingly, the giant is Amazon, with more than \$4 billion in sales through its mobile Web site and Amazon app (Walmart is ranked #7 with \$293 million in sales). Apple is second, primarily due to music and app sales for mobile devices. Hotels and travel companies play a surprisingly large role in the remaining top ten.



Mobile commerce is expected to grow to over \$100 billion by 2017.
 SOURCE: Based on data from eMarketer, Inc., 2013e

Increasingly, consumers are using their mobile devices to search for people, places, and things—like restaurants and deals on products they saw in a retail store. The rapid switch of consumers from desktop platforms to mobile devices is driving a surge in mobile marketing expenditures.

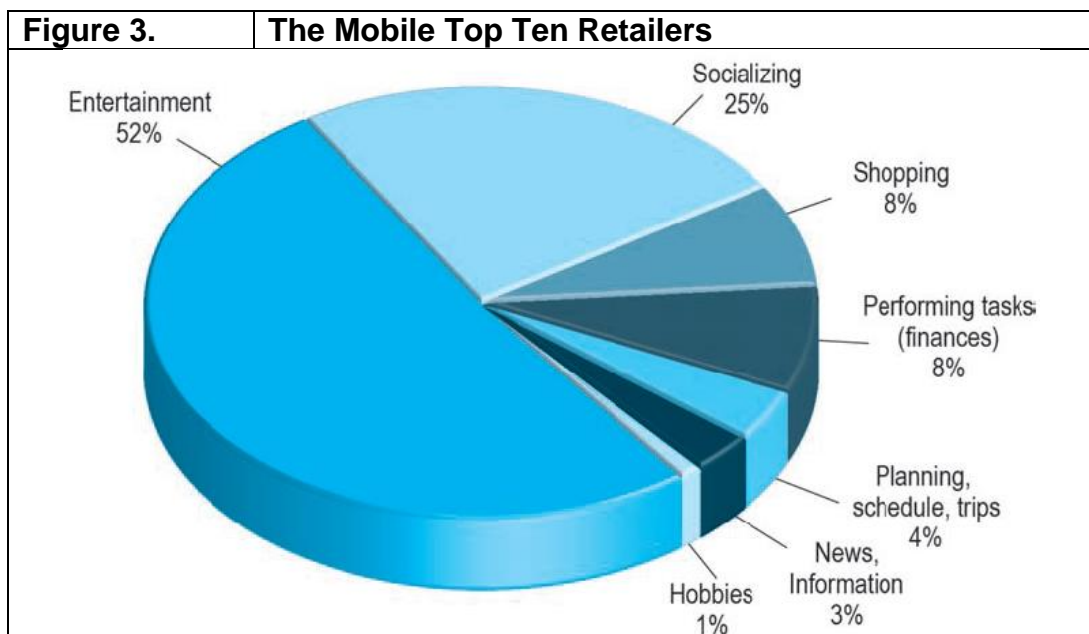


Amazon is the leading mobile retailer.
 SOURCE: Based on data from Internet Retailer, 2013

Currently, about 25% of all search engine requests originate from mobile devices. Because search is so important for directing consumers to purchase situations, the mobile search advertising market is very important for search engines like Google and Bing. Desktop search revenues are slowing for both. While 25% of Google’s searches come from mobile devices, mobile search ads generate only about \$8 billion a year, only 16% of its overall ad revenue. Google’s mobile ad business is growing rapidly, but the prices it can charge for mobile ads are far less than for desktop PC ads. The challenge facing Google and other mobile marketing firms is how to get more consumers to click on mobile ads, and how to charge marketers more for each click. And the answer lies with the consumer who decides what and when to click.

How People Actually Use Mobile Devices

If you plan a mobile marketing campaign, it’s important to understand how people actually use their mobile devices (which may be different from what you do or think others do). For instance, most of us think people use their mobile devices on the go, moving about the city; but in fact, according to one of the very few studies of actual mobile behavior, almost 70% of all mobile minutes occur in the home. Over 75% of the most common use of mobile devices, so-called “me time” involving entertainment and relaxation, happens at home (AOL/BBDO, 2012). **Figure 3** describes how consumers actually use their mobile devices in terms of broad categories of activity.

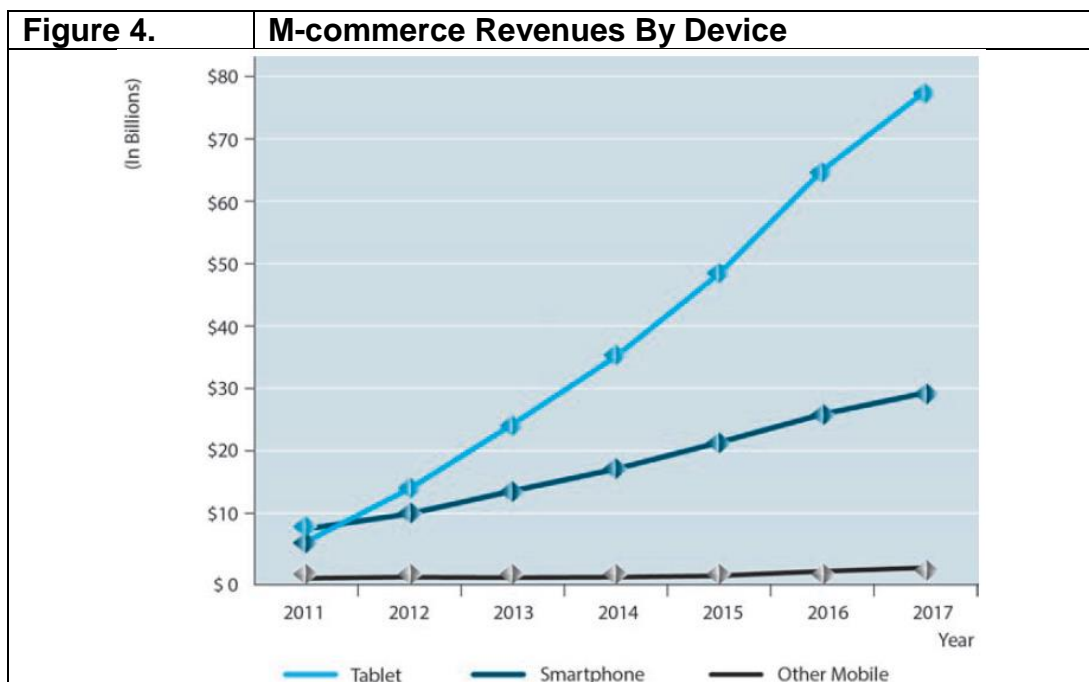


The predominant use of mobile devices is for entertainment and relaxation. Source: Based on data from AOL/BBDO, 2012.

On average, U.S. mobile users spend an estimated 1660 minutes per month using their devices (excluding phone calls, text messages, and e-mail). Entertainment is the largest single use, at 52% of user time (860 minutes). This includes viewing movies, television shows, shorter videos, or reading a gossip column, as well as just browsing. Users spend 25% of their mobile time (410 minutes) socializing with others on social network sites or blogs. Shopping (looking for specific goods to buy) accounts for only 7% of users' time (126 minutes). Actual purchasing of goods and services using mobile devices involves an estimated 3% of user time. Other uses include performing tasks such as online banking and investing (8%), planning trips (4%), reading news and magazines (3%), and hobbies (1%).

This does not mean that smartphones and tablets are not used to purchase goods (m-commerce). On the contrary, in the 7% of their mobile time consumers spend online, they generate \$39 billion in mobile-commerce sales, or about 15% of all retail and travel e-commerce (\$395 billion) (eMarketer, Inc., 2013f).

The mobile platform itself is changing rapidly from one dominated by smartphones to one dominated by tablets. The number of tablet users, once the newcomer to the mobile platform, is growing faster than the number of smartphone users in the United States: 123 million Americans use tablets, about 50% of the Internet population, and their use is growing at about 30% annually although it will slow down to single digits by 2015. Tablets, with their larger screens, are the fastest growing and largest source of mobile commerce revenues (**Figure 4**)



Tablet computers are the largest source of mobile commerce revenues.
 SOURCE: Based on data from eMarketer, Inc., 2013h

In-App Experiences and In-App Ads

You may think that using a browser to access the Web on your smartphone is a typical mobile activity. In reality, however, mobile users spend over 80% of their mobile minutes using apps, and only 20% using their browsers. On average, users have downloaded about 40 apps, and regularly use about 15. There may be millions of apps on the iOS and Android cloud servers, but just a tiny handful are actually generating sufficient user traffic to be of interest to advertisers. Game and entertainment apps account for about 42% of user time, while social networks (Facebook and Twitter) take up about 31% of time). The remaining 25% of time is split among discovery and search apps (such as Google Search and apps for Yelp, Orbitz, and TripAdvisor) and apps by brands (Nike, RedBull, Jeep Mobile, Macys, and Amazon).

The implications for marketers are quite clear: if consumers are primarily using apps rather than browsing the Web on their mobile devices, marketers need to place ads in apps where most of the action is for attracting consumers. **Second**, if mobile consumers only use, on average, 15 apps, then marketers need to concentrate their marketing in these popular apps, let's say, the top 100. Niche marketers, on the other hand, can concentrate their ads in apps that support that niche. A distributor of diving equipment, for instance, could place ads in apps devoted to the diving community.

The implication for marketers is that rather than focus on mobile display ads that are difficult to read, the best ad may be an app that directly serves customer interest or an ad in an app that is precisely targeted to the consumer's current activities and interests. Highly targeted News Feed ads also benefit from relevance to users' current activities, which in part explains their effectiveness.

How the Multi-Screen Environment Changes the Marketing Funnel

Along with the growth of smartphones and tablets comes a multiscreen world: smartphones, tablets, desktops, and television. The reality, and the future, of computing devices is that consumers will be multi-platform: using desktops and laptops at work and home, and smartphones and tablets at home as well as when moving about. Television will be available all the time, both at home and on the go via tablets and smartphones. Consumer purchasing behavior changes in a multi-screen world. Consumers will often be using two or more screens at once, tweeting when watching a TV show, or moving seamlessly from a TV ad, to a mobile search for more information, to a later tablet purchase screen. Several research studies have found that 90% of multi device users switch among screens to complete tasks, for instance, viewing an ad on TV, searching on a smartphone for the product, and then purchasing it with a tablet. Consumers move seamlessly among devices, either sequentially or simultaneously. Also, the more screens people use, the

more shopping and purchasing they do. One conclusion is that the more screens consumers have, the more consumer touchpoints or marketing opportunities exist (Google, Inc., 2012).

The implications of the multi-device platform, or “screen diversity” environment, are that marketing needs to be designed for whatever device the consumer is using, and consistent branding across platforms will be important. Screen diversity means that one ad size, for instance, will not fit all situations, and that branding images will need to be adjusted automatically based on the device the consumer is using. From a design perspective, graphics and creative elements will appear differently depending on the screen. This is called “responsive design” or “responsive creative design.” Responsive design is a Web design process that allows your marketing content to resize, reformat, and reorganize itself so that it looks good on any screen. You can see responsive design in action if you look at any portal on a desktop, and then compare the screen to that same portal viewed on a smartphone or tablet. You are likely to find there are three versions of the screen, one for each platform (IAB, 2012).

But even beyond screen adaptability, a multi-screen world means merchants need to be on all platforms, and to be integrated across platforms, in order to send a coherent message and to create a convenient consumer platform. The marketing environment today is much more complex than placing banner ads on pages or on search engine results pages on the Web.

Are Mobile Devices a Good Marketing Platform?

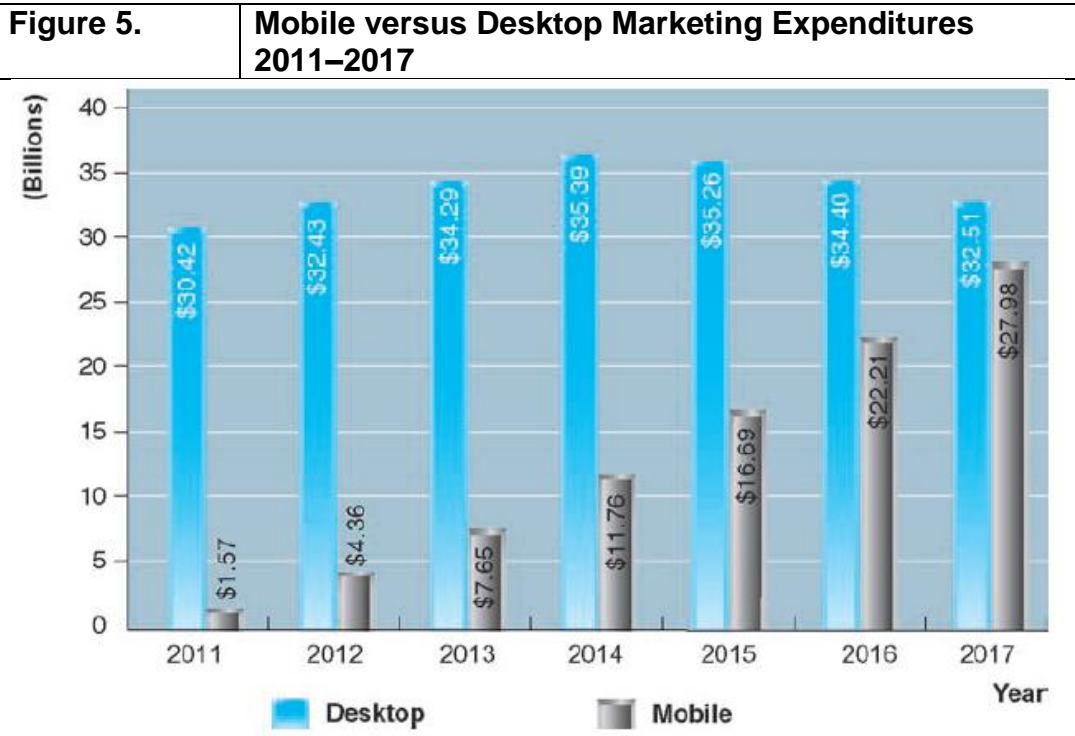
The answer is “Yes,” but with some qualifications. Because consumers are so tightly coupled to their mobile devices, and the platform itself can support so many different types of media, it is a nearly ideal marketing environment. Fully 75% of mobile users are more likely to take action after seeing a relevant local ad; those who research products on their mobile devices are ready to buy; 70% take action within an hour, while 70% of people on desktop PCs take action within a week (Microsoft, 2011). What’s more, 79% of shoppers use their mobile device to shop, and 70% of them use mobile devices in stores for price comparison and showrooming (Google/IPSOS OTX MediaCT, 2011).

Basic Mobile Marketing Features

As millions of consumers adopt mobile devices, mobile marketing expenditures have rapidly grown and in the next five years will equal marketing on desktop PCs. **Figure 5** illustrates how rapidly mobile marketing expenditures have grown, while marketing on desktops is slowing and will eventually decline.

In 2013, mobile marketing will be about 20% of all online marketing, which is extraordinary given that smartphones appeared only six years ago, in 2007, and tablets not until 2010. Analysts believe that if

current mobile marketing growth rates continue, by 2017 mobile marketing will be 84% of all online advertising.



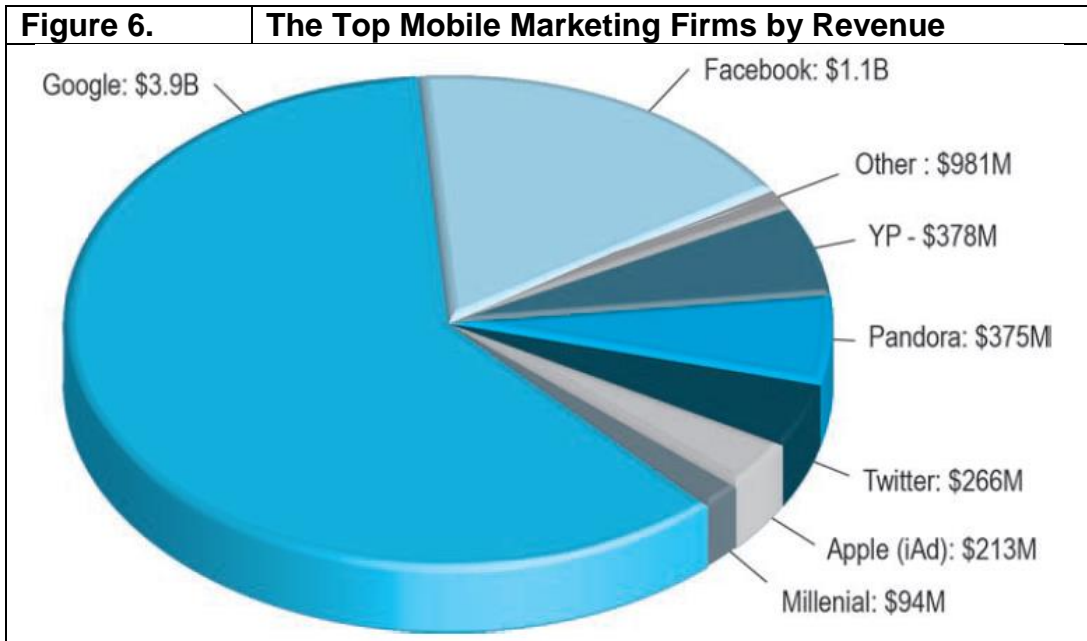
Spending on mobile marketing is growing much more rapidly than spending on advertising aimed at desktop computers.

SOURCE: Based on data from eMarketer, Inc. 2013i.

Mobile advertising is dominated by Google, with about \$3.9 billion (54%) of mobile ad revenues generated by its search engine and YouTube. On the mobile platform, Google is king of search, garnering around 85% of all mobile searches. Google is also the largest video distributor on the mobile platform because of YouTube, earning about 75% of video play on mobile devices. Facebook is a very distant second with \$1.1 billion (15%) of mobile ad revenues. Facebook is the leading display ad site on mobile devices, accounting for more than 80% of all mobile display ads. Unfortunately for Facebook, these ads sell for a fraction of what display ads sell for on desktop devices. In part this is because Facebook users do not respond well to advertising and marketing, and therefore do not have a high click rate. The problem is compounded by mobile Facebook users who have even less tolerance (and less screen space) for ads than is true of desktop Facebook users. Despite these difficulties, Facebook mobile ads have begun to gain traction, and generated significant revenues in the second quarter of 2013.

Other players in the mobile marketing marketplace are YP (5%) (previously known as the Yellow Pages, an AT&T telephone directory and

online marketing business), the music service Pandora (5%), and Twitter, Apple, and Millennial, with less than 4% (see **Figure 6**).



Mobile advertising is dominated by Google.

SOURCE: Based on data from eMarketer, Inc. 2013j.

The Technology: Basic Mobile Device Features

Everybody knows the capabilities of smartphones and tablets. But what is it about mobile platforms that make them any different from desktops? Are there any features that make them especially suitable for marketing? **Table 1** describes these basic features.

Smartphones today play a much more central role in the personal life of consumers than desktops and laptops in large part because smartphones are always physically with us, or close by. In this sense, they are more personal, and almost “wearable.” The “always on, always with us” nature of smartphones has several implications for marketers. Because they are perceived as “personal appendages,” consumers are less tolerant of commercial intrusion. Have you ever had a telephone conversation interrupted by an advertisement? You probably have not, and if so, you most likely would be annoyed at the interference with a personal conversation. These attitudes extend to any use of the phone or tablet, from reading e-mail, visiting Facebook, or watching a video. Consumers are simply less tolerant of advertising on the small screens of smartphones. Second, the around-the-clock physical proximity of smartphones to our persons greatly expands the time available for marketing materials and increases the supply of screens for marketing materials. This excess supply decreases the price of mobile marketing messages. In turn, there is a tension between marketers and consumers: marketers want to increase the number of mobile ads, while consumers

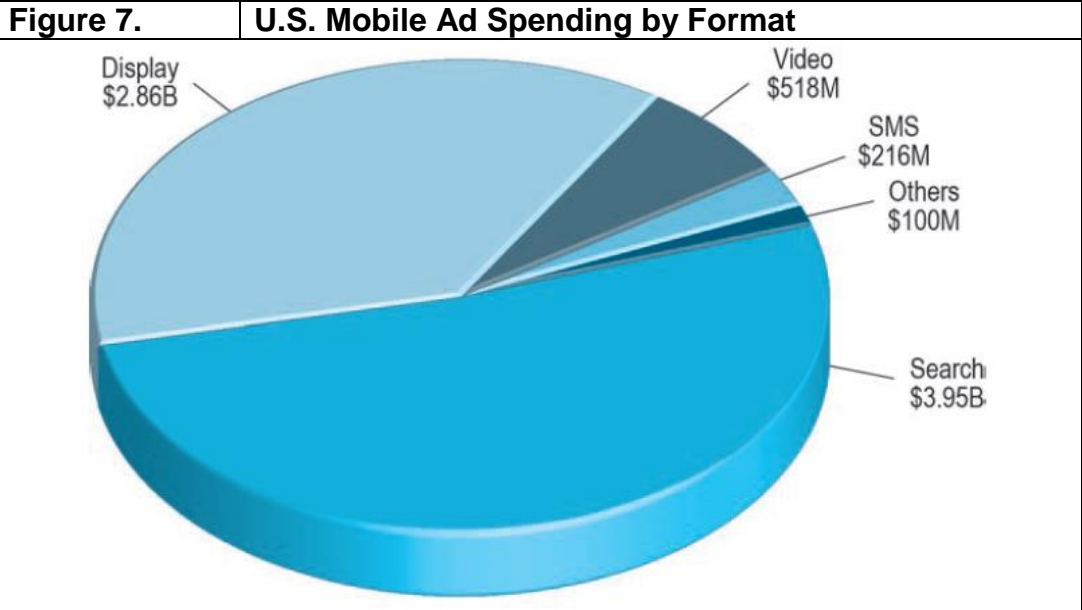
want to see fewer ads, not more, on their mobile devices. Ads inside apps are treated differently by consumers: in return for a free game, consumers are more accepting of ads.

Table 1. Features of Mobile Devices	
FEATURE	DESCRIPTION
Personal communicator and organizer	Telephone plus calendars and clocks to coordinate life on a personal scale.
Screen size and resolution	Resolution of both tablets and phones is high enough to support vibrant graphics and video.
GPS location	Self-locating GPS capability.
Web browser	Standard browsers will operate all Web sites and applications.
Apps	Over a million specialized applications running in native code and extending the functionality of mobile devices.
Ultraportable and personal	Fits into a pocket, or a briefcase for tablets, able to be used anywhere and on the go.
Multimedia capable: video, audio, text	Fully capable of displaying all common media from video to text and sound.

But perhaps the most unique feature of smartphones is that they know users' precise location by virtue of their built-in GPS. This allows marketing messages to be targeted to consumers on the basis of their location, and supports the introduction of location-based marketing and local marketing. While Web sites may know a desktop's general location, it is a very imprecise fix, and the position of the desktop does not change as the user moves about.

Mobile Marketing Tools: Ad Formats

Unlike social marketing, mobile marketing does not require much of a new marketing vocabulary. All the marketing formats available on the desktop are also available on mobile devices. With few exceptions, mobile marketing is very much like desktop marketing—except it is smaller. The major marketing opportunities in mobile marketing are search ads, display ads, videos and rich media, messaging (SMS/MMS/PPS), and some familiar other formats like e-mail, classified, and lead generation. **Figure 7** illustrates the relative size of mobile marketing expenditures by format. The marketing formats on mobile devices are search ads, display, video, text/video messaging, and other (including e-mail and sponsorships).



Search engine advertising is the most popular mobile marketing format.
 SOURCE: Based on data from eMarketer, Inc. 2013k.

In 2013, search engine advertising was the most popular mobile marketing format, accounting for 52% of all mobile ad spending, not surprising given that search is the second most common smartphone application (after voice and text communication). Search engine ads can be further optimized for the mobile platform by showing ads based on the physical location of the user. Display ads are the second leading ad format, accounting for about 37% of mobile ad spending. Display ads can be served as a part of a mobile Web site or inside apps and games. Ad networks such as Google’s AdMob, Facebook, Apple’s iAd, and Millennial Media are the largest providers of mobile display advertising. Video and rich media ads are only 7% of mobile marketing, but are a fast growing segment because of their very high click rates. Most desktop video ads can be resized for use on mobile phones and tablets. Mobile messaging generally involves SMS text messaging to consumers, with coupons or flash marketing messages. Messaging is especially effective for local advertising because consumers can be sent messages and coupons as they pass by or visit locations.

Social networks such as Facebook, Twitter, and Pinterest have generally brought their desktop advertising techniques over to the mobile platform, with some alterations of the interface for use on small-screen smartphones. In the process, social networks have brought real innovation to the mobile marketing experience, including Sponsored Stories and News Feed posts on Facebook, and Promoted Tweets in Twitter. **Table 2** provides selected examples of mobile marketing campaigns and techniques used by several well-known firms.

Table 2.	Selected Mobile Marketing Campaigns
Walmart	Company-wide mobile strategy using mobile applications, mobile Web, augmented reality, mobile advertising, mobile bar codes, social media, location-based services, and push notifications.
eBay	Multiple apps for deals, clothing, and flagship brand app eBay Mobile. \$10 billion in mobile sales and \$10 billion in mobile PayPal transactions.
OfficeMax	Uses iPhone and Android platforms for loyalty marketing and daily deals.
RueLaLa	Flash sales site for luxury clothing using SMS and Facebook mobile ads saw mobile sales increase to 40% of all online sales.
Ikea	Uses the Apple iAd platform to display banner ads promoting the Ikea catalog.
Starbucks	Early adopter of mobile marketing, now using a number of apps (company app, augmented reality app, and the Square Wallet mobile payment app) along with SMS and QR code campaigns to reach out to customers.

Mobile marketing is uniquely suited for branding purposes, raising awareness through the use of video and rich interactive media such as games. Read the Insight on Business case, Mobile Marketing: Land Rover Seeks Engagement on the Small Screen, for a further look.

Starting a Mobile Marketing Campaign

As with all marketing campaigns, start by identifying your objectives and understanding just how a mobile marketing campaign might help your firm. Are you a new unknown start-up seeking to develop a brand image, or an already existing brand looking to strengthen your presence and sell products? Is there something about your products that makes them especially attractive to a mobile audience? For instance, if you sell to local customers walking by your shop, then you might want to use the GPS capabilities of smartphones to target consumers who are nearby.

Next, consider the target demographic for your campaign and products. The most active purchasers on smartphones are men (45% vs. 34%), and they are more likely to buy consumer electronics equipment and digital content. Women are more likely to cash in coupons and respond to flash sales and deals. Younger consumers are more likely to research products and price on mobile devices, and more likely to share experiences using social media. Mobile shoppers and buyers are more affluent than the online population in general. These demographics are averages, and mobile marketing campaigns do not need to restrict themselves to these averages. Find out where your mobile customers are congregating. Are your mobile customers likely to be using apps, and if so, what are they? Are your customers likely to be on Facebook or use Twitter? Or are your customers most likely to find you on a Google mobile search page?

Finally, consider the marketplace where you hope to succeed. What are your competitors doing on the mobile platform? Is their presence

effective? Where do they place their marketing efforts: display ads on Web portals, or display ads in Google search results? Or can they be found as in-app ads? What apps are they advertising in? How are they represented on Facebook Mobile? Do they also have a Twitter and/or Pinterest brand page? Do your competitors have an app that users can easily download? You'll want to be able to meet your competitors on each of the platforms they have adopted. Once you've developed an initial vision for your marketing campaign, you can develop a timeline and an action plan of how to meet the milestones identified in your timeline.

Once you have envisioned your marketing campaign and identified your market, it is time to start implementing your mobile campaign. Here are some steps to follow:

- 1) Develop a mobile Web site so mobile consumers can see and buy your products. Make your mobile Web site social by including Facebook, Twitter, Pinterest, and other social site links.
- 2) Develop a Facebook brand page so your social and mobile marketing efforts are integrated.
- 3) Develop a Twitter brand page so customers can follow your posts.
- 4) If you already use a display advertising program like Google's AdWords or a Facebook display ad account, you can create a new campaign using the same ads designed specifically for mobile platforms.
- 5) Consider opening an iAd account and using Apple's iAd network or Google's AdMob in part because these ad networks can publish and track your ads on multiple platforms simultaneously.
- 6) Develop marketing content that is aimed specifically at the mobile user, with videos and high levels of interactivity designed for the mobile screen.
- 7) Measure and manage your campaign. iAd and AdWords, along with many other ad networks, will host and manage your mobile campaigns. In addition, they can provide you with a host of campaign measures that will allow you to see which mobile ads and techniques are attracting the most followers, comments, and social activity concerning your brand. With this basic data you can start to manage the mobile marketing campaign by reducing expenditures on ads that do not work and increasing the budget of ads that do work.

Measuring Mobile Marketing Results

There are many different mobile marketing objectives, and therefore different types of mobile marketing campaigns. Some campaigns are sales-oriented, based on display and search ads, offering coupons or discounts, and taking users directly to a Web site where they can buy something. Measuring the results of these mobile campaigns follows similar campaigns launched on desktops. Other campaigns focus on branding, where the objective is to engage consumers in a conversation, acquire them as fans and spread the word among their friends. The key

dimensions to measure for mobile social campaigns are fan acquisition, engagement, amplification, community, brand strength (center of conversation), and sales.

Figure 8 illustrates how a brand-oriented marketing campaign utilizing the mobile platform and social marketing might present its effectiveness measures over a six-month period. In a branding campaign, the object is not so much sales as it is strengthening consumers' engagement with the brand. In the example provided in **Figure 8**, acquiring fans is measured by the number of unique visitors. Here you can see that over six months, visitors have risen over 60%. Engagement is reflected in the time on-site (in thousands of minutes); amplification is measured by the number of Likes, and this has expanded threefold. Community is measured by the number of posts, suggesting fans are actively engaging with one another and the brand. Posts have risen eightfold in the period. Brand strength is best summarized in this figure as the composite picture of fan acquisition, engagement, amplification, and community measures. Measuring the impacts of this mobile campaign on ultimate sales requires going a step further and measuring which sales can be attributed to this mobile campaign.

