

# Telescopic Ads on Interactive Digital Television

**Verolien Cauberghe**

*University of Antwerp, Belgium*

**Patrick De Pelsmacker**

*University of Antwerp, Belgium*

## INTRODUCTION

The adoption of interactive digital television (IDTV) and related technologies such as the personal video recorder (PVR) make IDTV attractive for advertisers in terms of reach. Although IDTV leads to an increase in advertising avoidance behaviour, it also offers new advertising opportunities (Cauberghe & De Pelsmacker, 2006). One of them is the telescopic advertisement. This format consists of a “30-second TV ad with a call-to-action button with clickable content or micro sites featuring individual still screens providing additional product information” (Bellman & Varan, 2004, p. 2). When the viewer clicks on the call-to-action button, he or she leaves the linear broadcast stream to enter a dedicated advertising location (DAL). There, the viewer can navigate through the additional information, which can be structured in different layers. The purpose of this study is to investigate the impact of two aspects of the complexity of a telescopic ad by experimentally manipulating the amount of information and the level of interactivity in the DAL. Additionally, the role of time spent in the DAL is explored.

## BACKGROUND

### Advertising Complexity and Information Load

To keep the consumer’s interest focused on a persuasive message, an appropriate level of complexity is recommended (Putrevu, Tan, & Lord, 2004). Complexity has been identified as one of the major dimensions of information load. An increase in information load generates a positive effect on information processing until a certain threshold is reached, at which the consumer will be overloaded with information. At this point the consumer will no longer consider additional information and will become confused, and it is harder to recall previous information (Lang, 2000). The effects of complexity and information load follow an inverted *U* shape, by which a moderate level of complexity leads to the

most optimal advertising results (e.g., Geissler, Zinkhan, & Watson, 2006; Martin, Sherrard, & Wentzel, 2005; Wang, Chou, Su, & Tsai, 2007).

### Amount of Information

The effect of the amount of information follows an inverted *U* shape (e.g., Meyer, 1998), leading to negative effects in decision quality when too much information is provided. Although an increase in the quality of the additional information decreases message complexity, increases the credibility of product information, and leads to a positive effect on decision making (Keller & Staelin, 1987), increasing the quantity of information leads to an increase in complexity and can, due to limited cognitive capacity and information overload, lead to confusion and negative evaluative effects after a certain threshold is reached (Lang, 2000). In the present study, the quantity of information in the DAL is manipulated, keeping the quality constant. Therefore, the following can be expected.

*H1: A high amount of information in the DAL leads to lower brand recall and a less positive brand attitude than a low amount of information.*

### Level of Interactivity

Interactivity has the capability to develop feelings of flow, “an intrinsically motivated optimal enjoyable mental state” (Csikszentmihalyi & Lefevre, 1989). This mental state increases the cognitive involvement with the interactive content due to focused attention and the possibility for consumers to take control over the time, structure, and order in which they want to be exposed to the information (Liu & Shrum, 2002); it also increases the processing of the information presented in the interactive context (e.g., Chung & Zhao, 2004; Macias, 2003; Sicilia, Ruiz, & Munera, 2005). The intrinsically motivated joy evoked by flow may be transferred to the persuasive message and brand, leading to a positive effect on the attitude toward the ad, brand attitude, and pur-

chase intention (Chung & Zhao; Ko, Cho, & Roberts, 2005; Macias, 2003). Therefore, we expect the following.

*H2: A high level of interactivity in the DAL leads to higher brand recall and a more positive brand attitude than a low level of interactivity.*

### Mediating Role of Time Spent in the DAL

Longer ads have more opportunities to provide extra product arguments and to repeat key points of the message compared to their shorter equivalents. The longer a consumer is exposed to an advertisement, the more opportunity the consumer has to process it, and the more he or she will remember of it. Longer commercials lead to more positive brand attitudes (e.g., Danaher & Mullarkey, 2003). Since both the amount of information and interactivity increase the level of complexity, we can expect that more complexity will lead to more time spent in the DAL and that, next to a direct effect of the amount of information and the level of interactivity on brand responses, part of this effect is mediated by the time spent in the DAL.

*H3: Time spent in the DAL mediates the effects of the amount of information and the level of interactivity on brand recall and brand attitude.*

## EMPIRICAL STUDY

### Research Method

The hypotheses were tested using a 2x2 (information x interactivity) between-participant factorial design. A telescopic ad was developed, consisting of a 30" television ad, a call-to-action button ("click on the red button for more information"), and an interactive DAL. To avoid confounding effects, a traditional 30" advertisement for a travel agency originating in The Netherlands was used, unknown to Dutch-speaking Belgians. The attitude toward the 30" advertisement was controlled to be positive to avoid negative affective reactions. The ad contained a feel-good conversation between two men on an airplane.

In the DAL, the amount of information was manipulated at two levels. Information about different kinds of holiday formulas and hotels was provided for different countries. The information in the high-level condition was more of the same compared to the low information level (e.g., information about 29 hotels vs. 106 hotels). Interactivity was manipulated at two levels by means of the amount of links in the DAL (12 vs. 92), the availability of a navigation bar (yes or no), and the possibility of two-way communication

(e.g., "search an address," yes or no). The layout of the DAL was kept stable over conditions.

Out of a database of a Belgian market research agency, a gross sample of 521 individuals was randomly selected based on age, gender, and education quota. A net sample of 282 participants cooperated in the study. The average age of respondents in the sample was 38 (range 21-56); 61.8% were males, and 55.3% finished higher education. The respondents were randomly assigned to one of the four experimental conditions. The respondents were individually invited to an experimental living-room setting. After the briefing, they watched a 6-minute neutral-mood excerpt of a TV programme followed by the advertisement. At the end of the 30" television ad, a call-to-action button appeared on the screen in combination with a voice-over that invited the respondent to press the button for more product information. After viewing the DAL, the respondents entered a computer-assisted questionnaire. The experiment lasted 40 minutes in total. Each respondent received €25.

The questionnaire contained a brand attitude (Ab) measurement (which did not contain the brand name; seven-point four-item scale,  $\alpha = .87$ ) and a measure of the attitude toward the 30" ad (used as a covariate in the analysis; seven-point four-item scale,  $\alpha = .95$ ). After questions about the age, gender, and education level of the participants, unaided brand recall was measured using an open-ended question.

## Results

### Manipulation Check

The perceived amount of information (two-item five-point semantic differential scale,  $\alpha = .93$ ) and the perceived level of interactivity were measured by three-item five-point Likert scales ( $\alpha = .93$  and  $.74$ ). The t-tests indicate that both manipulations were successful ( $M_{low\ information} = 3.281$  vs.  $M_{high\ information} = 4.022$ ,  $t = 5.885$ ,  $p < .001$ ;  $M_{low\ interactivity} = 3.286$  vs.  $M_{high\ interactivity} = 3.644$ ,  $t = 6.024$ ,  $p < .001$ ).

### Main Effect of Amount of Information

The amount of information in the DAL had no effect on brand recall (low amount of information = 52.1% vs. high amount of information = 47.9%,  $\chi^2 = .845$ ,  $p = .358$ ). To measure the effect of the amount of information on brand attitude, an ANCOVA (analysis of covariance) was conducted in which the attitude toward the 30" television ad was used as a covariate. The attitude toward the 30" television ad had a significant positive effect on Ab ( $F(1, 240) = 65.128$ ,  $p < .001$ ). However, there was no significant main effect of the amount of information on Ab ( $F(1, 240) = .039$ ,  $p = .843$ ;  $M_{low\ information} = 4.28$  vs.  $M_{high\ information} = 4.37$ ). H1 is not supported.

3 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/telescopic-ads-interactive-digital-television/14133](http://www.igi-global.com/chapter/telescopic-ads-interactive-digital-television/14133)

## Related Content

---

### Information Technology Adoption and the Role of Organizational Readiness: The Case of an Indian Bank

Monideepa Tarafdar and Sanjiv D. Vaidya (2007). *Journal of Cases on Information Technology* (pp. 27-49). [www.irma-international.org/article/information-technology-adoption-role-organizational/3205](http://www.irma-international.org/article/information-technology-adoption-role-organizational/3205)

### Status of Non-Functional Requirements in Mobile Application Development: An Empirical Study

Varun Gupta, Raj Kumar Chopra and Durg Singh Chauhan (2017). *Journal of Information Technology Research* (pp. 59-84). [www.irma-international.org/article/status-of-non-functional-requirements-in-mobile-application-development/176374](http://www.irma-international.org/article/status-of-non-functional-requirements-in-mobile-application-development/176374)

### Managing the Information Technology: Knowledge Transfer in Virtual Teams

Huei-Chen Hsu (2010). *Information Resources Management: Concepts, Methodologies, Tools and Applications* (pp. 1643-1662). [www.irma-international.org/chapter/managing-information-technology/54563](http://www.irma-international.org/chapter/managing-information-technology/54563)

### Cisco Systems: Implementing "Customized" ERP in Nine Months and within Budget

Avimanyu Datta (2009). *Journal of Cases on Information Technology* (pp. 56-70). [www.irma-international.org/article/cisco-systems-implementing-customized-erp/3244](http://www.irma-international.org/article/cisco-systems-implementing-customized-erp/3244)

### Shift Towards Next Generation Networks (NGNs) for Sustainability: Evidence from an Emerging Economy

Abdul Rafay and Arsala Khan (2016). *Journal of Cases on Information Technology* (pp. 1-12). [www.irma-international.org/article/shift-towards-next-generation-networks-ngns-for-sustainability/172151](http://www.irma-international.org/article/shift-towards-next-generation-networks-ngns-for-sustainability/172151)