Chapter 7
The Ethical Implications of A/B and Multivariate E-Commerce Optimization Testing

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ABSTRACT

A/B and multivariate website optimization may not seem ethically problematic at first blush; however, in this chapter I will consider some of the less obvious elements that have been tested, such as header color, button design, and the style of tabs used for linking to product details. A/B and multivariate testing has shown that these seemingly insignificant changes can increase average order value and decrease abandoned shopping carts, among other results. I will consider these tests through the lens of the major ethical systems of utilitarianism, Kant's respect for person's principle, and virtue ethics, using specific case studies and examples of testing results. I conclude that this type of practice is likely ethically problematic in many uses, as understood through all three ethical systems. Along the way I will be careful to demonstrate how the manipulation resulting from A/B and multivariate testing is different and more problematic than that of advertising in general.

INTRODUCTION

Certainly, many ethical issues related to the creation and use of websites have already been broached. The 2000 Children's Online Privacy Protection Act addresses the privacy of minors (COPPA, 2009). In addition to privacy concerns, copyright issues have also played a large role in the development of the Internet (Montecino, 1996). A more recent issue is accessibility standards for web surfers with disabilities (*United States Access Board*, 2009). Some of these issues have been addressed by acts of Congress, while others have gotten their precedent from law suits, but overall, many of these issues are still in flux and still under debate. I will broach an issue that has not been previously addressed from an ethical or legal view.

Manipulative advertisements have long been the focus of major discussions within business ethics, and this discussion can certainly be ported

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over to advertising via the Internet. However, the Internet also opens up a new avenue for manipulation based on the layout, design, and copy of a particular website. It may be possible that many of the elements on a company's website might actually still fall under the topic of advertising; however, many of the changes that are made on websites due to A/B and multivariate testing clearly should not be understood as elements of advertising. For example, one would not be likely to categorize the color and/or style selection of category tabs as a form of advertising. Therefore, although the discussion may sometimes mirror that of manipulative advertising, a new discussion about implementing the results from A/B and multivariate tests needs to be highlighted.

By and large, companies which advertise their ability to implement multivariate tests on behalf of another company promote the activity in a way such that it appears altruistic or morally exemplar, rather than ethically questionable or problematic. Multivariate testing for websites has been occurring since at least 1995, but these tests have recently gained widespread exposure to a much larger audience of web developers. A/B and multivariate testing is rising in popularity of use and increasing in simplicity of implementation. Despite this increased use, the ethical implications of using such tests have not been raised or explored in either professional literature or on the web in general. For example, is it acceptable that websites conduct this kind of testing? Questions such as this have not yet been broached. In this chapter I strive to set the agenda for the broader topic of the ethical implications of multivariate tests, hoping to open up the issue for further commentary rather than trying to cover every aspect in depth.

BACKGROUND

A/B and multivariate tests on the Internet allow a website to test two or more versions of the same page and measure desired outcomes. A/B split testing allows one to:

randomly divide your visitors into two groups and show each group a different version of a page to determine which version leads to higher conversion, average order value, application completion, or other target. These visitors are then tracked and a report is generated that describes the impact of the A or B page version on this outcome. (Roche, 2004)

Multivariate testing, on the other hand, is:

a process by which more than one component of a website may be tested in a live environment. It can be thought of in simple terms as numerous split tests or A/B tests performed on one page at the same time. (Search Engine Marketing, 2009)

One example of this practice would be a site testing the placement of a search box on the page in order to see if it gets used more frequently depending on whether it is on the top right or left of a page. This type of testing came about long before the Internet and was used for many different purposes; however, the Internet allows for easy use and quick testing of many different design elements at the same time. Results can also be quickly linked to sales related figures such as percentage of shopping carts abandoned or average order size.

Discussion of manipulative advertising has a long history within the realm of business ethics, but this issue falls outside of the typical realm of those debates. The tests I discuss have nothing to do with the products, or brands, or marketing messages themselves. Instead, they focus on elements such as the placement of search boxes, header color, button design, and the style of tabs used. A standard example of manipulative advertising would be a commercial for a fast food company displaying large images of juicy hamburgers that create a feeling of hunger or desire