

Choosing and Evaluating Digital and Online Media: A Conceptual/Instructional Model

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Abstract

As expenditures in online advertising and public relations continue to increase, students should be prepared for the opportunities and challenges presented by an increasingly interactive Web 2.0 world. Yet a review of both the pedagogical and research literatures revealed no established framework around which educators or students can readily comprehend the many existing and emerging uses of digital media and the increasingly varied and sophisticated means for evaluating their effectiveness. This article addresses this gap in the literature with a conceptual and instructional model of online and digital media selection and evaluation. The article concludes with recommendations for future conceptual work on the topic of digital media and the assessment of their effectiveness.

Advancements in computing and networking technologies have greatly expanded the media options available to advertising and PR planners. Many companies are decreasing their traditional media budgets and leveraging e-mail, search engines, smartphone apps, advergames, social networks and other digital media for advertising, PR and other strategic communication campaigns. PepsiCo, for instance, not only dropped the 2010 Super Bowl in favor of a social media campaign (the “Pepsi Refresh Project”), but simultaneously announced the company would re-allocate a third of its Pepsi advertising budget to social media (Woodard, 2009).

Advertisers, in particular, have been seeking to exploit digital media since the early 1990s. Although many early efforts garnered limited success, the use of digital and online media continues to grow rapidly. In the U.S., for instance, online advertising expenditures exceeded \$20 billion in 2009 (Fulgoni & Morn, 2009). Worth about 14.9 billion euros in 2009, Internet advertising represents nearly 20% of total advertising expenditures in Europe, with about one-third devoted to display and the other two-thirds to search and classified/directory advertising (Interactive Advertising Bureau Europe, 2010).

Despite their appeal, however, there is no existing framework to help practitioners, educators or students readily conceptualize the

many strategic uses and evaluation methods available for a constantly increasing arsenal of digital media and tools. Moreover, the options and metrics are numerous, somewhat idiosyncratic and rapidly evolving (Russell, 2009). Thus, understanding digital media and the promotional and communication tools they enable pose considerable challenges. As Kaplan and Haeinlein (2010, p. 65) recently observed regarding social media alone, “There are dozens—if not hundreds—of Social Media applications, and new ones are appearing on the horizon every day.” In regards to education, Griffin, Johnson and Jones (2009, p. 11) similarly note, “Most of them [students] who study marketing or advertising are excited about using digital strategies but are often overwhelmed by all the possibilities they present.”

Advertising educators, of course, have not completely ignored the emergence of digital media. Yet more than a few have mentioned that while practitioners are increasingly adopting new media, the academy frequently struggles to keep up (Gould, 2004; Johnson & Jones, 2010). As Griffin et al. (2009, p. 6) recently observed, although educators feel an obligation to prepare students for the professional workplace they will enter, “Digital and direct marketing are not well represented in curricula.”

Contributions to the advertising pedagogical literature, in general, have focused on how digi-

tal media impact specific courses, the creative process, or how to incorporate digital media into the classroom. Among the works primarily emphasizing instruction and curricula include Beard and Tarpenning's (2001) early attempt to incorporate digital video into creative courses, Martin's (2002) examination of the media planning course, Gould's (2004) proposal of an online advertising writing course, Johnson and Jones's (2010) article on the creative process as executed in a variety of digital media and Robbs' (2010) study of creative executives. Works mainly focusing on the use of online and digital media to enhance advertising and PR classroom instruction include the contributions of Everett, Siegel and Marchant (2000), Frisby (2000), Grau (2007), Hachtmann (2006), Duke (2009), Wood, Wetsch, Solomon and Hudson (2009), Caravella, Ekachai, Jaeger and Zahay (2009); and Eckman (2010).

In summary, although a review of the pedagogical literature suggests considerable attention has been focused on digital media in advertising courses and curricula, there is little discussion of how to strategically and tactically choose online and digital media and, more importantly, how to track the extent to which they effectively contribute to the achievement of marketing communications objectives. Ironically, the major advantage of digital media, touted from their earliest appearance, has been that they offer unprecedented opportunities for the systematic tracking of effectiveness. Therefore, to address this gap in the literature, this conceptual article (Dorn, 1985) reviews and summarizes the most recent advertising trade, research and pedagogical literatures on the topics of online and digital media. The article's purpose is to develop and present a conceptual/instructional model that can be used as a guide through the process of selecting digital media and communication tools given various promotional and communication objectives and matching those choices with many of the measures and metrics available for tracking their effectiveness.

Background and Model Development

A review of five online marketing communications texts revealed thorough discussions of the history of digital and media, their strategic and tactical uses and, in some cases, measurement issues (Grossnickle, 2001; Schaeffler, 2008; Tuten, 2008; Scott, 2007; Spurgeon, 2007). Other sources, such as *The Groundswell* (Li & Bernoff, 2008), offer helpful strategic recommendations or planning processes for how corporations and other organizations might both monitor and interact with consumers and pub-

lics via blogs, social media, wikis and forums.

Reviews of these texts and the recent advertising trade and research literatures, however, failed to reveal a conceptual model that could be used to communicate an overall understanding of the many options available, their most important evaluation measures and metrics and the relationships among them. The model presented here addresses these topics with its inclusion of three parts: (a) Online Marketing Communications (OMC) disciplines, (b) digital and online media and communication tools and (c) corresponding measures and metrics for evaluation.

OMC Disciplines

Jensen and Jepsen (2008) argue that OMC should be considered conceptually distinct from the previously recognized Integrated Marketing Communications (IMC) disciplines: advertising, PR and publicity, direct marketing, sales promotion and personal selling. They propose that the traditional media are useful for mainly one type of communication, "transmission." Most online media, however, also facilitate two-way, one-to-one, one-to-many and many-to-many types of communication, which Jensen and Jepsen refer to as "consultation," "registration" and, most importantly, "conversation." These types are the foundation for a fundamental shift in perspective between traditional media advertising and communications practice to online practice and its decreasing shifting emphasis from what organizations do to consumers to an increasing emphasis on what consumers do in response (Pavlou & Stewart, 2001).

As Jensen and Jepsen (2008) further note, "the number of OMC tools is so large and different in aim and scope ... it is too simple to just treat OMC as one discipline..." (p. 33). Thus, they propose a typology of four OMC disciplines. One of them, Online PR/Publicity, appears to refer mainly to Corporate Public Relations (CPR) and was, therefore, not a marketing communications discipline at all. Figure 1's model addresses this issue by broadening the CPR/Publicity discipline to include Marketing Public Relations (MPR). With this inclusion, there no longer remains a meaningful distinction between Jensen and Jepsen's Online PR/Publicity discipline and their fourth discipline, Online Relationship Communication. Thus, the model shown in Figure 1 begins with three OMC disciplines: Online Sales Promotion/Direct Response, Online Advertising and Online CPR/MPR/Publicity.

For the most part, the three OMC disciplines are used to achieve the same marketing and communications objectives as their offline

counterparts. Therefore, they are arrayed vertically along a continuum consisting of Online Sales Promotion/Direct Response strategies primarily intended to achieve behavioral objectives and responses (e.g., product purchase, trial or similar behavior), to Online Advertising and Online CPR/MPR/Publicity strategies emphasizing cognitive and attitudinal objectives and responses (e.g., awareness, brand liking) and relationship management, conceptualized in Figure 1 as the “Branding Paradigm.”

Cross-Disciplinary and Discipline-Specific Online Media and Tools

Jensen and Jepsen (2008) originally matched their four OMC disciplines with 15 online media and tools. It is important to note that Jensen and Jepsen define online communication as “communications where the user, via a computer, is connected to and served by a computer network” (p. 21). Their approach accommodates emergent technologies, such as mobile, with the argument that any device, when it’s used to access the Internet (e.g., an iPhone), should be considered a computer. The Pew Research Center, in fact, recently estimated that by 2020 more people will access the Internet via a mobile device than with a computer (as cited in Kaplan & Haenlein, 2010).

Although they acknowledge that some online media can be used strategically to achieve objectives in more than one OMC discipline, Jensen and Jepsen (2008) assigned each tool solely to the discipline for which it seemed “most appropriate” (p. 25). The model in Figure 1 revises Jensen and Jepsen’s original categorization scheme. As the model shows, e-mail, Web sites and microsites, social media and, increasingly, games are routinely used today to achieve the communication-, branding- and relationship-oriented objectives of the Online Advertising and Online CPR/MPR/Publicity disciplines. Online Sales Promotions/Direct Response objectives are most often achieved with e-mail, Web sites and microsites and social media.

Marketers use e-mail to solicit sales directly, deliver coupons, confirm orders and inform consumers about sales in their bricks-and-mortar shops. Not-for-profits likewise use e-mail to solicit contributions and grow their memberships. Web sites, of course, have been used to achieve all types of marketing and communications objectives ever since the ubiquitous “visit us on the Web” first began appearing in the mid-1990s. Microsites are a single Web page or site functioning as a supplement to a company’s main site.

The once humble videogame has also

evolved into a truly cross-disciplinary digital medium offering strategic communication, branding and relationship-building opportunities. Games can serve as an advertising medium with ads and brands embedded in and around a game. Companies can also sponsor games, tournaments or even develop their own advergames. Although Kalliny and Gentry (2010) argue that one of the main goals of advergameing is to build brand awareness, they also note that the ultimate objective is more often to develop relationships. The U.S. Army’s advergame “America’s Army,” for example, may be its most effective recruiting tool to date, with more than seven million registered users and an average cost of 10 cents per hour of engagement versus \$5 to \$10 for a TV commercial (Verklin & Kanner, 2007).

Kaplan and Haenlein (2010) define social media as an umbrella term that includes blogs, content communities (e.g., YouTube, Flickr), social networking sites (e.g., FaceBook, MySpace), virtual game worlds (e.g., World of Warcraft) and virtual social worlds (e.g., SecondLife). Forrester Research recently predicted that social-media promotional expenditures will grow on average 34% annually from 2009 to 2014 — faster than any other online medium (as cited in Patel, 2010). Others predict 80% of U.S. businesses with at least 100 employees will use social media for marketing in 2011, up from 73% in 2010 (“How many marketers,” 2010). Companies can use social media to deliver “engagement ads” that direct users to Web sites, publish product and brand profiles and launch contests, among many other tactics.

Recognition of the significant potential of social media has also grown among PR educators and professionals (Duke, 2009; Owyang & Toll, 2007). Trammell (2006) notes that social media can be used to both deliver messages to target publics and build and maintain relationships. For example, Ford Motor Co. brought together teams from corporate and marketing communications to successfully utilize social media to distinguish itself from GM and Chrysler, both of which accepted federal bailouts in 2009 (Patel, 2010).

Online sales promotion/direct response media and tools. As shown in Figure 1, affiliate programs, online coupons, contests and context-based services are mainly employed to achieve objectives of generating sales directly or encouraging other behaviors. Affiliate programs, a decade-old tactic, involve in-text hyperlinks that link audiences to a company’s Web site. Online coupons are an electronic version of their offline counterparts and can

be delivered via e-mail, third-party vendor (e.g., CrazyCoupon.com) or a Web site (e.g., pizzahut.com). Contests, such as the recent Regus “Show Us Your Office” contest (www.showusyouroffice.com), have also successfully migrated to the Internet.

Context-based promotional services take advantage of content and time contexts or geographic locations to deliver promotions or messages customized for users. Perhaps the most widely known and used contextual service is Google’s AdSense. The program’s script reads the content of a Web site and then displays relevant ads administered by Google based on that context. Foursquare, which started out as a location-sharing social media application and service, recently began offering promotional partnerships. In November 2010, for example, the *San Diego Union Tribune (U-T)* ran a promotion whereby anyone using Foursquare to “check in” at *U-T*’s Mission Valley offices or selected kiosks received a free newspaper (Hopwood, 2010).

Online advertising media and tools.

Online advertising, like its offline counterpart, is used to achieve communication objectives typically ascribed to the advertising “hierarchy of effects” models (e.g., Lavidge & Steiner, 1961) — attention, awareness, comprehension and attitude change. These digital and online media and tools include display ads (both embedded and pop-ups), search-engine optimization (organic and paid), and viral and mobile advertising.

Online CPR/MPR/Publicity media and tools. Online media relations, online events and online sponsorships are the primary strategic tools available for achieving corporate and marketing PR and publicity objectives. Online media relations refers to the strategic practice of maximizing positive coverage of an organization and its products, services or mission by communicating with the creators of Web sites, social media, Weblogs, link exchanges and chat rooms (Alfonso & Valbuena, 2006). Online events help build corporate image and can include new product launches, fashion shows, presentation of financial statements and news conferences (Jensen & Jepsen, 2008). Online sponsorships are an extension of the traditional sponsorship tool. Companies and not-for-profits can sponsor online events, Web sites or parts of Web sites.

Evaluation Measures and Metrics

Based on a review of methods used to assess the effectiveness of digital and online media from 1995 to 2005, Hollis and Brown (2005) concluded that most reflected either a “direct-response paradigm” or a “brand-building

paradigm.” The direct-response paradigm follows a mainly behavioral-based approach, intended to measure the achievement of promotional objectives by capturing users’ online behaviors with counts and ratios such as click through rates and the resultant direct-response behavior (registration, sales, etc.). As Figure 1’s model shows, such measures are predominantly, but not solely, consistent with Online Sales Promotion/Direct Response objectives and media.

The brand-building paradigm, on the other hand, aims to capture the behaviors related to media exposure and engagement, but also the achievement of the cognitive and attitudinal objectives of online advertising and online CPR/MPR/publicity media and tools. The model in Figure 1 reflects the view that the two paradigms should be combined in some instances, with measures and metrics ranging from those that are predominantly behavior-based (e.g., Clicks, Conversions) to a mixed régime (e.g., Impressions, Network Size, Engagements) to a predominantly relationship and brand-building approach (Buzz Tracking and Online Surveys). As the model’s arrows from the various measures and metrics on the far right show, the effectiveness of campaigns and the media and tools they strategically employ should be evaluated based on the disciplinary objectives they were intended to achieve.

Evaluating e-mail, Web sites, games and social media. The evaluation of the four cross-disciplinary online media encompasses the full range of methods and metrics available and includes both behavioral and branding paradigms. Among the core metrics for evaluating e-mail effectiveness are (a) delivery rates, (b) open rates, (c) click through rates, (d) unsubscribe rates and (e) conversion rates (the number of message recipients who click through and then buy the product or otherwise perform the targeted behavior) (Bruce Clay, Inc., 2010).

The evaluation of Web site and microsite effectiveness falls under the umbrella term of “Web Analytics.” Although there are many Web analytic metrics that capture what users do both before and after they arrive at a Web site, they fall roughly into three categories: (a) Web impressions (e.g., hits, page views, unique visitors), (b) clicks and (c) conversions (the number of visitors who convert into customers, subscribers, contributors, etc.) (Page, 2008). Once users are on a site, Web analytics are used to evaluate its effectiveness by comparing user behaviors with the sponsor’s desired key performance indicators, or KPIs (“Web

analytics,” 2010).

Recognizing the problems caused by the diverse methods and metrics in use across various gaming platforms, the Interactive Advertising Bureau in mid-2009 introduced a set of In-Game Advertising Measurement Guidelines (Anonymous, 2009). As with most of the other digital media, a standard metric is Ad Impressions, which the IAB (2009) defines as an “advertising exposure occurrence” that meets minimum thresholds of time and quality. These can be translated into reach (the number of people exposed to a message) and frequency (the average number of exposures) estimates, identical to their use in traditional media. Advergaming can be tracked based on the number of players, clicks, amount of time spent playing and impressions as well.

The majority of social media communicators utilize three categories of metrics: (a) visitors and sources of traffic, (b) network size (e.g., followers, fans, members) and (c) quantity of commentary about brands or products (e.g., counts of both positive and negative mentions of the company and/or its products and brands in social media) (Dash, 2010; Murdough, 2010). The following five metrics, recommended specifically for Facebook, also apply to most other social media, with minor changes: (a) tab views, (b) engagements (actions performed on a Facebook page), (c) clicks, (d) submits (information shared by fans) and (e) news feed impressions (how many times posts about a brand are displayed in fans’ News Feeds) (“The five most important metrics,” 2010).

As Tuten (2008) points out, “Our tendency is to count—count impressions, visitors, friends, posts, players. ... However, counting does not capture the essence of the interaction consumers had with the brand, the degree of engagement felt during and after the interaction, or the effects of the interaction, exposure to brand messages, and brand engagement on measures like brand likability, brand image, brand awareness, brand loyalty, brand affiliation, congruency, and purchase intent” (p. 160). Such outcomes reflect the attitudinal-, relationship- and branding-oriented objectives of the online advertising and online CPR/MPR/Publicity disciplines.

The social media monitoring method called “buzz tracking” represents a combination of the branding and behavioral measurement paradigms in the sense that it captures both consumers’ behaviors (e.g., number of blog mentions and other user-generated content) and cognitive and attitudinal responses (e.g., qualitative content of messages posted in online forums). PR firms such as Ketchum, Burson-

Marsteller, Edelman and others offer in-house services for monitoring clients’ images and reputations online (Duke, 2009). One commercial service, Nielsen’s BuzzMetrics, mines data from 130 million blogs, 8,000 message boards, Twitter and other social networking sites (Angwin & Stecklow, 2010).

However, as the Advertising Research Foundation proposed in a recent book titled *Foundations of Listening*, “tuning in to the millions of people freely sharing their experience with brands in ways that are relatively easy to track isn’t anywhere near ready to replace the old system of ‘asking,’ i.e. survey research...” (as cited in Neff, 2010). There are at least two reasons why primary data collection via online surveys will continue to be an important method for tracking online advertising and online CPR/MPR/Publicity campaigns. First, the passive tracking of online word-of-mouth provides few of the standard descriptive and classification measures so important for promotional and communications planning, such as demographic, psychographic and product usage variables. Second, a recent study revealed there is often little correlation between online buzz and offline buzz, “which generally requires some form of survey research to track” (Keller, as cited in Neff, 2010). The main problem, as Keller also points out, is that offline discussion typically makes up 90% of a brand’s word-of-mouth.

Evaluating discipline-specific media and tools. As demonstrated in Figure 1, the effectiveness of online sales promotion and direct response media and tools, and the extent to which they achieve typically behavioral objectives are assessed with the simplest analytic metrics: counts. For affiliate programs, coupons, contests and context-based services, sponsors can track clicks, coupons redeemed, entries or conversions.

Display, search-engine, viral and mobile advertising can all be assessed using some of the same measures as the traditional media and in-game ads: impressions can be counted and converted into reach and frequency. Some Web analytics metrics also apply to online display and search advertising; that is, impressions, clicks and conversions. Since viral advertising is based on the idea that individuals will spread links to online ads, in addition to impressions and clicks, its effectiveness is also often tracked using pass-along rates (Patricia, 2010).

Along with gauging audience members’ behavioral responses to online advertising, buzz tracking and online surveys are also used to measure whether objectives of attitude change have been achieved. Among the available

custom measurement services based on survey data collection is Millward Brown's AdIndex (Millward Brown, 2010), which measures consumers' responses to online display ads and provides comparisons with industry norms.

As with traditional media relations, the effectiveness of online media relations and whether public relations objectives have been achieved can be tracked with the standard metrics included in a simple Media Monitoring System (MMS), which counts the number of stories generated, the volume of coverage (e.g., message threads and lines of text), where they appeared and analyses of their manifest content and qualitative tone (Watson & Noble, 2007). Additional measures and metrics can be included, depending on the objectives of the campaign. Outcomes can also be tracked by calculating ad equivalency values (or AEVs) that equate publicity in news media with paid advertising equivalents (Tuten, 2008).

In addition, as one source notes, "The most common PR metric today is Impressions" (Metricsman, 2010). Watson and Noble (2007) similarly emphasize the importance of reach and frequency estimates against target publics. Thus, most of the other online media, online tools, online events and online sponsorships can be assessed by counting impressions, as well as click throughs from sponsored sites. Nevertheless, counts alone cannot adequately assess if online CPR, MPR and publicity campaigns have engaged target publics, created awareness of brand or corporate images, influenced attitudes or achieved other objectives. Consequently, and as shown in Figure 1's model, the effectiveness of online PR campaigns should also be measured with buzz tracking and online surveys.

Return on Investment (ROI)

Ultimately, the managers of any organization are going to ask to what extent investments in online media and tools contribute to the bottom line, whether it's commercial sales and profits or non-commercial increases in membership, volunteers (e.g., U.S. Army) or financial contributions. The most common metric for measuring whether such objectives have been achieved is return on investment, or ROI. Applied to promotional and communication activities, ROI captures how effectively and efficiently an organization invests financial resources to produce sales or other bottom line outcomes (Tuten, 2008).

As the ROI bracket in Figure 1's model indicates, ROI applies to all online media and tools. However, just as is true for the traditional media, it can be more readily used

to evaluate the effectiveness of Online Sales Promotion/Direct Response strategies and tactics, compared to Online Advertising and Online CPR/MPR/Publicity. Regardless of the online medium or tool, ROI is calculated in approximately the same way. Both the cost of the investment and the benefit it produces are monetized, and the gain from the benefit minus the cost of the investment is divided by that cost (as shown in the formula below).

$$\text{ROI} = \frac{\text{Gain from Investment} - \text{Cost of Investment}}{\text{Cost of Investment}}$$

The major difference among the disciplines is the relative ease by which the benefit (e.g., sales) can be measured for media and tools with behavioral objectives.

There are many approaches to measuring the ROI of campaigns with attitudinal-, brand- and relationship-oriented objectives, some requiring complex analytical methods, somewhat subjective estimates of costs and benefits, or the use of proprietary marketing-mix models (Neff, 2009). However, the simplest and most widely applicable approach, since many digital media and tools share the metric of impressions, is the return on impressions model (Tuten, 2008). This approach requires an estimate of the percentage of people reached (based on impressions) who purchased the product as a means for estimating the sales value of the impressions. For example, the sales ROI for impressions achieved by an online ad, Facebook page or achievement would be the estimated sales (e.g., \$600,000) minus the cost (e.g., \$100,000), divided by the cost (i.e., an ROI of 500%).

Summary, Limitations and Recommendations for Future Research

Advertising and PR planners today have a growing and often bewildering array of digital media and communication tools available for strategic use in their campaigns. Client organizations have shown their determination to exploit these media by re-allocating budgets from traditional media. They have also shown they expect their agencies to lead, or at least effectively execute, their digital campaigns. Although a review of the pedagogical literature suggests educators have addressed a number of important topics and issues, there clearly remains an urgent need to continue efforts to include online and digital media in advertising and PR curricula.

Although this article and its model hopefully bring some helpful conceptual order to the new

media landscape, they are not without their limitations. While offering an overview and snapshot of the current relationships among OMC disciplines, digital media and tools and evaluation measures and metrics, it was not possible to offer very many examples or reveal much specificity about these options or metrics. Moreover, experienced online media practitioners can likely identify dozens of additional metrics and proprietary research services available for each of the media and tools (e.g., Murchough, 2010).

It was also not possible to go into much detail about how the many types of data are collected, the methods used to produce valid and reliable conclusions from them or the insights they support. Future efforts on this topic could build on the present model by starting with the various measures and metrics and then matching each with sources of data, methods of analysis and the managerial implications of the findings.

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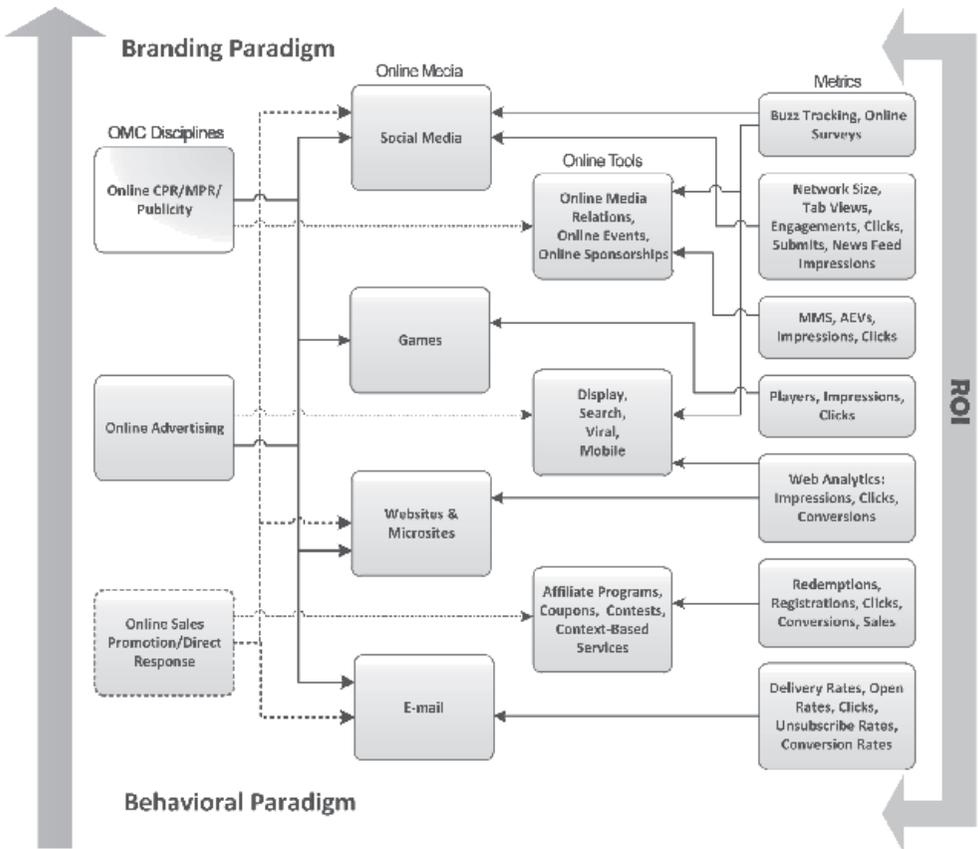


Figure 1. A Conceptual/Instructional Model of Digital and Online Media Selection and Evaluation

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