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Websites in brand communication: interactivity and cross-media effects

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Publication date
2010

[Link to publication](#)

Citation for published version (APA):

Voorveld, H. A. M. (2010). *Websites in brand communication: interactivity and cross-media effects*.

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Introduction, Summary, and Conclusion

Introduction

Global internet penetration grew 380% between 2000 and 2009 (Internet World Stats, 2009). Currently, in the United States 74% of the population uses the internet, while in the Netherlands the internet is used by 86% of the population (Internet World Stats, 2009), for an average of 7 hours a week (STIR, 2009). Furthermore, in 2008 the internet was the only medium with an increase in consumption time compared to 2007, while time spent on TV, radio, and magazines all decreased (STIR, 2009). Advertisers and marketers want to capitalize on this increasing and intensive internet use, by integrating the medium into their marketing communication efforts. As a result, online advertising expenditures have risen tremendously during the past decade (IAB, 2009), and currently nearly all brands are active on the internet.

Consumers are confronted with brands in a variety of ways in the online environment. Brands are present when searching for information using search engines, when playing online games, when watching favourite television shows online, and when staying in touch with friends through social network sites. Brands also send us messages directly, for example via e-mail newsletters or electronic magazines. We also actively search for information on brands and get engaged with brands, for example by reading and writing online consumer reviews or visiting the websites of brands.

This dissertation focuses on the websites of brands, not only because of their popularity but also because of their potential to persuade (CRM Metrix, 2009; Liu & Shrum, 2009). This persuasive potential is determined by the interactive possibilities of the websites, a typically long and voluntary exposure (Liu & Shrum, 2009), a high level of trust in the websites of brands (Nielsen, 2009), and the opportunity to pass through the entire sales cycle. Due to their potential, websites have become an important tool for marketers and advertisers. They frequently use websites as a supplement to advertising in traditional mass media (Greenspan, 2004; Song & Zinkhan, 2008). Given the popularity of the websites of brands, both for consumers and advertisers, it is important to know how consumers respond to these websites in isolation and in conjunction with marketing communication campaigns. Two key elements of websites are investigated in this dissertation; the next section will elaborate on these.

Problem Statement

This dissertation addresses two elements that are critical for expanding our understanding of websites. The first element represents the key characteristic of websites: interactivity. The second element is related to the role of websites in marketing communication campaigns: its contribution to cross-media effects. This dissertation starts with a literature review that gives a state-of-the-art overview of factors influencing consumer response to the websites of brands in chapter 2.

Interactivity

In this dissertation, interactivity is defined as: “the degree to which two or more communicating parties can act on each other, on the communication medium, and on the messages and the degree to which such influences are synchronized” (Liu & Shrum, 2002, p. 54). The three dimensions of interactivity are: two-way communication, active control, and synchronicity. The focus on interactivity is based on two grounds. First, interactivity is often seen as the defining difference between traditional and new media (Chung & Zhao, 2004), and thus between websites and advertising in traditional media (like TV commercials). Second, interactivity is widely acknowledged as a vital component of successful online advertising. It is almost generally accepted that interactivity has a positive influence on persuasive processes and outcomes (Liu & Shrum, 2002; Macias, 2003; Sicilia, Ruiz, & Munuera, 2005). Thus, studying interactivity of websites in brand communication will expand our understanding of a crucial, decisive factor in effective online brand communication.

Whereas research on the consequences of interactivity is abundant, and hence the effects of interactivity are generally known, research on the determinants of interactivity is scarce. Until now, there is still no comprehensive knowledge about what website features comprise website interactivity and we still do not know what makes a website perceived as interactive by its visitors. This dissertation aims to fill these gaps in the literature. To do so, this dissertation builds on two theoretical approaches that are central in the interactivity literature: actual interactivity and perceived interactivity. Actual interactivity is objectively assessed interactivity (Song & Zinkhan, 2008) and can be measured by observing the number and type of interactive features of a website. Alternatively, perceived interactivity is subjectively experienced by users and can be measured by asking consumers about their feelings or experiences during their website visit (Liu & Shrum, 2002).

The study described in chapter 3 deals with actual interactivity by developing and testing a new coding instrument to measure actual interactivity and giving insight into the actual interactivity of the websites of the top 100 global brands. Chapter 4 deals with the determinants of perceived interactivity by relating the presence of interactive website features (i.e. actual interactivity) to interactivity perceptions.

Cross-Media Effects

The second element that is critical for expanding our understanding of the websites of brands is related to the role of websites in marketing communication campaigns. As websites are often used in combination with traditional media in a campaign, it is vital to gain insight into cross-media effectiveness. In so called multimedia or cross-media campaigns, marketers seek to maximize the effectiveness of their budgets by exploiting the unique strengths of each medium. The ultimate goal of such cross-media campaigns is to induce synergy, whereby the combined effect of multiple media activities exceeds the sum of the individual effects (Naik & Raman, 2003). Although some empirical research has indicated that using combinations of media in a campaign is more effective than using only one medium (e.g., Dijkstra, 2002; Chang & Thorson, 2004; Havlena, Cardarelli, & De Montigny, 2007), several issues have remained unstudied or require further research. The first question that is partly unanswered is *why* cross-media campaigns are more effective than single medium campaigns. Although some cross-media studies implicitly assume that certain mechanisms or psychological processes can explain the more positive effects of cross-media campaigns (Edell & Keller, 1989; Keller, 1996), the influence of the mechanisms has almost never been tested (with the exception of Dijkstra, 2002). Therefore, chapter 5 deals with underlying mechanisms that can explain why campaigns using multiple media (including websites) are more persuasive than campaigns using only one medium.

A second issue that has remained unstudied is the effect of different media sequences within cross-media campaigns. To date, no study has systematically focused on comparing the effectiveness of different media sequences in cross-media campaigns, while from other fields it is known that the sequence in which people are exposed to persuasive messages influences their responses to these messages (Haugtvedt & Wegener, 1994; Loda & Coleman, 2005). A third issue that is completely neglected in the cross-media literature is under what circumstances cross-media effects are stronger or are more likely to occur. An important factor that may influence cross-media effects is product involvement because consumers' information search may be affected

by the importance of the product (Okazaki & Hirose, 2009), and because product involvement is an important moderator of the amount and type of information processing elicited by a persuasive communication message (Petty, Cacioppo, & Schumann, 1983). Chapter 6 therefore reports a study on the role of sequence of exposure and product involvement in cross-media campaigns using the websites of brands in combination with advertising in a traditional medium.

Dissertation Outline

The five studies of this dissertation are presented in five succeeding chapters. All chapters are published as individual papers or are submitted for publication. Being self-contained, each chapter has its own abstract, introduction, and reference list. This section provides a summary of each chapter.

Chapter 2: Literature Review

The second chapter presents an extensive overview of the existing empirical studies on the websites of brands (Voorveld, Neijens, & Smit, 2009a, 2009b). By systematically reviewing the literature that has been published so far, we aimed (a) to provide an integrated literature review of factors influencing consumers' responses to the websites of brands, (b) to describe the state of research in the past ten years and, (c) to give an overview of the theories used in studies on the websites of brands. Using a vote-counting procedure, we synthesized more than 700 findings from 50 empirical studies. In a vote-counting analysis the number of positive and negative significant relations between the same two variables is compared to the number of non-significant relationships (Hedges & Olkin, 1980). The analysis revealed that responses to the website are influenced both by person-related factors and website-related factors. Person-related factors or individual differences that affect responses to the websites include the level of involvement with the website or the brand, the perceived interactivity of a website, and the level of flow that was felt. Website-related factors that affect consumers' responses include the actual interactivity of a website, the usability of the website, the types of modality used on the site, and the degree of fit between the brand image and the image of the website. The study showed that responses to the brand are predominantly influenced by website-related factors, while person-related factors do not have a direct effect on these brand effects. Important website-related factors are the actual interactivity of a site and the number of functionalities used on the site. In addition, the review confirmed the mediating role of attitude toward the

website in the process through which websites influence attitudes toward a brand included on the website. To explain these findings many studies successfully integrated new theoretical concepts (e.g., interactivity) into traditional theories. Furthermore, the review showed that the current state of research is limited by forced exposure, student samples, and a focus on measurement of affective responses.

Chapter 3: Interactivity of the Websites of the Top Global Brands

The study described in the third chapter maps the level of interactivity of the websites of top global brands (Voorveld, Neijens, & Smit, in press-a; in press-d). In the study a new coding instrument to examine the interactivity of the websites of brands was developed, because no up-to-date, theoretically linked coding instrument was available. The new instrument contains 47 interactive functions and is directly linked to theories on interactivity. To test the applicability of the instrument and to give insight in the level of interactivity of the websites of the top 100 global brands, the interactivity of 66 American and 66 Dutch websites was investigated by means of a content analysis. Results showed that the instrument could be applied in a valid and reliable way in different contexts. In addition, the content analysis disclosed interesting differences between American and Dutch websites, and between the websites of different types of products. It showed that American websites were somewhat more interactive than their Dutch counterparts and that websites of durable goods and services were more interactive than websites of non-durable goods. The instrument can be used in future research to investigate the effects of interactivity. Practitioners can also use the instrument to assess the interactivity of their own websites.

Chapter 4: The Link between Actual and Perceived Interactivity

The study described in chapter 4 uses the instrument developed in chapter 3 to investigate the relationship between objectively assessed interactivity and interactivity perceptions (Voorveld, Neijens, & Smit, 2010). Although it is suggested that increasing the quantity of interactive functions on a website results in a higher perceived interactivity (Macias, 2003; Sicilia, Ruiz, & Munuera, 2005), there is also evidence that this may not be the case (McMillan, 2002; Song & Zinkhan, 2008). Strikingly, there has been little research on examining which interactive functions determine the perceived interactivity of a website. To investigate the relationship between actual and

perceived interactivity to learn what makes the websites of brands truly interactive, the study in chapter 4 combines a content analysis of interactive functions on the websites of the top 100 global brands with a survey (N = 715) in which the perceived interactivity of the same websites is measured. The main findings are: (1) there is great incongruence between the level of actual and perceived interactivity, (2) adding interactive functions to a website does not guarantee a strong perception of interactivity, (3) six unique website characteristics contribute positively to interactivity perceptions.

Chapter 5: Psychological Processes in Cross-Media Campaigns

As websites are often used in combination with traditional media, it is vital to study the effectiveness of campaigns incorporating websites and other media. Generally, among researchers there is some consensus that cross-media campaigns reveal more positive audience reactions than campaigns using only one medium (e.g., Edell & Keller, 1989; Naik & Raman 2003; Dijkstra, Buijtsels, & Van Raaij, 2005; Chang & Thorson, 2004). Still unanswered is the question *why* cross-media campaigns are more effective than single medium campaigns. Therefore, the aim of the study described in chapter 5 is: (a) to investigate which psychological processes are present when people are exposed to cross-media campaigns, and (b) to examine to what extent these processes contribute to campaign results (Voorveld, Neijens, & Smit, in press-b). Three psychological processes are: forward encoding (i.e., the ad in the first medium primes interest in the ad in the second medium); image transfer (i.e., mentally replaying the ad previously viewed during exposure to the ad in the second medium); and multiple source perception (i.e., believing the brand is good and popular because of the amount of advertising from multiple sources). To identify the role of these processes, 219 participants were exposed to one of four media conditions containing websites and/or TV commercials (two cross-media conditions and two repeated media conditions). The results showed that two processes were present when participants were exposed to the cross-media combinations: forward encoding and multiple source perception. We also found support for the hypothesis that these two processes contributed to campaign results. However, the third process, image transfer, was present in all conditions and did not add to the explanation of cross-media effects.

Chapter 6: Sequence Effects and the Role of Product Involvement in Cross-Media Campaigns

The study described in chapter 6 deals with two issues that remained completely unstudied in the cross-media literature: the role of media sequence and product involvement. The aim of the study is (1) to investigate consumers' responses to different media sequences, and (2) to provide insight into the role of product involvement in the relationship between media sequences and cross-media effects (Voorveld, Neijens, & Smit, in press-e). To do so, we conducted an experiment in which we studied the effects of combinations of TV commercials and websites (TV commercial-website vs. website-TV commercial). The results indicated a consistent interaction effect of media sequence and product involvement on three possible campaign targets: attitudes toward the ad, interest in the ad and message evaluation. These interaction effects showed that while a TV commercial-website sequence was effective for informing consumers about both high and low involvement products, the website-TV commercial sequence was only effective for informing consumers about high involvement products. The main conclusion of the study is that sequence of exposure is vital in cross-media campaigns, especially when taking product involvement into account.

Main Conclusions

In general, the five studies in this dissertation add the following seven conclusions to the field.

First, the dissertation shows that two types of factors influence how consumers respond to the websites of brands (e.g., attitude toward the website): person-related and website-related factors. It is striking that in particular website-related factors have a direct influence on consumers' responses to the brand (e.g., attitude toward the brand). In addition, the dissertation confirms the mediating role of attitude toward the website in the process through which websites influence attitudes toward a brand included on the website.

Second, this dissertation gives insight into what website features exactly comprise website interactivity by using a newly developed coding instrument to map the objectively assessed interactivity of the websites of the top 100 global brands. Interactive functions facilitating active control over the experience on the website are most prevalent on the websites of top global brands, followed by functions facilitating two-way communication and functions facilitating a fast response.

Third, this dissertation shows that the websites of American top global brands are slightly more interactive than Dutch websites. In addition, the websites of durable goods and services are somewhat more interactive than the websites of non-durable goods.

Fourth, this dissertation convincingly shows a great incongruence between actual and perceived interactivity. Furthermore, it shows that not the mere number of interactive features, but the number of *unique* interactive features is the decisive factor in determining interactivity perceptions.

Fifth, this dissertation advances our understanding of *why* cross-media campaigns including the websites of brands are more persuasive than single medium campaigns. The dissertation reveals that two psychological processes account for the superior effectiveness of cross-media campaigns. (1) In cross-media campaigns the ad in the first medium serves as a 'teaser' to attract attention to, arouse interest in, and increase curiosity for the ad in the second medium; (2) advertising in multiple media, which are perceived as independent, is seen as more expensive than repetitive advertising in the same medium and therefore perceived as more credible.

Sixth, the dissertation shows that when the websites of brands are used in cross-media campaigns, sequence of exposure to media is a vital factor influencing consumers' responses to such campaigns.

Seventh, product involvement is a key moderator in the relationship between cross-media sequences and interest in advertisements, attitude towards advertisements, and evaluation of the message. While a TV commercial-website sequence is effective for informing consumers about both high and low involvement products, the website-TV commercial sequence is only suitable for informing consumers about high involvement products. Thus, the sequence of media exposure is particularly important when taking product involvement into account.

In addition to these conclusions, this dissertation provides a significant contribution to the interactivity literature by developing an up-to-date and theoretically linked coding instrument which can be used in a reliable way to map the actual interactivity of the websites of brands in various contexts.

Implications

Theoretical Implications

The research in this dissertation contributes to the development of theories on interactivity. It was already established that interactivity is an essential element of successful online brand communication, as in general, interactivity has a positive influence on persuasive processes and outcomes (for

an overview see Liu & Shrum, 2002). However, theoretical knowledge on the determinants of interactivity was scarce until now. The dissertation contributes to this field by investigating the relation between the characteristics of websites and interactivity perceptions. This dissertation establishes that actual and perceived interactivity are not simply linearly related. While some researchers already stated that this could be the case (e.g., McMillan, 2002; Song & Zinkhan, 2008), this dissertation investigates this issue over a wide range of websites and a large number of interactive website features. This dissertation also states that the uniqueness of interactive website features could be an underlying variable in the relationship between interactive website features and interactivity perceptions. This also means that what is perceived as interactive now will not necessarily be perceived as interactive in the future, due to the habits of consumers. Additional research should further validate this claim.

This dissertation also contributes to the development of theories on cross-media effectiveness. In existing cross-media theories it was already established that campaigns using multiple media are generally more effective than campaigns using only one medium. The results of this dissertation call for incorporating two theoretical concepts in cross-media theories: sequence of exposure and product involvement. From research in other fields it was already known that the order in which consumers are exposed to information can affect their evaluations (Haugtvedt & Wegener, 1994; Loda & Coleman, 2005). This dissertation confirms the importance of this concept in cross-media effectiveness. This dissertation shows that, when taking product involvement into account, sequence of exposure influences consumer response to ads and the messages in these ads. By doing so, this dissertation answers the call for research on this issue from Ephron (2000), Bronner (2006), and Havlena, Kalluff, and Cardarelli (2008).

This dissertation also makes a theoretical contribution to the understanding of *why* cross-media campaigns are more effective than single medium campaigns. It goes beyond the work of Edell and Keller (1989; 1999) and Bronner (2006) who discussed the role of several processes without empirically testing their role in determining cross-media effects. In this dissertation the role of two psychological processes, forward encoding and multiple source perception has been confirmed. This dissertation therefore provides further evidence (in line with a study of Dijkstra, 2002) that these processes should be incorporated into cross-media theories.

Practical Implications

The main conclusions of this dissertation provide useful implications for practitioners who want to incorporate a website in their brand communication or optimize its effects. These implications are fourfold. Two implications are related to the interactivity of the websites of brands and two implications are related to the role of websites in cross-media campaigns.

First, in the literature it is widely acknowledged that interactivity plays a crucial role in determining the effectiveness of websites as it is generally accepted that interactivity has a positive influence on persuasive processes and outcomes. In view of this crucial role of interactivity, advertisers can use the developed coding instrument to map the interactivity of their own websites and compare it to the websites of their competitors and the websites of the top global brands. They could also use the instrument to detect or develop a unique interactivity point (UIP).

A second implication concerns ways to enhance the perceived interactivity of the websites of brands (Voorveld, Neijens, & Smit, in press-c). The dissertation shows that simply adding interactive features to a website does not guarantee that consumers also perceive high levels of interactivity. It shows that especially unique interactive features contribute to interactivity perceptions of consumers. Thus, marketers should carefully monitor consumers' expectations on interactivity and technological developments and tailor the interactive features on their website to these expectations and developments.

The third implication of this dissertation deals with incorporating websites in campaigns. The dissertation shows that the simultaneously usage of websites and TV commercials in a campaign can result in more effective campaigns than when only one medium is used twice. It also revealed two psychological processes that account for these effects: forward encoding (i.e., the ad in the first medium primes interest in the ad in the second medium) and multiple source perceptions (i.e., believing the brand is good and popular because of the amount of advertising from different sources). The occurrence of these processes could potentially be stimulated by advertisers by, for example, stimulating overlap between ad executions or increasing curiosity to stimulate forward encoding. They could also encourage the use of traditional media, such as TV commercials, next to advertising in new media to provoke multiple source perceptions.

Fourth, media planners should also consider the sequence in which media are used in a campaign. A sequence of TV commercials followed by websites is proven to be effective for both high and low involvement products. Consequently, when generalizing the results of our experimental study to a

real-life situation, it could be a safe option to put the emphasis on TV commercials early in a campaign, while adding websites at a later stage. Concerning high involvement products, websites could also be used earlier in the campaign, because the website-TV commercial sequence is only effective for high involvement products.

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Chapter 1

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