

Chapter 1

An Overview of Digital Media and Advertising

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ABSTRACT

In an astonishingly short period of time, the Internet and mobile commerce have profoundly shaped the way consumers live their lives as well as the way organizations do business with them—and with each other. With these electronic technologies and tools, businesses have remarkable new opportunities to connect with their customers and to build their brands as never before. Consequently, this chapter provides a broad overview of digital media and its effects on marketing and advertising. In doing so, we identify and define the most important digital media and advertising tactics as well as explain how they can be introduced into traditional marketing and advertising programs. The innovations presented here will help the reader understand how digital technology can improve marketing and advertising strategy formulation and execution. With so many online changes and innovations happening daily, this is a challenging—and exciting—time to practice marketing and advertising. As such, it is imperative that organizations have a presence in the Internet spaces that their customers and potential customers are exploring on a daily basis. In essence, organizations need to provide online listening posts for customers so that they can communicate what they think, as well as what they want or don't want.

INTRODUCTION

It is well-documented that consumers are increasingly using the Internet and mobile commerce for shopping, for entertainment, and for accessing and sharing information. Brands that connect

with consumers in these spaces—and listen to them—will have a greater chance of success. The utilization of these electronic platforms is no longer a matter of being innovative—it has become a necessity. To understand how things reached this point, we will briefly review the history of Internet marketing. Next, we will outline key marketing tactics for facilitating ecommerce (e-commerce,

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eCommerce) with the organization's website as well as for those outside of the organization's website. This will include a strategic approach for understanding customer needs and wants within the context of the marketing environment in an easy-to-understand framework. In addition, recommendations are provided for the effective implementation of ecommerce strategies that will build the brand and build relationships with customers using digital advertising and media. We will conclude with recommendations and applications for future research.

BACKGROUND

History of the Internet and the World Wide Web

The evolution of the Internet provides a relevant and substantive narrative and starting point for this chapter. While the World Wide Web was created in 1991, its origin dates back to 1957 when the Soviet Union launched the Sputnik I satellite. With Sputnik, the "space race" between the U.S.A. and the U.S.S.R. began. During this period, President Eisenhower created the Defense Advanced Research Projects Agency (DARPA) to fund scientific research among the Department of Defense, universities, and research organizations across the United States. What emerged from this effort was an attack-proof electronic infrastructure for the sharing of research results by multiple users, on their own computers, at the same time. The linking of computers allowed scientific communities to interconnect and exchange ideas as well as cooperate on scientific projects.

This new computer network enabled instant, electronic human communication in a time and distance environment that was completely unprecedented in our history. That said, the number of users was limited until the mid 1980's—when TCP/IP (Transmission Control Protocol/Internet Protocol), a standard language of Internet com-

puting was invented and published. Initially developed by English researcher Tim Berners-Lee, the program was expanded to find and retrieve information for the European Particle Physics Laboratory (CERN) in Switzerland. Hypertext was then developed to allow a linked retrieval system that came to be known as the World Wide Web (WWW).

In June, 1993 CERN released this innovation—an interconnected network called the Internet—to the rest of the world. Described as being global and user-friendly, this standardized computer language opened the door to businesses and individuals to connect online. Soon, commercial traffic came rushing in. But in the beginning the Internet was difficult to navigate since search engines and directories did not exist. Moreover, many consumers felt it was too boring or of little use. In short, Internet adoption by consumers emerged slowly until a tipping point occurred in the early 1990s. After that, the rate of adoption skyrocketed past any previous media innovation. Reaching that tipping point, however, required several additional improvements and developments. For instance, in 1993 Mosaic (the forerunner of Netscape) allowed for the transmission of graphic files—something of broader interest. As a consequence, by 1995-1996, there emerged a significant public consciousness of this electronic tool and its potential. Nevertheless, few people fully anticipated the applications that would continue to emerge, much less the rapidly growing pace of change and development that was to come on the Web.

The next significant development occurred in 1996 when Yahoo! pioneered directory and search capabilities that allowed users to move around the Web. Not only could Web surfers find things more easily, as new and easier to use technologies were developed for the Internet, but they also found it more convenient to access information, initiate communications, discover entertainment, and more. Subsequently, the Internet diffused into the global society in a big way. This diffusion provided businesses with an understanding of

many unique aspects of the Internet and of users' behaviors. During this period, various marketing, advertising, and promotion theories related to online marketing strategies and tactics were developed to increase the odds of success, and reduce the risk of failure. Consequently, 1996 was an important turning point, marking the transition from the first generation of digital marketing to the second generation. It was also a time in which valuable lessons were learned.

One of the important lessons learned from the decade of the 1990s was that a focus on digital technology alone, without an appropriate focus on consumer behavior, resulted in overestimating the willingness of consumers to change behaviors from physical shopping space to virtual shopping space. In addition, many Internet marketers abandoned old and proven business models and strategies for new, unproven ones resulting in many Internet business failures. The dramatic result was when the "dot-com era" ended abruptly and traumatically when many dot-com companies went bust in 2001. Much has been learned since that time. Practitioners and academics have aggressively researched and reported what works and what does not work, and have developed "best practices" that are increasing the probability of digital success. And what is Tim Berners-Lee doing these days? In January of 2009, he assisted in the re-launch of the British monarchy's website, royal.gov.uk, making it easier to navigate. The site now features new technology, including audio and video footage as well as interactive maps.

History of Internet Marketing

The enthusiastic, yet cautious adoption of the Internet by consumers and businesses led to changes in long-accepted marketing and advertising practices. At first, these new changes were largely trials, tests, and experiments. Questions emerged as quickly as technological changes occurred. Imagine the thoughts of marketers: "What is a web page?" "Can I advertise on the World Wide Web;

and if I do, how do I do it?" The Internet clearly generated a need for new marketing "vocabulary" (Kalyanam and McIntyre (2002)—much of which we use in this chapter.

The accelerating growth of the Internet and its rapid adoption by consumers can be largely attributed to the positive impact this medium has had on their lives. This goes far beyond simply purchasing items online. Consumers began to use "...electronic networks to become and stay informed, perform services for themselves (such as banking, redeeming air miles, and trading stocks), interact with private and public institutions, and entertain themselves." (Watson, et al. 2002) The general public and consumers have continued to use every conceivable technological device to surf the Web and continue to adopt new technology at a rapid pace. Businesses, early on, responded to this rapid growth, and marketers, especially now, must explore, understand, and positively influence customers with digital media and advertising. Doing so has the potential to make positive changes that will deliver "value" to customers. The Internet is "...an enabler and driver of competitive marketing strategy" as well as an enabler of digital media and advertising. (Varadarajan (2002) As such, the Internet has the potential to gainfully leverage and enhance the effectiveness of a business's competitive marketing strategy. Given the enormous—and expanding—impact of the Internet it is beneficial for marketers to understand the evolution of digital media and advertising.

Early on, the attractiveness of the Internet as a commercial medium was due to its ability to facilitate the global sharing of information and its potential to provide an efficient channel for advertising, marketing and the selling of goods. (Hoffman, Novak and Chatterjee 1995) During the early development of the Internet, businesses used it to engage in electronic transactions as sellers or as buyers in the business-to-business market. (Bradlow and Schmittlein 2000) In addition, they also used the Internet to disseminate and gather information about customers, both in Internet

advertising (acquiring new customers) and after sales support. (Bakos 1997, Hoffman and Novak 1996) As a result, the Internet has emerged as a rich source of managerial information that helps firms manage their brands and conduct marketing research. (Vikas, Manz and Glick 1998, Haubl and Trifts 2000)

As the Internet matured, marketers began to focus on the overall marketing value of an online presence. Marketing research is growing on the Internet, with firms collecting customer information using techniques such as search log analysis and click stream analysis. Both types of data provide precise records of an individual's movement on the Internet and can provide insights into a customer's behavior, types of demand, and their brand perceptions. (Burton and Walther 2001, Maxwell 2001) The ability to track advertising effectiveness and target specific online markets and individuals with web analytics and specific metrics are what truly propelled interest in digital media and advertising.

Web analytics allow firms to study and shape customers' online behavior. Specifically, off-site web analytics measure and analyze web behavior irrespective of whether the organization owns or maintains a website. It measures what is happening on the Internet as a whole. On-site web analytics measures a visitor's journey on the organization's website. The measurement includes its drivers and conversions; for example, which landing pages encourage consumers to make a purchase. A digital trail is left behind every campaign and every marketing and advertising program. The Internet can potentially be a marketing manager's dream (or nightmare if not managed properly). The ability to develop marketing programs based on research metrics, and then evaluate their subsequent effectiveness, has become a key strength of digital media and advertising.

Of course, along the way, many Internet strategies and tactics failed. One dramatic example is Webvan, which filed for bankruptcy in 2001. In spite of raising \$375 million in its initial public

offering, their grocery delivery business model never attained profitability. (Farmer and Sandoval 2009) Webvan's Internet business model depended on consumers ordering their groceries online; and then Webvan would deliver them to the customer's address. In spite of this dramatic Internet business failure, a variety of new digital marketing strategies and tactics have emerged and endured, becoming common marketing practices because they work well if implemented properly. For instance, search engine optimization (SEO) appears to be growing in acceptance and usage for many organizations. Therefore, if a business, or other type of organization, has a website it must engage in SEO or be left behind. Web search engines are commonly used to help locate information of all kinds and navigate the millions of pages on the World Wide Web. (Krishnamurthy, 2003) Brand managers today must recognize the way consumers use keywords on search engines to find suitable brands. To capitalize on the opportunity presented by search engines, managers want their brands listed at the top of appropriate web pages. That said, Owen (2000) found that brand managers initially gave insufficient thought to search engine tactics; especially in their infancy. With greater experience, however, the use of search engines has become more accepted by consumers and businesses. Likewise, Search Engine Marketing (SEM)—the tactic of paying for the placement of an ad on a searcher's click through—has become more popular. Each of these will be discussed in more detail later in the chapter.

Advertising on the Internet has generated many questions and much research. For instance, what are the different types of internet advertising? What is the influence of various types of ads on visitors and viewers? Which organizations and industries are engaging in Internet advertising? How much is being spent on Internet advertising, and by whom? We know that Internet technology makes it possible to target specific customers with relevant messages. Banner ads, button ads, tower ads, intracommercials, sponsorships, as well as co-

branded and co-marketed ads, are all attempting to integrate companies' brands and products with the editorial content on targeted websites.

However, the future of online advertising is expected to become more intrusive and "louder" in order to capture the desired attention of consumers. Krishnamurthy (2003) estimates that as the level of clutter on the Internet rises, creative approaches to grab consumers' attention will become the norm. For instance, Luk, Chan, and Li (2002) investigated the characteristics of manufacturers' online advertising, analyzing 472 product advertisements found on the websites of automobile manufacturers. In addition, they examined the possible impact of the content and enhancement devices of Internet advertising on the attractiveness and effectiveness of online advertisements. While they found Internet advertising facilitates selling activities, its impact was not as strong as expected. They also reported that various technologies are also making it possible to use creative, but less graphically intensive messages to achieve greater engagement of the customer with the message. Put simply, Internet advertising strategies are continuing to evolve.

Various forms of Internet advertising have come and gone. The bottom line is that firms with business models that focus on advertising revenue must find a way to deliver relevant and targeted ads to potential customers on their websites and in other digital media. The keys to success will be the specific relevance of the message, the resonance of the message, and the effectiveness of the delivery of the message or program in the time and space where the potential customers want to receive it, not where marketers want to shout it out.

Fundamental Differences between Digital and Traditional Advertising and Marketing Communication

The Internet is certainly the most recent significant development in the long history of steadily advancing communication media—techniques that

began with the stone tablet and have culminated in various forms of electronic media. Internet marketing is a subset of e-commerce that focuses on the utilization of the Internet in the marketing component of business and other organizations. In recent years, the Internet has developed many unique properties that can help organizations perform marketing functions more effectively and efficiently, with greater value to customers. (Bierma 2002) Many firms have discovered that the Internet is an effective tool for differentiating their products (Trudell and Kolkin 1999), and building long-term relationships with current and potential customers. (Kalakota and Robinson (2000) Additional research indicates that the Internet can be used for positioning an organization in the e-environment (Cho, Yong-Sauk and Jae-Chase 2002), tapping into global markets more easily (Donada 2002), and fundamentally altering the way many companies do business (Krishnamurthy 2003).

When the Internet revolution began there were many unknowns. But it was clear then, and is still clear today, that the Internet did not, and should not, change everything in marketing. In other words, traditional marketing themes and tactics remain essential. The Internet does, however, provide new and powerful applications for traditional marketing strategies and tactics. Today, it is hard to imagine an effective marketing plan that does not incorporate the Internet and consider mobile marketing. At the macro level, an important dimension of Internet marketing is the opportunity for organizations and entrepreneurs to construct new business models and/or to change their existing business models. A business model (also called business design) is the primary mechanism by which a business intends to generate revenue and profits, and it is important to include how the Internet will help serve customers better.

Integrating the Internet into traditional marketing plans and strategies will help the organization discover its customers, as well as define and differentiate its product offerings. These plans and

strategies need to be based on consumer demand in such a way as to create utility for its customers, acquire and keep customers, go to the market (promotion and distribution strategy), define the tactics and tasks that need to be performed, profitably administer its resources, and increase sales and profits. Some of the most well-known new business models include eBay, Priceline, Amazon, CarDirect, Google, and Weather.com. Practitioners should consider these and other new, innovative organizations and their business models to encourage wise decision making about how they might modify their own business model to deliver greater value to customers, and increased sales and profits for their organizations.

To be fully effective, any new advertising medium requires that advertisers do extensive marketing research to understand the medium and the process by which consumers adopt or reject it. It is necessary to develop a framework for defining the value that a medium can provide and the value received and perceived from the point of view of the target audience. The key question is—does the new medium provide the value and benefits sought by the target audience? If not, the new medium will be less effective, or even fail to become profitable. For example, one discovery early on was that advertising tactics and programs that worked offline did not always work online. For advertisers, the Web was the first interactive medium. Interactivity offers major challenges and opportunities for advertisers. Marketers needed to understand how the capability of interactivity could be used to develop on-going relationships with customers.

Traditional mass media is also a one-to-many distribution process (broad casting) where the same message is directed at everyone. The Internet offers the capability of one-to-one marketing (narrow casting), and targeted marketing. The potential for personalization of advertising messages and promotional offers evolved as the technology

and software advanced. The challenge at the time was that sophisticated software was required as well as the educational and intellectual capital to develop, program, and implement such programs. In a short period of time, software was developed that made the Internet more readily accessible to nonprogrammers and more cost efficient. Such advances in software meant that businesses could shift from mass advertising to more personalized, or targeted marketing.

Another aspect that differentiates the Internet is that it is both a push and a pull promotion medium. Consequently, marketing and advertising programs need to be developed to consider and maximize both. When consumers type in the name of a Web address to obtain information they are pulling content back to their computer or other device, such as a cell phone or personal digital assistant (PDA). It can also be a push promotion medium where consumers are served ads or e-mails directly to their computers or other devices. Some advertising is both push and pull. This can happen when a consumer observes an ad online and then clicks through to connect with the desired content. Much has been learned over time, just as advertisers learned how to most effectively use radio and television when they became media options. The fact is that marketers need to continue to research and understand consumers and their media consumption habits as well as their attitudes and behaviors. So armed, marketers will be better able to incorporate digital media and advertising into their marketing programs in ways that accurately reflect the lifestyles and media habits of their target audiences. The real beauty of today's Internet environment is that extensive databases are readily available to assist marketers in these efforts. Web analytics should be at the core of the development, implementation, and evaluation of all digital media marketing programs. More about web analytics later in the chapter.

COMMERCE

Today, Internet marketing largely focuses on how the Internet has become a new channel for communication with customers and for the distribution of products. (Lal and Sarvary 1999; Bakos and Brynjolfsson 1999; Markilli 2004; Kalaignanam, Kushwaha and Varadarajan 2008) Online retailers are known as e-tailers, and online retailing is known as e-tail. Markillie (2004) explains how e-business is merging with traditional forms of retailing, and according to the Department of Commerce, online retail sales in the U.S. in 2007 rose by 26 percent, to \$55 billion over 2006. However, this amounts to only 1.6 percent of total retail sales. The vast majority of consumers still buy most products in the traditional bricks-and-mortar world. These figures and other measures of better-than-expected growth appear to be signs of continued resilience and health of online retail sales. This might be fueled by the fact that online retailing has the potential to generate a greater profit than off-line retailing. For example, The Associated Press (2004) reported that traditional bricks-and-mortar stores generate a 3-10 percent operating profit margin whereas online retailers generate approximately 21 percent. Other research has found that the Internet offers a wide range of opportunities for firms to achieve marketing efficiency gains by lowering costs. For example, efficiency gains are possible even for Internet grocers, if an appropriate business model and be developed. (McTaggart 2004, Anckar 2002).

A survey of eCommerce in the *Economist* (2004) reported that both businesses and consumers are changing their behavior in significant ways. Not only are consumers spending more, but a broader range of consumers are spending online in a wider variety of ways. This study found that, each year, consumers are spending greater amounts on the Internet. For example, in November and December 2003, Americans spent \$18.5 billion online (excluding travel)—35 percent more than they spent in the same two months of 2002. This

overall growth has been driven by the rising number of high-speed broadband links which now connect over 50 million American homes to the Web. Spending patterns on the Internet are also getting closer to those in bricks-and-mortar outlets. For example, the survey also reports that 71% of females purchase online, and that growth was six times faster than spending for men. Older people are also shopping more online.

Much of the online shopping is heavily concentrated on a few sites. In January 2004, 83.5 million Americans, or just over half of the country's Internet users, visited either eBay or Amazon, making these sites among the most frequently visited retail outlets in the country; both online and offline. Half of the 60 million consumers in Europe who have an Internet connection bought products offline after having investigated prices and details, such as styles, availability, and colors, online. It is interesting to note that more and more consumers, who purchased products in brick-and-mortar stores, or by telephone from catalogues, are first checking out the merchandise online for styles, sizes, colors, availability, and price (Forrester Research 2009).

Even in those years when retail industry sales are expected to be sluggish, American consumers will likely keep turning to the Internet for many of their shopping needs. In their 11th annual Shop.org study, Forrester Research (Mulpuru 2008) found that of the 125 retailers in their study, online retail sales was expected to rise 17 percent (\$204 billion) in 2008. Apparel (\$26.6 billion), computers (\$23.9 billion), and autos (\$19.3 billion) will be the three largest sales categories. This has enormous implications for businesses because websites are increasingly becoming the gateway to a firm's goods and services—even if the firm does not sell online. Therefore, even if a company does not sell directly online, they need to have a presence on the Web in order to gain sales leads or provide information needed by customers and potential customers.

FACILITATION OF ECOMMERCE IN A DIGITAL ENVIRONMENT

Websites and Branding

Branding should be at the core of website design and all digital advertising and media programs. The design should identify the seller and differentiate that seller's products from all others. The brand is the seller's promise to deliver a specific set of features, benefits, and services consistently and reliably to the target market. (Kaferer, 1992 and Aaker, 1997) A brand needs to build trust in order to achieve brand equity in the minds of consumers. Consumer research has shown that powerful brands also create meaningful images in the minds of customers that help them differentiate among competing brands. (Shocker, Srivastava, and Ruekert, 1994 and Keller, 1993) For the seller, a strong branding strategy can build strong brand equity in the minds of consumers, which is the added value a brand name gives to a product beyond the functional benefits provided. (Aaker, 1996)

Marketers invest in branding because brand image and brand reputation enhance differentiation and can lead to stronger brand equity. (deChernatony and McEnally, 1999) Brandt and Johnson define brand equity as "the tangible product plus the intangible values and expectations attached to the product by the consumer or prospect." (Brandt and Johnson, 1997) Gardner & Levy (1955) proposed that a brand name is more than the label employed to differentiate among the manufacturers of competing products. It is a complex symbol that represents a variety of ideas and attributes. It tells the consumers many things, not only by the way it sounds, but, more importantly, via the body of associations (classical conditioning) it has built up and acquired as a public object over time. The net result is a public brand image, a character or personality that may be more important for the overall status (and sales) of the brand than many technical facts about the product.

Moore (2003) states that one of the beneficial characteristics of effective branding are the strong associations embedded in consumers' thought processes (classical conditioning). The goal of any branding project is to establish a strong and stable set of associations in the minds and long-term memories of consumers. Strategists work to help client companies achieve consistency across all "touch-points," so that the consumers' in-store experience, or the experience of the catalogue, the website, the call center, or any face-to-face dealings with any representatives of the company, are all consistent, and all of the company's communication mediums mutually reinforce the brand's values and image. Moore found that redundancy, in this case, is a virtue, and that it is essential that associations be multiplied and reinforced across all media and channels (print, online, in-store, and broadcast). The sheer quantity of associations is also important, since, to this way of thinking, the greater the number of associations in the consumers' mind, the stronger the recall (long-term memory).

So where and how does the Internet fit into branding strategy? Rubenstein and Griffith (2001) propose that, on the Internet the brand itself must be at the heart of the business strategy. The emphasis shifts from brand to "branded experience," and becomes an issue for the entire company. They argue that while the key principles of how to develop a brand remain the same, the need for speed and other experiential variables means that it must be managed differently. Many studies emphasize the differences found when consumers use digital as opposed to traditional media. deChernatony's (2001) research suggests that brand strategists need a new mental model to develop integrated brands in a digital age—brands that go beyond the classical models in recognizing the new roles consumers are taking. The need for this new mental model emerged as deChernatony considered, and then challenged, some of the assumptions that led some managers to migrate their brands onto the Internet. One significant aspect of online branding

is that a looser degree of control is more appropriate because of the involvement and number of interactions within a brand's Internet communities. Both studies focused heavily on such differences and identified specific behaviors that are unique to online media, recommending changes to accommodate these differences.

For instance, deChernatony discovered that businesses need to switch from the classical model of talking to customers directly to interactively communicating with them using systems that enable organizations to respond rapidly to inquiries. Other research also suggests that an organization's website represents an opportunity to communicate the brand and the brand message, as well as differentiate a brand from competitive brands. It is obvious that further research is needed in order to capitalize on these potential opportunities. To date, a significant amount of Internet research has focused on website design, revealing many current and potential problems. For instance, Hauseman and Siekpe (2008) found that firms are increasingly relying on e-commerce solutions to reach their profit objectives; yet many websites fail to help companies reach these objectives. Their study finds that the "...use of human factors is stronger in evaluations of usefulness and entertainment of a site, which are more influential antecedents of attitudes towards a site and flow that, in turn, impact purchase and return intentions." This finding seems suggests that there should be increased emphasis on these human factors rather than technology elements in the development, testing, and ultimate design of a website. Human factors engineering is the science of understanding the properties of human capabilities (human factors science), and the development of systems and services that humans are capable of using effectively. Human factors engineering has also been called ergonomics. (Human Factors Engineering 2009)

WEBSITE CONTENT

8 Cs and a U

The traditional marketing mix or four Ps (product, price, place, and promotion) are well-accepted in marketing. In virtual space, there appears to have emerged some additional principles, particularly in the design of websites and website strategy. Before these principles are explored, it is vital that practitioners have a clear understanding of the purpose of their website. It might be to sell (Amazon), or to provide information (ESPN.com), or to build a brand and relationships with customers (Kraftfoods.com), or to collect data about visitors in order to deliver relevant and timely information and special offers to them (forresterresearch.com). This is what all organizations need to be doing. It requires an opt-in strategy. Once the organizations objective(s) are defined, the following table displays some of the basic principles that are essential for building a framework for an effective and efficient website strategy. (Krishnamurthy 2003) In essence, instead of the four Ps in physical space, the virtual space (the website) should contain the 8 Cs and a U (see Table 1). The first 7 Cs listed in the table were proposed by Krishnamurthy (2003).

Practitioners and consumers place a high value on convenience, which is the 8th "C." The term "usability" (U) was high on the list of practitioners, as well. To practitioners, this has more to do with Web design factors such as website navigation. As we progress through this chapter, many of these terms will emerge again, and take on a dual role. Not only should they be part of the website design, but marketers can also use them for branding and advertising purposes. For example content, connectivity, and community can be achieved by providing a consumer-generated media or social networking space on a website. Many organizations do this very successfully. Kraftfoods.com encourages readers to share thoughts about their huge recipe library, rate recipes, and share their

Table 1. The 8 Cs and a U of website design

8 Cs and U	Description or Common Meaning
Commerce	Encourage exchanges (goods, services, two-way information, etc.)
Content	Give visitors what they want; do not lock up archives or all desired information
Communication	Talk with visitors and let them communicate with each other
Connectivity	Talk with visitors and let them communicate with each other
Community	Develop a community for viral marketing
Computing	Enable visitors to calculate (banking, stock prices, sports scores, track weight loss, etc.)
Cost Savings	Help visitors save money, time, and effort
Convenience	Make it easy for customers to find you and to do business with you
Usability	Make the website easy to navigate, fast, searchable, and visually appealing (human factors science)

own recipes with other readers. This network builds the Kraft brand as well as building stronger, on-going relationships with customers. An integrated marketing campaign is at the core of Kraft’s digital marketing strategy which is supplemented with direct, permission-based e-mail campaigns, and a high quality magazine sent out to consumers who opted-into the program.

The 8 Cs and a U will be a running theme throughout this chapter. Moreover, the concepts of branding and integration of all forms of communication efforts through all forms of media should be considered as well. This is typically referred to as Integrated Marketing Communications (IMC). The purpose IMC is to ensure that all forms of communication display a uniform, recognizable brand image, and communicate the same basic message(s).

Website Personalization

It is becoming more and more common for people to customize their choice of product features from a menu the manufacturer displays on its website. An extension of this customization is to further personalize the customer’s experience by allowing them to become a co-creator of the product experience. For example, Converse allows you to design your own tennis shoe online at their website. (Converse 2009) The customer can col-

laborate with the brand to get exactly what he or she wants, when he or she wants it. Content is tailored to the customer, and cost and time savings may be achieved. From the brand’s point of view, personalization makes the customer part of its distinctive competency. And while customization does a good job of building brand loyalty, personalization does an even better job because it helps the customer to think, “Hey, I designed it, so it’s mine.” (Travis, 2001).

Personalization is targeting taken to the extreme because it envisions creating a unique marketing mix for each individual. For consumers, personalization reduces the transactional burden because they invest time and energy educating the supplier about their specific needs. What that means for the company is that this investment is significant enough that consumers will be unlikely to want to repeat the process elsewhere since the cost of switching would be so high. Switching costs include the time, effort, and money a consumer would have to expend to switch from one brand to another.

Consumers may also find it convenient to use personalization to track new products consistent with their tastes. This is a strategy used effectively by Amazon.com whereby a customer orders a book and periodically receives an e-mail or pop-up technology alert about new books by the same author, or similar types of books by different

authors. On the other hand, there appears to be a need to ensure that the brand remains strong while implementing personalization strategies. If the site redesigns itself for each user, it may become hard to define what the site stands for in the first place. One viable approach would be to maximize the individual experience while creating a broader theme that defines and informs the customer what the brand is all about. (Krishnamurthy, 2003) It is clear that there are compelling reasons for organizations to offer personalization capabilities on their website. However, it can be very challenging to attract and retain the customers over the Internet due to low barriers to entry, and severe competition. Changchien et al. (2003) define personalization as a special form of product differentiation. When applied in market fragmentation segmentation (individualized segmentation), personalization can transform a standard good or service into a specialized solution for a specific individual. There are significant marketing opportunities to explore this topic across industries and customer segments to better understand how best to develop and offer personalization capabilities.

RSS Feeds: Website Content and Digital Advertising Capabilities

Most consumers are not aware of really simple syndication (RSS) feeds. (Beal, 2004) Yet, RSS feeds are an emerging theme in marketing, most commonly used by trade journals and the popular press, but now they are being embraced as valuable website content, and even a form of advertising for marketers. Netscape initially developed RSS feeds as a way of creating portals for online news organizations to allow users to download a program designed to accept information from websites that provide an RSS feed. That feed then pops up as a headline, or short summary, and a link to the webpage where the content is located. One of the unique capabilities of these feeds is where they can be displayed. They are most commonly found in a web browser and in small boxes that

appear in the corner of a desktop (similar to some e-mail programs).

RSS is a method of extruding information from a website and making it available as a feed that can be viewed in an RSS reader, also known as a news, information, or entertainment aggregator. Some aggregators deliver feeds to a user's e-mail inbox, while others are stand-alone programs that run on a users' computer or are customizable web pages. (Palser, 2005) Clicking a headline in an RSS feed is equivalent to typing the URL into a web browser. Beal (2004) suggests that RSS feeds can potentially help a company's marketing program. In cases where an organization has a large number of products or product categories, generating a continual stream of changes that need to be communicated to customers, RSS feeds can efficiently and effectively provide information about product changes, new products, pricing changes, and other important topics.

Palser notes the emerging practice of placing text ads between headlines in the feeds themselves, and suggests that the biggest implication might be the link to promotion and branding. In a time when brand loyalty is waning in most consumer product categories, loyalty might be encouraged in an environment "...where people can compare coverage from competing newsrooms side by side, the very best way to cultivate affinity will be with timely, reliable, complete information." (Palser, 2005) Initially, the most common marketing applications of RSS feeds alerted customers to new products or to account information. Because RSS feeds are not e-mail, they do not run into content filters and are therefore, not considered spam. In fact, an RSS feed is considered to be a fine example of "pull" promotion, rather than "push" promotion that is commonly used to communicate with customers. Beal (2004) explains that it is users, not marketers, who determine what type of feed they receive; and whether they want to follow the feed to the site, or to simply ignore it.

RSS feeds have the added advantage of not having the same security risks as e-mail—because

they are links, they are not subject to customers' fears of downloading unwanted files, viruses, or other unwanted attachments. Baker and Green (2005) report RSS as an innovation that has sent blogs catapulting into the mainstream on the Internet. Currently a user can subscribe to certain weblogs, or to key words, and then have all the relevant items land at a single destination. These personalized web pages bring together the music and video the user signs up for, as well as the news. These personalized web pages are also aggregators, and Yahoo!, MSN, and Google are working with them. Baker and Green (2005) reveal how "insidious" this really is. "If you set up your own aggregator page, such as my.yahoo.com, and subscribe to feeds, you soon discover that blog and mainstream postings mingle side by side. Feeds zip through the walls between blogs and the rest of the information world." (Green, 2005) People subscribe to RSS feeds only when they are interested in the content. For a marketer, this should mean that conversion rates into leads or sales should be higher because users are seeing what they want to see. Hrastnik (2005) claims that it is relatively easy and inexpensive for an organization to create, maintain, and support its own RSS feeds. For the user it does not require much of an orientation, and most of the time it is free. Many electronic devices are capable of receiving RSS feeds including iPods, PlayStation game consoles, and PDAs. Sony, Dell, and Yahoo! are among the many organizations embracing RSS feeds to communicate with consumers; including advertising to them. In fact, Apple's iTunes Music Store invites consumers to find their favorite podcasts from ABC News, CNN, ESPN, CNBC, etc. Subscriptions are free, and with the click of a button subscribers can get the most recent episodes, and all future episodes automatically delivered to an iTunes podcast playlist.

Websites and Podcasts: Content and Digital Advertising Capabilities

Podcasts are another innovation that is related to weblogs and RSS feeds. Podcasting is primarily associated with the iPod, but its real association is with RSS file casting. Once you know how RSS feeds work, the concept of podcasting is relatively easy. RSS feeds are the downloadable content that originated with news programs. However, these programs have merged into many different types of content from sports programs to music, and ever more frequently, into original programs. Podcasting allows individuals and businesses to create and distribute original audio and video programs via the Internet. Often formatted like a radio show, a podcast is a multimedia file downloaded by its audience. More than 25 million fans will "tune in" to podcasts in 2008. (PR NewWire 2006) This figure is expected to rise to 50 million by 2010. Podcasts have become popular largely because of their distinctive content, finding niche audiences, and giving voices to people outside the mainstream media.

West (2005) explains that the "podcast phenomenon" is largely fueled by the under 24-year-old age group. He reports that over one in four 8 to 18-year-olds use audio media while using other media such as personal computers, or even watching television. These young consumers are listening to audio while they do homework, shop, drive, and, especially when they are alone. West suggests that podcasts can be used for both internal and external communications, including marketing and branding. We are beginning to see corporations post and deliver their executive speeches and current news (publicity) as a podcast. Some college professors are now delivering their lectures via podcasts. Television stations are beginning to podcast their news programs, offering time and place convenience. The radio industry is profoundly changing their offerings to include

podcasts. West (2005) reports that any radio station without a podcast/Internet strategy "...will run the risk of audience loss, and consequently advertising that is increasingly part of podcasts."

A major strength of podcasting is that it provides access to existing content, such as Web mail, anywhere, anytime, and with the computer phones, any place. This, of course, makes life easier by allowing consumers to access content anytime they want, such as during their commute to work, at lunch, or any time convenient to them. Podcasts are portable programs that can be heard on-demand using computers, portable media players, or other devices. Similar to a weblog, subscribers can receive podcasts automatically through RSS feeds. (PR NewWire 2006) Podcasts allow consumers and organizations to engage in social media, and create a conversation. The conversation is not a one-way conversation (narrowcasting) with the marketer sending a message to the customer, but rather a two-way conversation (dyadic) between marketer and customer. A good example of this is the CarTV podcast, a weekly video that covers the automobile industry and evaluates car models from different makers. The CarTV podcast can be downloaded to an iPod or other portable video player, and is popular with consumers with a strong interest in cars. Currently, there are podcasts available for almost any topic of interest. Audi is known for its use of non-traditional media to connect with its customers and to communicate its messages. Each year, Audi teams up with top music acts to back the launch of its latest TT model sports car through a digitally-led campaign. What Audi is trying to do is to sign up with established, well-known bands that create original content that will be available as podcasts on their website. This campaign is an example of how a growing number of marketers are focusing more on digital work, and less on conventional advertising. (Charles 2006) Music has long been used as a marketing tactic to connect with customers. Podcasts are another vehicle to deliver the same basic kind of connection. Deliso (2006) reports that only 8 percent of

American adults listen to podcasts, however, he believes that marketers' embrace of this technology is not premature. There is some question as to just how fast podcasting is proliferating, but marketers seeking a low cost technology to reach audiences should consider podcasting.

There are, of course additional opportunities and tactics to exploit the rich capabilities of a website to meet organizational marketing and advertising goals. Marketing and advertising objectives are more likely to be met when the Internet focus is on online branding. This focus can be achieved by implementing various online marketing tactics such as using the 8 Cs and a U in website design, as well as utilizing media content broadcasting such as RSS Feeds and podcasts that can reach customers and potential customers on the Web. Connecting with customers can be as simple as providing clear contact information via e-mail, phone, chat, or even weblogs. Weblogs will be discussed later in this chapter.

DRIVING TRAFFIC TO A WEBSITE

Much of the chapter thus far has been devoted to websites and website content. We now shift to consideration of driving traffic to a website. Just as bricks and mortar retailers want to drive traffic to their stores, online marketers should strive to drive traffic to their websites. A major objective of a website is to generate "traffic" (visitations to the website). Generating more traffic will provide the organization with more connections with its customers and potential customers, potentially resulting in higher advertising rates (if profits are based on advertising), and potentially a greater return-on-investment (ROI). Traffic can and should be driven by offline and online tactics in an integrated manner. In cyberspace, hurling (distributing) your URL is a must. Practitioners must place their website address, or URL, on every communication piece they distribute. Other tactics include viral marketing, affiliate market-

ing, sales promotions and incentives, e-mail and search engine programs, including search engine marketing (SEM), and search engine optimization (SEO), directory listings, and more. Digital advertising clearly has the capacity to drive traffic to an organization's website as well. This will be discussed later in this chapter.

DIGITAL ADVERTISING

Digital advertising is simply an extension of the traditional media broadcast model (i.e., similar to advertising on television and radio). The website digital advertiser broadcasts content (typically for free, but not always) that contains various kinds of useful customer information. These broadcasts may also include such services as e-mail, chat rooms, and weblog services. Mixed in with this content and services are advertising messages, such as banner ads. For some advertisers banner ads are their sole sources of revenue.

These generally work best when the volume of viewer traffic is large or highly specialized. High volume sites such as Yahoo! and Google attract a large number of viewers and are desirable for their ability to reach large numbers of people. The Super Bowl is a good example of a program with high reach in traditional media--and therefore commands very high advertising rates. ESPN.com is desirable to advertisers because of its reach, as well as some strong sports-oriented specialization. The primary audience is comprised of males (sports enthusiasts) who are intensely interested in sports. Male sports enthusiasts often respond in similar ways to advertising messages targeted towards them. Enthusiasts tend to be the most frequent viewers of specialized websites as well as the most frequent purchasers of specific products. They are also the most brand loyal. There are many highly specialized sites focusing on everything from fly fishing to fashion. Advertising on these sites is desirable because of their enthusiast targeting capabilities.

Media kits for any site that sells advertising will provide traffic and visitor metrics. A media kit, or press kit, is a package of news and background information about a medium that is provided to potential advertisers. For example, among other things, information might be provided on the number of readers, viewers, visitors, demographics, advertising options and rates, and contact information. It assists the advertiser in understanding and comparing one medium relative to others. For example, CyberAtlas (<http://www.cyberatlas.com>) collects a vast array of Internet statistics and metrics that could be of interest to Internet marketers, advertisers, and others doing business on the Internet. Media Metrics (<http://www.mediametrics.com.au/>) provides a patented on-site web analytics methodology to measure a consumer's online behavior including click by click, page by page, minute by minute user activity, both online and off line. ACNielsen/NetRatings (<http://www.nielsen-netratings.com>) can provide data on Internet growth and consumer user patterns of Internet usage by using an off-site web analytics methodology. eMarketer (<http://www.emarketer.com>) proclaims to be the leading provider of eBusiness statistics and Internet statistics in the world. Burke, Inc. (<http://www.burke.com>) can provide custom, full-service Internet metric marketing research, market analysis, and consulting for both consumer and business-to-business goods and services organizations.

Marketers should understand both the opportunities and the threats associated with digital media and advertising. For example, Menon and Soman (2003) argue that the challenges of generating interest and educating consumers about your brand are especially relevant in digital advertising. Unlike advertising messages in traditional media, most digital advertising is in a form a banner or tower ad that generates sufficient interest and motivation on the part of the consumer to interact with the message. In addition, customers are often required to actively access information rather than be passive recipients of the advertising message.

An Overview of Digital Media and Advertising

Marketers must work to ensure that they are generating sufficient attention and motivation for viewers to click-through and view the full content of the advertisement. Unfortunately, many of the tactics that work well in traditional media may not work as well in digital spaces. For instance, television commercials do not always work well in a digital medium. Since the customer has a choice on a website he or she will most likely click away from a “lengthy” television style advertisement; unless they are very short in duration. Marketers should strive to develop messages that fit the medium and its users. Another consideration is ad placement. Chatterjee, et al. (2003) find that while repeated exposures to the same banner ad is negatively related to click-through rate, consumers are equally likely to click on banner ads that are placed early (primacy) in navigation, or later (recency) in navigation on a website. Moreover, clutter is a major weakness for digital ads. The greater the clutter in the ad the more likely it is to be ignored by customers. Using metrics that discover the most likely target market can help to deliver relevant messages to targeted prospects, increasing the success of digital advertising campaigns. The key word is *relevant*. Most consumers want relevancy in the ads they read or listen to on the Internet.

Although there are many forms of digital media and advertising, Table 2 presents some of the most common types in use today. There are two forms of digital advertising that are currently not considered to be common forms of digital advertising but appear to be gaining a large amount of interest with marketers. Both video and mobile advertising are on the rise and are generating attention. Consumers are beginning to see campaigns which include video and mobile messages. Both of these areas of digital advertising may grow in the future and become significant in some online marketing programs. (Business Week, 2009)

Video ads formats are not much different from ads that consumers might see on television, while others encourage and enable the interactivity of the Internet to engage viewers. (MacMillan 2009) The Interactive Advertising Bureau collaborated with more than 140 different online publishers, including Microsoft, Google, and Yahoo!, to create a set of guidelines for the five most common formats, some of which are not much different from television ads. Others are more sophisticated and use the interactivity of the Internet to engage viewers. The first is the “pre-roll” - a 15- or 30-second ad that viewers watch before a show or video clip (“pre-roll”), at some

Table 2. Most common forms of digital advertising

Form of Digital Advertising	Description or Common Meaning
A business's website	This is the most common form of advertising on the Internet. Ragu Spaghetti Sauce was one of the first. Remember to consider the 8 Cs and the U.
Banner	A banner is a rectangular graphic placed as an advertisement on web pages. They often employ graphics, or rotate to capture the user's attention. The user can even click-thru the web page.
Button	A button is similar to a banner, but square.
Tower	A tower is vertical display; usually down the right site side.
<u>Intracommercials</u>	An intracommercial is an animated, full-screen ad placed at the entry point of a website before the user reaches the intended content.
Search Engine Marketing (SEM)	SEM includes various forms of Internet marketing displays that seek to promote websites by increasing their visibility and/or ranking in search engine results pages.
Classified Ads	Classified ads are well-suited for the interactive environment. Users can enter requests, and the computer will search for the appropriate listings.
Weblog or Chat Room Ads	Yahoo! and HotWired are examples of sites that sell advertising in chat rooms.
Contest Sponsorship	Many sites offer contests which can be sponsored by an advertiser.

point during the video (“mid-roll”), or afterward (“post-roll”). The second is the “interactive.” The Interactive is a pre-roll, mid-roll, or post-roll that offers viewers some form of interaction, such as entering a Zip Code or stock ticker, or playing a short game. The ad may last longer than 15 or 30 seconds if a viewer engages with it. The third form is the “overlay,” a text or graphic that appears on the bottom or top portion of the video for a brief period while content is in progress. What generally occurs is that viewers can click on the ad to expand it or go to an advertiser’s Web site. The fourth form is the “invitation,” which is similar to an overlay, but the message briefly appears next to the actual video player rather than on top of it. Lastly, the “companion” is a static banner that appears alongside a video player, typically in conjunction with another ad from the same sponsor, like a pre-roll or overlay. (MacMillan 2009) As these and other forms of digital advertising methods develop, marketers will begin to and continue to explore video ads and their potential for engagement and ROI.

More than 80 percent of consumers now own cell phones—a potential advertising medium. Fast-food chains, car makers and TV reality shows have run contests and other promotions in which consumers participate by sending text messages to their Web addresses. Wireless carriers have begun allowing organizations to run banners ads in a mini version of what they might see on the Internet. Google Inc. and Yahoo! have distributed search ads to cell phones; and this appears to be just the beginning. Jesdanun (2009) reported that organizations will be able to use image-recognition software to determine what offers, video clips, or other content are delivered to cell phone users.

For example, Snap Tell Inc., an online wine retailer, offered discounts to anyone who sent a photo of its newspaper ad snapped with a camera phone. Soon it will be possible for cell phone users to snap a picture of a movie poster, billboard, or some other brand message and receive movie reviews, and/or receive discounts for tickets, goods,

or services. The Mobile Advertising Report (2008) found that in the first quarter of 2008 there were more than 255 million mobile phone users in the U.S.; up from 251 million in the fourth quarter of 2007. A dramatic finding of the research was the significant rise in the number of consumers who were able to recall the brand they had seen advertised on their cell phones. Forty-one percent of those who remembered mobile advertising could remember at least one brand, which is up from 34 percent just three months before. This represents a 7 percentage point increase. Men are 10 percent more likely than women to recall a brand they have seen advertised on their cell phone, while those aged 25 to 34 were the highest-performing age group in terms of brand recall. There is certainly much to learn about this new medium, and form of advertising; and both researchers and marketers need to explore it.

Viral Marketing

Viral marketing is a term applied to a family of analogous marketing tactics, some of them quite old, though the term itself dates from the height of the Internet bubble economy. (Moore, 2003) According to one of the venture capitalists who launched it, viral marketing amounts to little more than “network-enhanced word-of-mouth.” Word-of-mouth has consistently been one of the oldest, most credible, and most effective branding and advertising strategies. Viral marketing proposes that messages can be rapidly disseminated from consumer to consumer, leading to large-scale market acceptance because of the credibility of the source of the information—friends, family, relatives, co-workers, etc. (Krishnamurthy, 2003) The beauty of viral marketing on the Internet is that it can turn every user into “an involuntary salesperson.” In viral marketing, the brand seems to underwrite (or sponsor) acts of communication, transforming users of the service—authors of e-mail messages sent over the network—into de facto product endorsers.

Viral marketing is more powerful than third-party advertising because it conveys an implied endorsement from a friend, relative, or co-worker. Close acquaintances have more credibility than an advertiser. Tactics that involve people in playful ways, which are passed on and disseminated organically, are far more likely to be successful. (Moore, 2003) Brands that are perceived to enhance personal relationships, and are worth sharing with friends, are the ones that will prosper. (Hodder, 2002) In addition, contacting individuals using the Web is much faster and less expensive than any other medium. The critical mass effect also plays an important role in viral marketing. As more customers spread information or sign up for a product, each one can contact many more. Soon the total number contacted rises exponentially; which illustrates Metcalfe's Law (Metcalfe's Law 2008) that the community value of a network grows as the square of the number of its users increase.

Affiliate Marketing

Affiliate marketing is a marketing practice in which a business rewards one or more affiliates for each visitor or customer brought in by the affiliate's marketing efforts. It is using the connectivity function of one website to drive traffic to another. Amazon.com and Barnesandnoble.com are affiliates for many other websites. A visitor to an Amazon.com affiliate might see an ad on that site for a book that Amazon sells. If a visitor clicks through and purchases something at the Amazon.com site, Amazon.com will pay their affiliate a fee. Therefore, the affiliates provide purchase-point click-through to the merchant (Amazon.com). It is a pay-for-performance business model. If an affiliate does not generate sales, no cost is incurred by the sponsor. This type of marketing may have another advantage. The algorithms search engines use for serving up listings usually consider the popularity of a website including what other sites that website is linked to. Search engines will reward those websites that have more

links, and those that display more popular links with a higher natural, or organic, and perhaps less expensive paid listing.

Email

Commercial e-mail is an electronic message that can be promotional in nature, usually containing an incentive. It is a form of direct marketing, and is interactive. For marketers, e-mail introduces five capabilities, including the ability to initiate two-way communication, the ability to communicate quickly, the ability to provide almost instant feedback, and the ability to achieve worldwide reach, and it is relatively low-cost. On the negative side, consumers and businesses receiving unsolicited e-mail messages often perceive them to be spam, or junk, and may choose to "block" them.

Permission Marketing

Digital marketing works best when it is permission-based; that is, when a consumer gives a business the "permission" to send and receive relevant messages. Permission marketing is about each customer shaping the targeting behavior of marketers and receiving only the marketing messages desired. It is a scenario where consumers empower a marketer to send them messages in certain interest categories. Marketers then match anticipated, personal, and relevant messages with the interests of consumers who have opted-in. The use of e-mail to solicit permission to market to individuals is common and often successful.

Marketers can make good use of data mining techniques (discussed below) when seeking permission to send customized messages and offers to potential and existing customers. E-mail is relatively easy to use and e-mail lists are readily available. Marketers should work to ensure the delivery of legitimate e-mail communications and build an ongoing, mutually beneficial dialogue with customers and potential customers. Some suggestions for maximizing the effectiveness of e-mail

communications include informing customers about the nature of e-mails they will receive and the frequency of those communications, should they give permission. The more specific the information is about the type of offer or product the better. Marketers should create and make readily available a clear privacy policy statement that is easily accessible to recipients—one that explains what data is collected and how it will and will not be used or shared.

Communications should be relevant to the recipient, should not contain objectionable content, and should only contain the type of content the customer originally agreed to. The content should clearly describe the offer and its benefits. Tips, special offers, and information based on each recipient's own behavior, interests, and needs often generate the best response rates and the fewest complaints. It is very important that the subject line accurately reflect the message, purpose, and content. In addition, a marketer's brand should be featured prominently in the "From" and/or the "Subject" lines. Although creative elements such as images often make a message more interesting, marketers should pretest them with anti-spam software to avoid words, phrases, coding, punctuation, and design common to spam. (Direct Marketing Association 2005) These recommendations are among the many that should help to improve the likelihood of permission-based e-mail being delivered to the inbox and read by the intended recipient.

Sales Promotions and Incentives

Consumers are accustomed to incentive tactics in the bricks and mortar environment; yet they often perceive few benefits from similar tactics on the Internet. (deChernatony, 2001) However, it is the marketer's task to develop and implement incentives to drive traffic to his or her website, and then employ additional incentives to convert potential customers into customers. Such tactics might include sales promotions designed to move

the target market quickly towards a purchase, such as the use of a promotion code published in a magazine. Permission e-mail marketing directs marketing messages and incentives towards potential customers that are interested enough to allow their names to be included on a commercial e-mail distribution list. Further, with personalization, more customer data can be mined to target the right customer with the right messages.

Data Mining and the Marketing Decision Support System (MDSS)

Data mining, also called machine learning, or knowledge discovery, is a class of machine-driven methods that look for hidden patterns and relationships in databases and data warehouses. (Siegal 2004) It works by analyzing huge amounts of raw data to discover managerially useful summary information within the data that are not typically be revealed in the raw data. Siegal (2004) reports that data mining can substantiate what would otherwise be educated guesses about marketing relationships. This can be accomplished by using automated discovery whereby the marketer can search for hidden relationships among a multitude of variables. Siegel further claims that data mining is both a descriptive and predictive tool—one where the process creates its own theory about why a relationship exists. It requires drilling down through multiple layers of data such as customer transaction data to create profiles of customer purchase behaviors. The process of data mining creates models for segmenting customers and forecasting behaviors, such as future purchases (loyalty) or attrition (brand switching).

Data mining is relatively new addition to the traditional marketing decision support system (MDSS). A marketing decision support system is "...a coordinated collection of data systems, tools, and techniques with supporting software and hardware by which an organization gathers and interprets relevant information from business and the environment and turns it into a basis for

marketing action.” (Little 1979) The main reason data mining is important to marketers is that this information can be used to assist in developing marketing programs to include market segmentation, targeted marketing, personalization/customization, relationship marketing, direct marketing, cross selling and discovering customer lifetime value. Marketing research also does this, but in a different way. According to Yang (2005):

Data mining research incorporates methodologies from various research disciplines such as statistics, machine learning, database technology, optimization and pattern recognition, and hence has a richer pool of knowledge and model representation. It focuses more on the effectiveness of problem solving, and pays greater attention to the actual performance on data. In contrast, marketing research advocates more theory-based analysis and its theories are often built upon statistics, economics, econometrics and other social sciences.

An MDSS system has three basic components. The first is the data system which is composed of methods and processes for gathering useful internal and external information. The second component is the model system which provides routines, procedures, and techniques for manipulating information. And, the third component is the dialogue system (language) that allows the marketing manager to manipulate the data to solve ill-structured decision problems. There is evidence that these two basic forms of marketing research can work well together in a MDSS system. For example, as consumers continue to shift their purchasing toward shopping in multiple channels, the value of capturing information at various touch points has become increasingly important. This growing need for data mining is also occurring in the B2B marketplace as these markets become more complex, and the need for better targeting grows. One of the strongest applications of data mining results is the ability to deliver relevant offers to targeted consumers.

Coupons are one of the most visible forms of sales promotion. Many retailers participate in online coupon programs. Additionally, contests are popular online—such as those offered by General Mills, and NASCAR. To be sure, one of the most important tasks of the marketer is to employ data mining techniques to develop relevant messages and offers to targeted consumers. For example, data mining can be used to reduce shipping costs to specific geographic areas. It can also be used to discover specific market segments that are price sensitive, or responsive to incentives.

Cross-selling and up-selling are tactics that can be used on commerce sites. Other incentives might come in the form of cause-related marketing such as green marketing. Research by Changchien et al. (2003) evaluated a sales promotion application for distributing and redeeming coupons while shopping on the Internet. They found that during the online shopping experience, various sales promotions and coupons were offered. Various methods were also used to target coupons to select potential buyers. One threat that emerged, and which should be considered, is that security mechanisms are needed to prevent alterations, duplication, and trading of coupons by customers; as well as the fraudulent use of manufacturer’s coupons by retailers. The impact of coupon trading and duplication Marketers, facilitated by the Internet can have an adverse effect on sales promotion campaigns. should consider that well-developed and targeted campaigns can be quite successful, but care should be taken in minimizing the potential for fraud.

Search Engine Programs

More and more marketing managers are adopting new ways of thinking about branding on the Internet; including the ability to recognize the way consumers use keywords in search engines to find suitable brands. To capitalize on the opportunity presented by search engines, some marketing managers strive to get their brands posted at the

top of the list on the website. (Owen 2000). The term “search engine” is commonly used for any type of website search—one that obscures valuable information about other types of search tools and other types of search sites. There are three types of Internet search tools including lists, directories, and search engines. A given search site may contain one or more of these search tools for the visitor to use.

Lists are the earliest and most popular form of organizing information about websites. They are literally a list of websites (or far less frequently of web pages) that may be organized by some scheme, such as letters of the alphabet, or subject area. These lists typically have only one or two levels of organization. The visitor uses a list by simply reading down the list until they (hopefully) find a website that is relevant to their interests. An online example of such a list is yellowpages.com.

Directories were the next development in search tools. Yahoo! is the earliest and best-known example. Two other examples are Open Directory and Looksmart. A directory is a logical extension of a list having multiple categories and subcategories; in some cases 10 to 20 levels deep. They list websites (not web pages). The visitor uses the directory by “drilling down” (clicking) through the subcategories until they find the appropriate subcategory they are looking for. Then they peruse the list of websites therein. A key feature, and as it has turned out, a key reason for the failure of directories, is that they have a human being review each website before listing the website in their directory. (Sonnenreicht 1997)

Search engines, and their cousins, meta-search engines, have proven to be the most popular search tools on the Web. A search engine consists of three elements. The first element is a database of web pages (not websites), the second element is a user interface, and the third element is an algorithm that determines the relevancy of web pages in the database for any given search term. Upon locating a new website or web page, the search engine searches the site by using a “robot,” or “spider.”

A robot is a type of automated software, often referred to as spider. The robot collects the web page and places it in the search engine database. When a visitor requests a search for a specified word, phrase, or term, the search engine uses a proprietary, secret, multi-variable, non-linear algorithm to evaluate all the web pages in its index that contain the search term. The web pages are then presented to the visitor, ordered from highest to lowest in terms of relevancy by means of a relevancy score. Compared to lists and directories, search engines are more convenient to use, are more inclusive of the World Wide Web, and typically have more relevant results. (Brynn, 1999)

Meta-search engines function by first accepting the visitor’s search term(s); it then searches other search engines, and finally presents the results. Meta-search engines do not contain their own database. The simplest of these meta-search engines presents the results from the search engines they contacted on the visitors behalf, in a list, engine by engine (see www.dogpile.com). A more sophisticated meta-search engine applies its own algorithm to the results it obtains from the search engines it contacts to provide another level of interpretation of relevancy. One example is www.ixquick.com.

Search sites are websites where the searcher may conduct searches for websites or web pages relevant to a given search term. Most search sites include both a search engine and a directory. The directory is typically a feed from Open Directory or Looksmart, rather than a directory unique to the search site. Also, the database of web pages is typically an amalgamation of the search site’s own database supplemented by databases from other search sites. Search sites have struggled to develop sustainable revenues. Most are operating in the red, using additional investment or debt capital to sustain operations. A key element in the future survivability of individual search sites is the ability to develop a business model that generates adequate revenues. Revenue generation continues to be a major hurdle for search sites. However, four

revenue sources have become prominent. One of these revenue sources is advertising. Search sites sell ad space typically in three areas. These areas include banner ads at the top of the web page, skyscraper ads on the right side of the page, and “sponsored listings” typically displayed as the first pages above the non-advertised pages.

Another source of revenue is paid inclusion. Search sites quickly realized that website owners often wanted their websites included as soon as possible on any newly launched website. This is because traffic is the key to the success of most websites; and placement in search engines generates traffic. In the past, most search sites were not indexing new pages or re-indexing existing pages in a timely manner. It was typical for months to go by before a robot would visit or revisit a website. In order to counter this slow indexing of websites, some search sites began offering a “premium” service. By paying a negotiated fee per page, a website owner could have their pages indexed within two to three days and then re-indexed every two to three days thereafter.

A third source of revenue is “pay for placement;” also known as “pay per click” or “PPC”. This is a form of advertising in which a search engine allows website owners to “bid” for top placements in the engine on a keyword by keyword basis. The bid is what the website advertiser is willing to pay that search engine owner per visitor. Overture (formerly GoTo, now owned by Yahoo!) was the initial search engine to promulgate this model. It and has been extremely successful, both in obtaining market visibility, and in revenue generation (and suspected profitability). Based on traffic and revenues they remain the major “pay for placement” search engine. There are about 5 to 10 minor such search engines, and between 100 and 200 micro search engines.

A fourth source of revenue is the sharing of sponsored listings. Yahoo! is perhaps the greatest proponent of this approach—they provide their top three listings (based on bids) to another search site. Both Yahoo! and the other search site benefit from

this arrangement. Yahoo! benefits because it gets more exposure for its listings, thereby generating more income, and it shares the income with the other search sites. There is continued growth in the number of listings being shared among search sites as they mimic Yahoo! Currently, Google, Yahoo! and MSN provide the great majority of searches. Because of this sharing among websites, marketers can have confidence in the extensive reach of their search engine marketing strategy when advertising on just these three search engines. The opportunities to advertise are becoming broader and more complex as these sites work to provide relevant listings to Internet searchers. The search engines are trying to accommodate the needs of advertisers while earning greater revenues and profits for their organizations.

A final observation about search engines is their ability to generate traffic. Website owners realize that high placements in search engines (and sometimes directories) can result in significant traffic to their websites. Currently, there are three ways to obtain visibility, and hence, traffic from search sites. One is through optimization. Optimization is the practice of creating web pages that will produce high relevancy scores in a search engine’s algorithm. Since early algorithms employed by search engines were often simplistic, it was possible to significantly influence relevancy scores (and hence placements) by manipulating text on pages. But the era of simplistic and easy means to obtain high relevancy scores is past. (Farrelly, 1999 and Google 2002) Search engines now employ highly sophisticated, secret algorithms. Consequently, the practitioner of “optimization” must keep abreast of the state of the art in search engine algorithms. This is not easy to do. It is possible to influence relevancy scores by creating “optimized” pages, but it is no longer possible to manipulate search engines. A second means to generate traffic in search sites is through the “pay for placement” model as exemplified by Overture. A web page can be listed at the top of a search engine results page even though it is

identified as a “sponsored link.” That way it will obtain high visibility and receive traffic. A third means to generate traffic is through advertising such as banner ads, and skyscraper ads. Website marketers typically employ variations of all three techniques to obtain traffic.

Consumer-Generated Media

Smith (2006) suggests that the Internet is still evolving with the latest “killer application” being social engagement. Social engagement is a key characteristic of consumer-generated media (CGM). Perhaps the simplest way to describe CGM is to provide some well-known examples. Facebook, MySpace, YouTube, Craigslist, Angie’s List, and PhotoBucket are among the most used websites by consumers. Examples of CGM include blog entries, consumer e-mail feedback, message board posts, forum comments, personal websites, and personal e-mail. Recently, Hart and Blackshaw (2006) included wikis, raves, profiles, networks, and mailing lists as other examples of CGM. CGM is not precisely defined, and generally refers to “...just about any website powered by the user on a constant and mandatory basis.” (Levy and Stone 2006) The popular media refers to GCM as Web 2.0. Unlike paid media, CGM is created and driven by consumers. It is advancing as a major consumer resource for socializing

and connecting with others, as well as obtaining various types of desired information. The central idea is “harnessing collective intelligence.” (Sur-owiecki 2005, as cited in Levy and Stone 2006)

For instance, a good early example of a CGM website is Craigslist, an online community bulletin board where millions of consumer go to peruse classified-ad listings to find jobs, apartments, concert tickets, and more. In doing so, they connect with millions of people who provide postings in a self-service, community-moderated market space. Managed by a small staff of 19, Craigslist is the seventh largest website in the world. (Levy and Stone 2006) A similar kind of list is Angie’s List that is a review, or rating site that gathers consumer ratings of various types of businesses and services, such as plumbers, painters, accountants, doctors, lawyers, dry cleaners, and so on. Table 3 describes the most common forms or types of CGM.

Consumer use of CGM is growing at an increasing rate. In 2006, MySpace.com was visited by 65 million consumers. In addition to final consumers, there is a growing list of marketers wishing to connect with them. (Levy and Stone 2006) Facebook has almost 200 million members. (Facebook 2009) Early in 2009, Facebook was growing by over 700,000 users a day. This growth translates into more 5 million new users a week world-wide and more than one million per week in the United States. This unprecedented growth

Table 3. Most common forms or types of CGM

Form or Type of GCM	Description, or Common Meaning
Blog	Website where entries are written in chronological order and displayed in reverse chronological order.
Message Boards/ Forum	Web application for holding discussions and posting user-generated content.
Review/Rating Site	Website where product and/or company reviews are posted by experienced consumers.
Direct Company Feedback	Media vehicle allowing consumers to provide direct feedback to companies.
Third-Party Web Site	Website, such as Complaints.com and My3cents.com, where smaller, yet active groups of consumers generate comments.
Moblog	Mobile-enabled blogs that let users post photos from anywhere.
Vlogs/Video blog	A blog that comprises video.
Podcast	A digital media file, or a series of such files, that is distributed over the Internet using syndication feeds for playback on portable media devices.

is now attracting over 10 percent of the global Internet population to its site. Facebook employs most of the 8 Cs and the U as it continues to differentiate itself through content, community, connectivity such as easy photo-sharing (it has more than a billion photos shared per month) and clear and aggressive privacy controls so people can make sure those who are most special in their lives can see certain information others cannot.

Each day around 35,000 videos are added to YouTube with about 30,000 daily visitors to the site, viewing millions of videos. (Levy and Stone 2006) Flickr—a 2.5 million member community of people with a passion for sharing photos—is another popular CGM site recently purchased by Yahoo! Google Video is another CGM site that lets users upload videos and even sell them. In all of this communication and engagement, what may interest marketers most is that consumers communicate frequently about products and brands.

Indeed, Klaassen (2007) reports that marketers are already starting to recognize the frequency with which people report their affinities for brands on CGM sites such as social nets, blogs, and personal web pages. Marketers also understand that consumer reviews and trusted recommendations (a level of credibility not enjoyed by advertisers) are increasingly important marketing factors. For example, Facebook has developed applications devoted to displaying visitors' favorite brands, purchases, and tastes. CGM communities provide value to consumers akin to the value of word-of-mouth, and their reach is limited only by the size of the online network. (Hart and Blackshaw 2006) Organizations such as Nike, Sears, and the Coca-Cola Company have pushed their advertising agencies to come up with CGM tactics. Nike built a social network for running geeks. The main point was to get feedback and learn what worked and what did not work. (Helm and Kiley 2009) Experimentation with social networking should continue because companies need to determine how to connect with consumers in the digital age.

Lenhart (2007) discovered that teenagers are one of the most influential consumer segments propelling CGM. MySpace grew to 50 million members in a little over two years. Websites such as MySpace, Facebook, and PhotoBucket have between 50 percent and 90 percent more visitors aged 12 to 24 than the Web as a whole. (Morrissey, 2006) Content creation is a common behavior on CGM sites and this behavior by teenagers continues to grow; with 64 percent of online teens ages 12 to 17 engaging in at least one type of content creation. Girls continue to dominate most elements of content creation with approximately 35 percent of all online teen girls blogging, compared with 20 percent of online boys. Lenhart (2007) also found that 54 percent of wired girls post photos online compared with 40 percent of online boys. Boys dominate the posting of video content online however, and are nearly twice as likely as online girls (19 percent vs. 10 percent) to have posted a video online. Lenhart also found that content creation is more than just about sharing creative output—it is also about participating in conversations based on that content. Almost half (47 percent) of online teens have posted photos in places where others can see them; and 89 percent of those teens say that people comment on the images at least some of the time. Parents of teenagers are more likely to be online (87 percent) than parents who do not have teenagers in the home (17 percent). The most common online behavior for the parents of teens is to check up on, and regulate their teens' media usage; including the Internet, but also television and video games. (Macgill 2008)

In order to use CGM as an effective marketing tool, marketers will need to analyze its costs and benefits. While the popularity of using CGM to spread information is growing rapidly, risks exist. On the one hand, marketers might successfully influence the consumer content and postings, and also gain a better understanding of consumers' attitudes toward their products, services, brands, and

even their competition. On the other hand, CGM tactics can be time-consuming, require regular management, and can produce candid, sometimes negative, remarks about an organization or its products. It is this lack of control that may be the biggest fear of marketers when considering the risks of using and participating in CGM. While it is clear that CGM can be used to send and receive information, there is little substantiated research providing evidence as to their effective use in generating sales and profits. In the absence of valid and reliable studies, marketers must rely on case studies and specific examples from industry to gauge their potential success. Future research needs to consider these and other strategic and tactical variables so that marketers can develop a stronger understanding of CGM and their potential role in marketing programs.

Weblogs (blogs), are a type of CGM which has received significant attention in both in the academic literature and even more so in the trade literature. *Business Week* (2006) suggests that it is difficult to imagine a world without Weblogs. In the early stages of Weblogs, Winer (1999) reported that Weblogs were "...often-updated sites that pointed the reader to on-site articles and to articles elsewhere on the Web with comments on those articles. A Weblog is kind of a continual tour, with a human guide whom you get to know." Kahney (2000) proposes that the best Weblogs provide a diverse mix of resources including news stories, connections with other similar topic sites, essays, and opinions. Weblogs about cars, food, health, love, news and more have emerged online.

In a special report, *The Washington Times* reported that many companies have incorporated Weblogs and Weblog discussions (blogging) into their customer relationship programs. (Baker, 2006) Microsoft Corp., Dell Inc., and Sun Microsystems have given their employees permission to start Weblogs and are generally given free rein to discuss their business, as long as they do not give away trade secrets. Nike hired an agency that publishes several popular Weblogs to create a We-

blog for a new campaign entitled "Art of Speed." The Weblog promotes a Nike-sponsored series of short films. On the other side of the business scenario, there is evidence that blogging might be appealing to customers who have become weary of traditional marketing methods. (Baker, 2006)

Blogging provides marketers with an opportunity to no longer have to rely on the printed press alone to publicize new goods and services. There are many other uses of Weblogs, as well. Some, like Nike's "Art of Speed" Weblog, have great attention-getting and entertainment value. Others, such as Microsoft's employee Weblogs, provide good information as well as good customer service to customers. The themes, or tactics, of Weblogs should be considered from the perspective of both the seller and the buyer. For example, Weblogs that are simple and useful might result in a potential shift in the way people get their news and how they learn about new goods and services. CNN (2005) reported that "...most managers accept the benefits blogging can bring." Examples include, establishing a company as a thought leader in its sector, providing tips and insights on potential new products, facilitating feedback on existing products, and allowing an outlet for good company news, as well as a chance to ease bad news into the ether. The most obvious and compelling reason to start a corporate Weblog is "...to establish a direct relationship with customers in a context that can build trust over time; something all the advertising in the world can struggle to accomplish." (CNN, 2005)

Marketers need to understand the risks and rewards of communicating in such open spaces as the Internet. Another important issue is the measurement of weblog performance. Most measurements are still in their infancy. (Fry, 2006) Yet Oster (2005) suggests that organizations need to be tuned into what customers and non-customers are saying about their company, and their products. Oster believes that many companies do not really know the many negative remarks being made about their brands. Clearly then, marketers considering

using weblogs, or advertising on blogs, should monitor the tenor and the tone of the site; then make a decision about the extent of their participation; if any. Many mainline companies have made the decision that the rewards of the Internet are worth the risks. Baker and Green (2005) report that Gawker Media, a daily Manhattan media news and gossip Weblog, sells ads for everything from Nike to Absolute Vodka, commanding up to \$25,000 per month for a sponsorship. There is evidence of continued technological development in the future of weblogs, and, despite some predictions of its demise, there is evidence that blogging will be increasing—at least until it is replaced by new technology (which is very likely considering the history of technological development). Weblog software is becoming easier to use, thereby expanding the number of organizational and consumer users. (*Business Week* 2006) Eventually, it will become easier to incorporate more media and more mobile capabilities into Weblogs to bring in more mainstream users.

Regardless, CGM usage is growing and may provide value to both consumers and marketers. Therefore, marketing practitioners must continue to scan the environment for new developments that may impact the creation and use of marketing programs that include CGM. Given the rapid growth of CGM worldwide, academicians and practitioners need to consider identifying monitoring, measuring, and interpreting the consumer-generated media websites that are relevant to their industry, their company, and their brands.

MEASURING DIGITAL ADVERTISING AND MEDIA

Web Analytics and Metrics

Digital technologies have opened the door to new possibilities in data collection and analysis of business processes; including customer behavior. As a consumer travels in the virtual, or digital world,

everywhere he or she goes, and everything he or she does, leaves a trail of bits of information because almost all actions and activities are recorded. Marketers can and should analyze the rich data that is generated. Marketers can then use the resultant consumer behavior information to help optimize the network infrastructure and improve website architecture. Marketers can also use it to measure the effectiveness of website design as well as any associated marketing tactics used on a site or its affiliated sites, and search engines.

For marketers, Web analytics can almost surely improve business results. For example, specific metrics can obtain the complete picture of a company's website's performance. This should help firms acquire, convert, and retain customers, develop strategies to deliver greater value, measure and improve customer satisfaction, identify drivers of customer pain and delight, and create win-back programs for lost customers. Additionally, these metrics can explore other important types of customer research such as market segments, best new product concepts, pricing, and best promotion practices.

CONCLUSION

One of the most appealing qualities of digital advertising and digital media is the opportunity for marketers to explore and evolve with along with the digital marketing capabilities they work with. Naturally, marketers want digital capabilities that truly work to deliver relevant messages to a defined market in the time and space desired by the customer. This chapter covered the breadth of digital media as it relates to marketing and advertising; beginning with a historical overview of the Internet followed by various types of emerging digital media, and various types of digital advertising.

This chapter explained how a website should be developed and managed in order to accomplish marketing and advertising objectives. It also of-

ferred a broad scope of tactics for driving traffic to a website and stimulating ecommerce and digital relationships. This chapter provided the foundation for introducing new digital elements into traditional marketing and advertising programs. Such innovations in digital media and advertising can improve marketing strategy formulation and execution. Each day brings advances in knowledge, and new applications of new technologies. Sometimes these changes are occurring so rapidly that it is challenging to understand them, let alone apply them effectively.

What we do know, however, is that using the Internet effectively can help companies better interact with their customers and potential customers, deliver information, deliver goods and services, and build ongoing relationships (relationship marketing). Academics and marketers need to continue to research how consumers behave in digital spaces, and their ever-changing use of digital media. Only then will they be able to effectively incorporate digital media and advertising into their marketing programs.

Finally, Web analytics are readily available and should be at the core of the development, implementation, and evaluation of all digital media advertising and marketing programs. (Helm and Kiley 2009) Experimentation with almost all forms of digital media and advertising will continue because companies need to determine how to effectively connect with consumers in the digital age. This will lead to many opportunities for future research on the productive use of various types of digital promotions. The key challenge for is not only to master digital media and advertising, but to stay abreast of technological advances and industry trends.

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