Chapter 12
Display Ads Effectiveness: An Eye Tracking Investigation

Dionysia Filiopoulou
University of Patras, Greece

Maria Rigou
University of Patras, Greece

Evanthia Faliagka
Western Greece University of Applied Sciences, Greece

ABSTRACT
The average web user receives numerous advertising messages while browsing online and the formats of such digital marketing stimuli are constantly increasing in number and degree of intrusiveness. This chapter investigates the effectiveness of different types of display advertising by means of an eye-tracking study combined with a pre- and a post-test questionnaire with the purpose of collecting quantitative and qualitative data concerning ad visibility and interaction. Eye gaze data are particularly revealing when examining visual stimuli and they become more valuable when associated with asking users to recall seeing an advertising message we know they fixated on. Moreover, the study aimed to look into whether banner blindness still applies regardless of the type of display ad used, whether the visual pattern remains F-shaped, the effect of placing ads below the fold, how effective trick banners are, and which types of ads are annoying to users.

INTRODUCTION
Marketing is an integral part of any business and is defined as “... the management process responsible for identifying, anticipating and satisfying customer requirements profitably” by the UK Chartered Institute of Marketing’s (CIM) while the American Marketing Association (AMA) provided a more extended definition in 2013: “Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large” (Johnson, 2015). The related literature indicates that marketing definitions cover a wide spectrum

DOI: 10.4018/978-1-5225-7262-6.ch012
Display Ads Effectiveness

and span a large period, with the first definitions documented in 1918 (Brunswick, 2014). Advertising is part of the marketing strategy (typically along with market research, media planning, pricing, public relations, community relations, customer support, and sales strategy) and is a means of communication with the users of a product or service aimed at informing people or influencing their buying behavior by promoting a product, service or company. According to Nicosia (1974) simply put, advertising means to give notice, to inform, to notify, or to make known. Dunn and Barban (1986) defined advertising as “a paid, nonpersonal message from an identifiable source delivered through a mass-mediated channel that is designed to persuade” (Sheehan, 2014, p. 2). Throughout the years marketing has been affected by technological developments and in many cases, it has acted as an early adapter of technological innovations. This does not imply that technology is the kernel of marketing; it is the people that marketing targets and revolves around, but marketing has always depended on technological developments that allow for new, faster or more efficient ways of coming to contact with people and establishing a communication channel with them (Ryan, 2016). Typical advertising channels included television and radio, print ads, direct mail. The advent of the web, its widespread adoption and availability almost everywhere, anytime provided marketing with unprecedented potential, giving it easily accessible channels large audiences and new ways of formatting attractive promotional messages. Online advertising (also called digital, online or web advertising), refers to the type of marketing strategy that involves the use of the internet for delivering promotional messages to users. It includes placing or dispatching advertisements on websites, through e-mail and ad supported software, in the form of text/multimedia messaging, in social platforms, as well as on mobile web-enabled devices (tablets, smartphones). This newly formed scenery is very dynamic and has also empowered the recipients of marketing messages (users) with wide access to peers when it comes to word-of-mouth marketing, online ratings and blogging. Current online marketing has evolved drastically and uses advanced computational techniques (Busch, 2016) able to manage large amounts of data integrated from various sources. The mere purpose of this ad-serving technology is sending the correct messages to the correct users, at the correct time to maximize sales, build brand identity, and serve customer needs as efficiently as possible.

Display advertising is one of the most important types of online advertising that visually conveys its advertising message using text, logos, animations, videos, photos, as well as hyperlinks. The main purpose of a display ad is to provide generic ads and brand messages to site visitors.

Advertisements presented as display ads, appear on third-party sites or on search engine results pages leading to websites or social media. Display ads aim to support brand awareness and help to increase consumer purchasing intent (Smith, 2013). The types of display advertising that we have examined in our experiment are: text ads, banner ads, pop-ups/pop-unders, floating/overlay ads, expandable ads, trick banners, news feed ads and interstitial ads.

To evaluate the types of display ads and to investigate the behavior of users towards these advertisements, an eye tracking experiment was conducted. The purpose of this experiment was to study how participants reacted to various types of display ads available in the set of selected real-life websites and with the help of eye tracking (visualizations and metrics) to investigate whether the banner blindness phenomenon still holds, the F-pattern is still followed, to what extend the stimuli placed above the fold override, what is the effect of trick banners and which types of ads are annoying to users. The overall aim of the work was to examine how modern advertising promotional messages work as visual stimuli for their recipients in the web environment and to address the factors that affect their effectiveness. This approach differs from typical experimental and empirical studies found in the related literature, as eye tracking offers valuable insights through the subconscious and unbiased visual attention data it captures.
Related Content

E-Health Service Model for Asian Developing Countries: A Case of Emergency Medical Service for Elderly People in Thailand
[www.igi-global.com/chapter/e-health-service-model-for-asian-developing-countries/195744?camid=4v1a](www.igi-global.com/chapter/e-health-service-model-for-asian-developing-countries/195744?camid=4v1a)

What is New York’s Amazon Tax on Internet Commerce?
[www.igi-global.com/article/new-york-amazon-tax-internet/59914?camid=4v1a](www.igi-global.com/article/new-york-amazon-tax-internet/59914?camid=4v1a)

Towards A Model-Driven Approach for Process-Aware Web Applications
[www.igi-global.com/chapter/towards-model-driven-approach-process/49284?camid=4v1a](www.igi-global.com/chapter/towards-model-driven-approach-process/49284?camid=4v1a)

Coordinating Multi-Channel Pricing of Seasonal Goods
[www.igi-global.com/article/coordinating-multi-channel-pricing-seasonal/74742?camid=4v1a](www.igi-global.com/article/coordinating-multi-channel-pricing-seasonal/74742?camid=4v1a)