

New Communications Approaches in Marketing: Issues and Research Directions

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Abstract

In the early part of the 21st century, the media landscape has been dramatically affected by the introduction of new, largely digital media. This increase in the number of media has been driven largely by improvements in technology and how customers interact with the technology and each other. In this paper, I describe the kinds of new media that companies are using to engage customers and the challenges that these media present from the perspective of the marketing manager. In addition, using the management challenges as a framework, I describe the research opportunities posed by these media and where marketing academics can make the greatest contributions.

Introduction

The early part of the 21st century has witnessed an explosion in the number of media that marketers can employ to reach their customers. This began in the 1990s with the use of the Internet as an advertising medium. Web pages became the “new” medium with banner and other types of similar ads (e.g., buttons, rectangles, etc.) seeking customers to click on them and be sent to the advertiser’s web site. Internet advertising augmented the set of communications tools that marketers had used for 50-100 years: television, radio, print (magazines, newspapers), and outdoor.

These traditional media are not disappearing. It is estimated that nearly \$295 billion was spent on advertising in the U.S. in 2007 (<http://adage.com/images/random/datacenter/2008/spendtrends08.pdf>) with the vast majority of that on traditional media. Radio is experiencing a new boom with the advent of satellite and other digital formats. Outdoor ads are becoming more creative all the time with digital technology enhancing the potential interactivity with customers in urban areas. Finally, while newspapers and magazines have been the most negatively affected by new media, they are still important for business-to-business and retailers, among others.

However, it is clear that major marketers are shifting their budgets today into new media categories. For example, Procter & Gamble spent \$3.5 billion on “measured” advertising in 2006 which includes print, TV, and other “old” media. However, the company also spent \$1.4 billion on “unmeasured” media which includes events, contests,

and the new digital media (Tedeschi, 2007). The U.S. auto industry pulled \$1 billion out of the traditional “measured” media in 2006 and put much of it back into the Internet and other new media formats.

What is driving this movement towards new media? There are at least four factors commonly cited (not in any particular order):

1. The existence and improvements of new technologies at home and in the workplace. For example, the rapid penetration of digital video recorders (DVRs) that enable people to fast-forward through TV commercials means that advertisers need to seek other ways of reaching their target markets.
2. Marketers today are talking of creating “experiences” for their customers in an attempt to differentiate their products and services from competitors. It is difficult to do this with the traditional media that tend to be one-way communications from seller to buyer. As a result, marketers are looking for ways to interact more with their customers as well as to allow their customers to interact more with them.
3. While advertisers still talk about the popular 18-34 year old demographic, there are vast differences in the media habits and how information is obtained when an 18-year old is compared to someone who is 30. The general comment that is often made is that markets are becoming fragmented with the traditional demographic breakdowns become less and less useful.
4. Marketers are more interested in “behavioral targeting,” that is, focusing on developing personalized messages based on what people are doing on the Web

(tracking “clickstreams” or the paths that people take when surfing the Web) or where they are by their personal GPS “system,” the cellphone.

These changes have impacted marketers in that the increase in the number of “alternative” media and the increased competition in many markets has fragmented markets, shifted power in the transaction to buyers, and resulted in less TV viewing.

These changes in the marketplace are not simply U.S. phenomena. The same trends are occurring in other countries. For example, on a recent trip to India, the author found that people of undergraduate age are just as familiar with and use social networking and other similar media just as frequently as their counterparts in Western countries. The same holds true for China, Singapore, Korea, and Japan.

As a result, while there is still a considerable amount of experimentation and searching among these new ways of reaching customers, it is clear that many of them are here to stay and that we will witness the continued expansion of the list of ways that companies are attempting to reach their customers. At the same, users of these new media face an array of problems in implementing and measuring communications campaigns that integrate the “old” and “new” media.

The purpose of this paper is to provide an overview of some of the new media being employed by marketers and, based on feedback from discussion sessions held by the author, describe some of the major issues facing Chief Marketing Officers (CMOs) and other senior marketers in employing these media. Using those issues as a framework, I will focus in particular on measurement issues, and describe some of the academic research opportunities in this new and exciting area.

How Communications Have Changed

Until the mid-1990s, the traditional concept of the communications “mix” included

- Advertising (TV, print, radio, outdoor)
- Sales promotion
- Direct marketing
- Publicity/Public relations
- Personal selling.

The classic communications model shown in Figure 1a assumed that the marketer had control of the flow of communications from the company through the media to the consumers. In addition, the mantra of advertisers was Integrated Marketing Communications (IMC) where all of the communications adopted a similar positioning and “look and feel” and thus were mutually supportive in order to generate not only main effects on sales of each media but interaction effects as well. The typical decisions that had to be made were:

- The objective of the communications
- The target market
- The strategy (copy, media, timing)
- Budgeting
- How to evaluate whether the objectives were being met.

With the shift to what has been called a “hypermedia” environment (Hoffman and Novak, 1996), the nature of the communications model has changed. The central themes

today are *interactivity* and *digital*. As can be seen from Figure 1b, consumers are now interacting with the company, the media, and, importantly, each other through social networking and other new media. This has given rise to a large number of new media, some of which are under the control of the marketing manager but many of which are not. At the same time, most of these media are Internet- or digital technology-based. While the mantra of communications is still IMC and the same communications decisions have to be made, the large increase in the number of media alternatives has made the job of the marketing manager much more difficult not only because the brand is not fully under his/her control any more but that the problems of coordinating a message across the large number of media and making media choices have been exacerbated.¹

What Are the New Media?

Following the preceding discussion, there are two characteristics of new media: (1) interactivity, and (2) digital. Shankar and Hollinger (2007) have classified new media into three groups: intrusive where the consumer is “interrupted” (Godin, 1999) by advertising, non-intrusive where the consumer chooses to receive the communications, and user-generated where the consumer actually creates the communications. Although there will be disagreement about what is the composition of the set of “new” media and into which of the three categories they would fall, the following meet the two criteria:

Intrusive

Internet advertising

¹ See AN 08 for more on the implications of interactivity for marketing.

As was noted in the Introduction, the first “new” medium was the introduction of advertising on the Internet in the mid-1990s. Today, this would include a large number of Internet options (see Shankar and Hollinger 2007 for a more detailed overview):

- Buttons
- Banners
- Skyscrapers
- Rectangles
- Interstitials
- Pop-ups

These Internet advertising options are variations on the same theme: some piece of “real estate” on the web site (or while a website is loading) that, if clicked, takes the customer to the advertiser’s web site. While most attention is paid to clickthrough rates (CTRs), in fact, the ads themselves are like billboards and attract attention.

Product placement in Video Games (Advergaming)

While product placement is not really “new” as it goes back to the 1950s or even earlier by some accounts, it has seen a dramatic surge in that the integration of products and services into TV programming, movies, and, importantly, video games is extremely common today. An important goal is to show the product in normal usage and, therefore, have the customer envision how it would fit into his or her daily usage patterns. In TV programs, an additional benefit is that by placing the product into the content itself, it becomes invulnerable to being skipped if the program is being recorded by a DVR or VCR. In video games, the placements can be dynamic when the console is hooked up to the Internet, that is, a different product can be shown in the context of the game with

repeated plays. There is interactivity in some Web-enabled games as a click on a virtual billboard leads to a web site.

M-Commerce

Mobile or M-Commerce is still in its infancy in the U.S. but is widely used in many other countries such as the U.K., Japan, Korea, and China. Marketers can send a variety of message to consumers with cell phones who have agreed to receive such messages, termed “opt-in” customers. These messages range from simple text messages to actual video commercials. In addition, some experiments are being run to try to see if coupons can be sent digitally to cell phones where the user would simply show a cashier a bar code on the phone which is then scanned. The concept underlying M-Commerce is that customers can receive messages when and where they want them. This is often referred to as contextual marketing. Responses through SMS (short message services) make this form of communications interactive.

Non-intrusive

Internet Advertising

Some types of Internet advertising are non-intrusive in that the consumer has to activate the communications him or herself:

- Streaming audio/video
- Destination sites (e.g., Burger King’s www.subservientchicken.com)
- Sponsored search/paid links.

Obviously, the last group, paid links, has received a considerable amount of attention as it has spawned a hugely successful company, Google. eMarketer expects about \$11 billion

to be spent on search marketing in 2008 (eMarketer, 2008), by far the largest segment of online advertising.

Social networking sites

Of all the new media, social networking sites such as Facebook, Myspace, Second Life, and YouTube have generated perhaps the most publicity. In fact, the growth of these sites has led to the notion that we are now in the Web 2.0 era where user generated content and discussions can create powerful communities that facilitate the interactions of people with common interests.

Marketers have been cautious in using this new medium because of the risk that members of a community will become offended from an over-commercialization of the site. However, IBM, Unilever, and many other companies have set up sites on MySpace for fictitious characters from an advertising campaign and inviting select customers to become “friends” of the character. In some cases, companies have set up their social networking sites to facilitate the interaction of their customers. For example, KLM Airlines has established a “Club China” on its web site for frequent travelers to that country to exchange itineraries, travel tips, business contacts, etc. Companies have also used social networking sites to invite customers to create their own advertisements for the company. This so-called customer generated media (CGM) is becoming a popular way for a company to not only engage its customers but to also obtain some creative advertising at a low cost.

Podcasting

This is small new medium but growing in importance. Many MP3 player owners download content other than music. This includes newscasts, sports, short stories, and

other editorial content. Marketers can deliver audio advertisements embedded in the podcasts that reach a very narrow, targeted market.

“Buzz” or viral marketing

This is also referred to as Word-of-Mouth (WOM) marketing. For many product categories, customers rate friend, families, and professional colleagues as the main source of information about purchasing products and services. WOM marketing is different from the others in that it does not use the Internet or a traditional medium to deliver the message. The goal is to stimulate WOM about a brand from trusted personal sources rather than through an unknown part in an ad.

Buzz marketing typically uses a combination of the media noted above plus, where appropriate, sponsored events. Thus, a company might try to create buzz about its brand by setting up a “friend” on MySpace and then running a contest through the MySpace site. The company might also stimulate conversation on a relevant blog and run an event in a shopping mall or other venue and hire people in the target age group to distribute free goods or just talk about the product.

User-Generated

Blogs

Short for weblogs, blogs have become a popular advertising medium. A blog is where an individual establishes a web site, usually around a theme such as technology, offers his or her opinions about the theme, and invites others to comment about the opinions, thus creating a dialogue around the theme. In some cases, the blog is just a set of postings from the enthusiast community. For example, www.autoblog.com is a blog

for automobile enthusiasts. Marketers post banner and other ads on blogs that are targeted towards the user community.

Video sites

Consumers can now interact with brands through streaming video. For example, the phenomenon of YouTube has significantly changed the communications world. People not only submit videos of their lives and other similar content, they can also submit spoofs of TV ads or campaigns. In addition, companies often run contests today requesting consumer submission of TV commercials. An example of both of these is the “Campaign for Real Beauty” run by Unilever’s Dove soap bar. The campaign featured ads with “real” women rather than models. A large number of spoofs of the campaign were posted to YouTube and given significant publicity. In addition, the company ran a contest, Real Ads for Real Women, for Dove Cream Oil Body Wash, a new product, where the winning ad was shown on the Oscars telecast. The ads were posted to <http://dovecreamoil.com>.

Ratings/recommendations

Another form of user-generated content is postings of product ratings and recommendations to Web sites. Many popular e-commerce sites like Amazon and eBay rely on users to rate products and vendors that consumers use to evaluate prospective purchases.

Summary

Many companies today are using some or all of the above new media to develop targeted campaigns that reach specific segments and engage their customers to a much greater extent than traditional media have. For example, the luxury fragrance brand

Chanel has used a number of the media noted above for its Coco Mademoiselle perfume.

The company's new media plan contains the following elements:

- Ads on Web sites such as nytimes.com and nymag.com.
- Search-engine marketing on Google and Yahoo!
- A special Web site mademoiselle-forever.com where users can take a virtual tour of the Paris apartment of Coco Chanel (now re-named coco-mademoiselle.com).
- Communications with the writers of blogs such as beautyaddict.blogspot.com and blogdorfgoodman.blogspot.com.
- E-mail messages to bloggers and V.I.P. customers with passwords giving special access to a new commercial featuring the actress Keira Knightly cavorting throughout Paris.

What Are the Major Issues Facing Marketers?

The new media are clearly valuable additions to the set of media that marketers have used for many years. Their abilities to engage customers through interactivity and communicate with targeted segments deliver benefits that the traditional media cannot.

However, with this increased communication capabilities are a new set of problems that must be faced by CMOs and other senior marketing managers. The author ran three discussion groups with a total of about 50 from both groups at Marketing Science Institute conferences in April and September, 2007, and in May, 2008. The major issues facing these senior marketing executives can be put into the following groups.

Metrics and Measurement

There is considerable uncertainty about what metrics to use to gauge the effectiveness of the new media.² For example, what are the appropriate metrics to use with social networking sites? Site visits? That is one measure but does not indicate how engaged a customer becomes with a brand after visiting the site and communicating with others. Brand engagement? The Advertising Research Foundation conducted a survey of a number of research firms on the definition of engagement and there were as many different definitions of engagement as there were firms involved. Internet advertising has used CTRs for many years but there is more interest today looking at actual purchasing as the metric of banner and related advertising rather than simply being transported to advertiser's the Web site. It is clear that the traditional metrics used for TV (e.g., reach, frequency), radio, and print do not work in this new environment.

As might be expected, perhaps the key issue is how to measure the impact of spending in these media. While we have many years of experience with marketing mix modeling, we have relatively little experience measuring the impact of, say, money spent on social networking sites alongside the amount spent on the traditional media. More importantly, it is not clear that the way that the sales or profit effects of money spent on TV advertising would be the model for how the impact of new media should be evaluated. An advantage of the new media is that experimentation is relatively inexpensive and quick to evaluate. Thus, it is easy to test different Internet advertising approaches. However, a disadvantage is that the spending levels are low relative to the traditional media which may make standard statistical methods difficult to apply since the

² See Stewart and Pavlou (2007) for a more detailed exposition on measurement issues for new media.

signal from the new media may be hard to read. Because of the importance of this topic to both managers and academics, this area will be expanded upon below.

Planning and budgeting

Developing the media budget and plan has never been more difficult. Despite the vast improvements in technology in allocating money over media through the use of highly sophisticated computer programs, the state-of-the art is dependent upon traditional metrics like reach and frequency. As noted above, these metrics are questionable for the new media. How do you allocate money to advertising and/or creating a social networking site? Or a blog? Or on WOM stimulation?

Therefore, the following questions must be addressed:

- What should digital media objectives be?
- How do you set an integrative budget with traditional and new media?
- What is the point of diminishing marginal returns with these media?
- Should the new media be viewed as supplementary, that is, adding some frequency to reach goals, or complementary, delivering something different?
- How much money should be allocated to each medium?

A bigger picture issue relates to IMC. It is clear that as the number of communications methods increases, the ability of the marketer to ensure that the messaging is consistent across all the media decreases. Many senior managers today are worried that their communications will be fractionated among even more media.

Consumer Behavior/Brand Control

It would be difficult enough to coordinate a communications campaign across all the media if the marketer controlled all the messages. However, a related problem is that

the marketing manager does not have the ability to control the messaging the way s/he used to be able to. In TV, print, outdoor, and radio, the communications are one-way and controlled. With blogs, social networks, WOM marketing, etc., it is not possible to fully control what customers are saying about the brand. With the “old” media, the marketing manager controls the message and the media. TV advertising, for example, is classic one-way communications (see Figure 1a) with the manager controlling what is being said about the brand and, through media purchases, the quality and content of the medium. “New” media do not permit that level of control. Blogs and social networking sites are largely totally outside of the control of the marketing manager both in terms of the message being delivered about the brand and what is being said in online conversations.

The senior managers in the discussion groups felt that there is a big gap in their knowledge of how consumers react to traditional media versus the new media. The change in the locus of control requires new thinking on the part of the manager about how to (or if to) use one of the newer media and a sound understanding of how consumers are using the Web to collect information and how this impacts their decision-making processes.

Measurement Issues

The issue of measurement noted above is sufficiently important (it was consistently noted to be the most important issue in utilizing new media) to warrant detailed exploration of alternative research approaches that enable the marketing manager to better understand whether any of these new media are “working.” The approaches are

divided into those that use existing data either from the company or other sources (secondary data) and those that directly utilized data from respondents (primary data).

Secondary data approaches

The most common approach to analyzing secondary data is to estimate market response functions (see Shankar, 2008). The tools for estimating the response to spending on any media have been around for many years. The basic response function is the following:

$$\text{Market response} = f(\text{TV advertising, print advertising, social networking, Internet, ..., control variables}),$$

where market response is the criterion variable selected by the marketing manager (e.g., sales, market share, profits) and TV advertising and the other media variables are represented by the amount of money spent on the respective medium. Control variables such as price, promotion, distribution, and seasonality are added to ensure that there is no specification error. The function f can be linear or non-linear. The analyst may also want to add an equation representing the budget variables (or a total budget) as a dependent variable to reduce the problem of endogeneity. For example, if sales is the dependent variable, TV advertising may affect sales but sales (or expected sales) may impact TV advertising levels.

Given that the media are intended to interact with each other according to the philosophy of Integrated Marketing Communications (IMC), the model's variables should be supplemented with interaction effects, e.g., TV advertising x social networking. In other words, increases in social networking expenditures should make TV advertising more effective as the messages are mutually reinforcing. The importance of including

interaction effects or marketing “synergies” is described more fully by Naik and Raman (2003).

As noted above, the basic tools for estimating this kind of function (even with interactions) have been available for many years. Through an examination of the parameters estimated with historical or cross-sectional data (say, across sales territories or ADIs), the analyst can determine which media are contributing most to the criterion metric. In addition, if a non-linear model is used, optimization and policy experiments can be conducted.

It is not, of course, as easy to do this as it seems. In fact, even in the “old” days when only traditional media were being used by companies, problems in data quality and model estimation existed. For example, most analysts use monetary values for the media spending. However, it is clear that this does not control for quality of the communications. The amount spent on magazine advertising, for example, does not consider the quality of the print communications such as recall of a particular print ad campaign.

In the new era, it is even more difficult to use response modeling. An issue raised earlier in the paper is that there is a huge difference between the budget levels for, say, TV advertising and the amount spent on social networking sites. When all the variables are put into one equation, the signal from the latter may be particularly weak relative to the former. A second issue relates to merging data from disparate sources. This is particularly a problem when trying to develop a model at the household level to understand how the new media mix affects customer behavior. We have had single-source data for some time now---household purchasing from scanners with metered TV

behavior. However, collecting and merging data about Web site visits, blog interactions, print ads viewed, etc. with purchasing is a daunting task. Finally, while we have made progress on estimating the long-term brand effects of advertising, the new media model mixes TV and media where the campaign objectives are often more short-term in nature. For example, Internet campaigns are more like direct marketing efforts in that the expected response is measured in days or weeks rather than months or even years.

Some methods utilize existing information in “cyberspace” to better understand the impact of the new media. Perhaps the most prominent example of this approach is Nielsen’s BuzzMetrics. Nielsen analyzes consumer generated media by data-mining blogs, message boards, discussion groups, public e-mail groups, personal homepages, and other sources. The company uses computer software to organize and analyze the data to answer questions about the volume of comments about a brand, issues raised, sentiments (favorable, non-favorable), sources, and other measures. Like some of the other methods, the limitation of BuzzMetrics is that it is focused only on one class of media.

Primary research approaches

Experimental methods

Experimental methods are particularly promising given the ease in manipulating some parts of the media plan, particularly Internet advertising. The downside is that at least at the current time, the best-known experiments are limited to that form rather than the full set of new media.

Two major experimental approaches have been developed by Yahoo! and America Online (AOL) and are quite similar. Both approaches use Nielsen Homescan panel members matched with online advertisements on their networks. Thus, the

experiments are limited to CPG categories. Two groups of households are established that are exposed to test Internet ads (or what else is being tested) with one being the control group. The groups are matched on demographics and product usage as closely as possible.

Another approach is termed the Cross Media Optimization Study (XMOS) or Return on Marketing Objectives (ROMO). XMOS attempts to measure the optimal media mix to achieve the goals of the advertiser. A good review of the approach can be found in Cook (2006). The method uses online surveys to assess the impact of both traditional and online media. Telephone surveys may be used to supplement the online sample if necessary.

Subjects are recruited prior to the start of a campaign and surveyed to provide baseline measures of advertising objectives. The survey questions include both attitudinal and behavioral questions such as purchase intentions. Like with the Yahoo! and AOL study, the subjects are randomly assigned to test and control groups. However, with XMOS studies, the experimental manipulations are restricted to online media and do not include network TV or magazine advertising. These latter two media are measured using different methodologies. Thus, the advertiser can manipulate advertising on Internet and social networking sites, blogs, etc. Therefore, the advertiser can get experimental results from online media and incorporate the advertising and magazine studies to get the cross-media results. Unlike Yahoo! and AOL, the dependent measure, though, is not actual purchasing but self-reports from the surveys.

Experimental methods suffer from the data merging problem noted above in the econometric models section. It would be exciting if the Nielsen Homescan panel

members were also being measured for TV commercial exposure (single-source) using both (AOI/Yahoo! and XMOS) experimental methods. In addition, while XMOS has the potential to measure a large number of online media, the method has not been used to date beyond TV, magazines, and Internet advertising.

Qualitative approaches

One approach developed by industry to measure the impact of cross-media exposure by collecting primary data through qualitative methods is the Market Contact Audit (MCA).³ Good references on this approach are in Chattopadhyay and Laborie (2005) and Cook (2007). This procedure has a number of steps:

1. The first phase is based on focus group research. Researchers ask consumers what media contacts are used for purchasing a particular product category and which brands are considered.
2. The second phase follows up with a survey of 500 or more respondent's from the brand's target audience. The first is to measure the value of each media contact for the category. The second is to determine the quality of the media contacts. Each media contact is measured on three dimensions: the degree to which a contact effectively conveys information (rational), its ability to build an emotional bond (attractiveness), and its capacity to change attitudes and behavior (power). The three dimensions are then summarized by a single indicator called the contact clout factor. Each contact is then evaluated by whether a respondent associates each brand in the consideration set with the contact.

³ A similar approach is used by Simmons in their Multi-Media Engagement Study. Their sample size, however, is approximately 50,000.

3. An overall measure of brand experience is obtained by summing across all the media contacts the media clout factor weighted by the number of associations the brand has had with that contact. This is called the brand experience factor.

As with every method, MCA has both pros and cons. It has been validated in a number of ways. For example, a brand's experience factor divided by the sum of all category brands' experience factors (brand experience share) has been found to be highly correlated with market share. (Cook 2007). MCA also covers a wide set of media, as many as the customers use. Being customer-defined is consistent with a media schedule driven by actual customer usage of different communications channels. However, it does not produce measures directly related to actual customer or market behavior. Thus, while an advertiser can obtain qualitative information about which new media are being used by consumers of a product category and which are being used most heavily, normative, quantitative models to help with media planning cannot be constructed.

It should also be noted that it is often that case that methods are combined. For example, response functions can be estimated using data from experiments.

Implications for Research

The important research issues in this emerging media area are organized by topics of importance (see the Table). It is not possible to be fully comprehensive about all of the potential research topics in these areas. As a result, those noted are among the most prominent gaps in the literature.

Metrics and Measurement

Because of the relative abundance of secondary data, much of the extant work in this area has been on metrics and measurement. Marketing academics have recently become more interested in metrics (Lehmann and Reibstein 2007). While Internet metrics have been pretty clearly established (e.g., CTRs, shopping basket abandonment rates), it has been noted earlier in this paper that the metrics for most of the other the new media have yet to be clearly defined. How should interactions with MySpace be measured and evaluated? What are the criteria for a “good” site? What are appropriate goals for the media? We know what they are for advertising through traditional models such as the hierarchy-of-effects model or, more currently, the rush towards using engagement measures such as those provided by IAG.

Of particular interest is the evaluation of the different media types using a variety of criterion variables in market response models. This includes, of course, continued developmental efforts of marketing mix models that incorporate information from new media expenditures or other activity. However, research can be directed at particular media types. For example, we have little knowledge of the impact of different cell phone messaging approaches. It would be valuable to know how consumer response varies between text messages, short, and longer video. Some experimental results would be particularly valuable here.

A number of authors have developed models for analyzing “clickstream” data, the path that consumers navigate through a Web site due to exposure to information provided by Web sites (see also **AN 19**). Although a large amount of information is generated by

the paths that visitors take while “surfing” the Web, it is possible to develop models that attempt to link exposure to Web-based information to how customers navigate different sites.

For example, Sismeiro and Bucklin (2004) model consumer decision-making as a function of the information to which Web consumers are exposed. More directly related to the new media, Danaher et.al. (2006) and Danaher (2007) examine the role that Internet advertising plays in how long a visitor remains at a Web site and how many pages a visitor views across websites.

Some authors have examined the impact of Internet advertising directly on purchasing behavior. A good example is Manchanda et.al. (2006) who found that banner advertising significantly affected purchase probabilities for site visitors and that the elasticities were similar to those found in conventional advertising.

Of high importance is more research on search engine marketing. While there is a research stream on optimal keyword advertising (see, for example, Bucklin and Rutz, 2008), there has been less research on consumer usage behavior of search keywords. Yao and Mela (2008) develop a model of keyword pricing that incorporates both the firm and consumer side providing some empirical evidence of how consumers value search.

Clearly, the “holy grail” of new media measurement is to combine the broad media reach of an MCA approach with the market-based measures generated by econometric models and field experiments. A startup company called Integrated Media Measurement (IMM) is trying to do this with audio media, again, a partial though highly-innovative solution (Pontin 2007). The company recruits people up to the age of 54 to carry a special cell phone at all times for two years in exchange for the company paying

the phone bill. The phone captures 10 seconds of audio every 30 seconds. The digital files transferred to company's servers are compared with the media being "heard" using a technology called acoustic coupling. Thus, the company can measure communications heard on TV, radio, DVRs, video games, cell phones, DVDs, CDs, movies, concerts, and sporting events. Unfortunately, the company cannot measure ads that are simply viewed such as banner ads nor even audio communications through WOM since the source cannot be identified.

Planning and Budgeting

Current interest in planning and budgeting in the new media area focuses on the "three screen" problem, that is, how to coordinate media plans across TV, personal computers, and cell phones. Unfortunately, there is little research on this topic. There is a rich tradition of media planning models in the marketing literature (see, for example, Gensch 1973). However, there have been no attempts to extend these models into the "three screen" era except, of course, by media planning companies.

This could be accomplished by even richer optimization models than we have used in the past. The media models referred to above typically have some kind of market response model at their core. By using the type of response models described earlier in this paper, the analyst can develop policy simulations assuming different budget levels of the alternative media. However, as Shankar (2008) notes, there is a "dearth" of media allocation models focusing on the new media.

A key part of the planning process is how to integrate the theme of the communications across the media, i.e., the IMC problem. Peltier, Schibrowsky, and Schultz (2003) develop a conceptualization of the problem and argue that a complete

consumer database of “touchpoints” is a first-step towards creating what they refer to as an “integrated” IMC program. Coyle and Gould (2007) have also developed a conceptualization of an integrated Internet media model arguing that traditional media metrics such as reach and frequency should be augmented by key characteristics of the media such as richness and stickiness.

Consumer Behavior and Loss of Brand Control

As noted earlier in the paper, one of the main issues that frustrate marketing managers today is the lack of control of the brand due to consumers taking control of their information flow. While understanding consumer behavior in general is still an ongoing problem, the behavioral impact of the new media is even less well-understood. Research has been conducted on consumer behavior on the Internet providing some implications for how they collect and use information (see also **AN 13** for more on online consumer behavior).

For example, take the area of social networking (see **AN 05**). Suppose that a company establishes a discussion group around a product category and invites a select group of consumers in their target segment to meet each other (electronically) and discuss issues related to the product and, of course, the brand of interest. It would be exciting to see how brand equity increases (or, perhaps, decreases) over time due to the discussions that are logged.

Since social networking sites have become so popular, it is not surprising that a number of authors have started to analyze this new medium. Dwyer (2007) describes and tests a new metric for identifying the information being communicated in a social network site that attracted the most customer attention as well as the members of the

community who provided that information. Brown, Broderick, and Lee (2007) show that information flows in an online community are different in nature from those in offline word-of-mouth flows due to the moderating aspect of the Web site hosting the discussions. These two papers are illustrative of the kind of work being done in this area.

Some authors have started to look at the impact on buyer behavior of using avatars or virtual representations of individuals. Holzwarth, Janiszewski, and Neumann (2006) found that the use of an avatar (a virtual character) on a retail Web site to deliver information about products lead to higher levels of persuasiveness of that channel. Wang et.al. (2007) also study the impact of avatars on how consumers interact socially with Web sites. These studies are relevant to the use of virtual sites like Second Life as storefronts and sources of marketing information to potential customers.

There is also a growing literature in the area of how consumers use the content generated by other consumers such as product reviews and recommendations. Using data from Amazon.com and Barnesandnoble.com, Chevalier and Mayzlin (2006) show that improvements in a book's reviews increases sales. Weiss, Lurie, and MacInnis (2008) study the criteria by which a Web user would evaluate such content. Among other results, they show that information users on the Web rely heavily on the past reviews and other content provided by particular information suppliers in judging the quality of the information.

This area of research (user-generated media) has considerable potential for future research. In fact, it is the focus of a recent MSI-Wharton research initiative. Possible research topics include:

- The impact of user-generated reviews and opinions on brand equity

- New approaches to categorizing user-generated content
- Determining the extent to which the social “distance” between participants affects the likelihood of accessing each other’s content

We also need more research on information search and utilization. There have been many studies in marketing on information search describing how many and which sources are used for, say, durable good decision-making. Following the MCA method described earlier, we need a better understanding of the situations, product categories, and customer types that use the different new media.

Conclusion

The early part of the 21st century has witnessed an explosion in new media utilized by marketing managers to reach their customers. Key characteristics of many these new media are that they are (1) digital, and (2) interactive. These characteristics plus the sheer number of alternative ways of communicating with customers has created both opportunities and problems for managers and academics. In this paper, I have outlined a number of issues that need to be resolved by both managers and academics for the new media to be fully integrated into marketing practice.

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TABLE

Amount of Research Conducted

Problem Area	Examples of What Needs to be Done
Metrics and measurement	Basic metrics for newer media Build in new media in response functions Impact of new media on purchasing behavior Consumer use of paid search New data collection approaches to measure consumer use
Planning and budgeting	New approaches to IMC strategy New optimization models for media planning New budgeting models
Consumer behavior/brand control	Impact of social networking on brand equity How consumers react to user generated media The impact of virtual worlds on behavior Information search/utilization on the Web

Figure 1a

Traditional Mass Communications Model

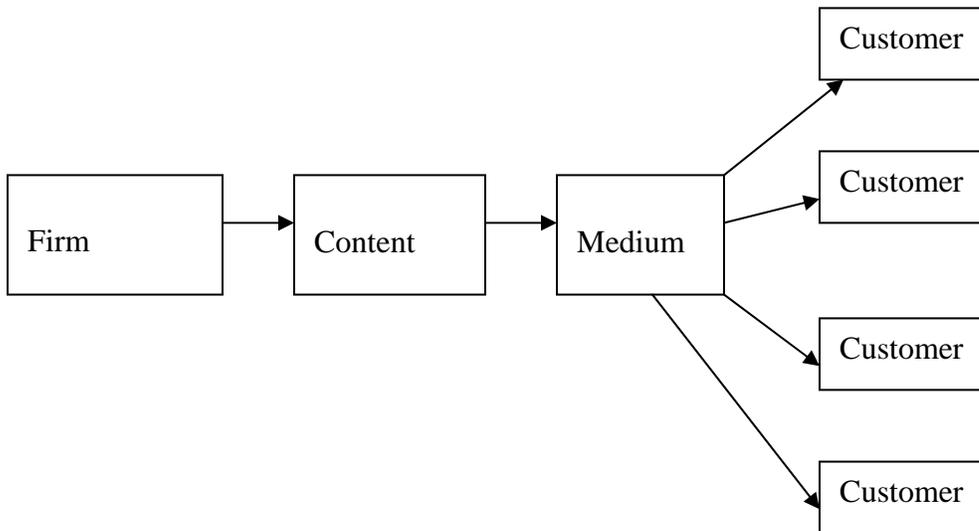
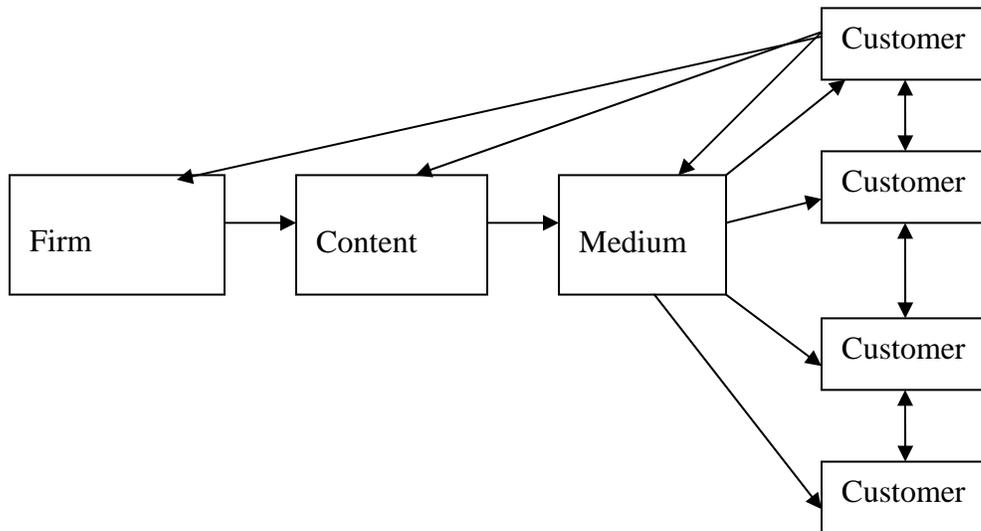


Figure 1b

Modified Mass Communications Model



Source: Donna L. Hoffman and Thomas P. Novak (1996), "Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations," *Journal of Marketing*, 60 (July), 50-68.

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