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#### Recommended Citation

Douglass, David; Holthaus, Adam; Lockwood, Timothy; and Sasidharan, Sharath, "The Role of Typeface and Product Context in Influencing B2C E-Commerce Trust" (2010). MWAIS 2010 Proceedings. 9. http://aisel.aisnet.org/mwais2010/9

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## The Role of Typeface and Product Context in Influencing B2C E-Commerce Trust

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#### **ABSTRACT**

Lack of user trust in B2C e-commerce websites remains a major hindrance to its continued expansion. This initial study examines the role of website typography and product context in influencing user perceptions of trust in a B2C e-commerce website. Users perceive typefaces to possess human qualities; hence the typeface used to present text-material in a website could shape user perceptions towards that website, including those of trust. This paper presents an experimental model that addresses the impact of typeface as well as its interaction with product context in influencing user perceptions of trust.

#### **Keywords**

Trust, e-commerce, web design, typography.

#### INTRODUCTION

The Business to Consumer (B2C) e-commerce market has grown considerably in recent years and is projected to reach USD 300 billion by 2010 (Forrester Research, 2006). The global economic recession has further fueled its growth as it facilitates optimal purchase decisions due to comparison shopping (Rainie and Smith, 2009). However, user concerns regarding the integrity, reliability, and trustworthiness of e-commerce websites have led to an increasing number of consumers using them as an information source for making purchase decisions rather than making purchases. This "trust-gap" has been pointed out to be one of the major limiting factors to the continued expansion of B2C e-commerce activities (Fox and Beier, 2006; Horrigan, 2008). Though website designers have incorporated various functional techniques for enhancing user trust in B2C e-commerce websites (Kimery and McCord, 2002; Lee and Turban, 2001; Shneiderman, 2000; Suh and Han, 2003), these have proven inadequate with over 50% of internet users hesitant to use the online environment due to trust issues (Horrigan, 2008).

#### **TYPOGRAPHY**

Typography is the art and technique of designing letterforms with the objective of enhancing communication (Texas Tech University Office of Communications and Marketing, 2006). In the context of website design, typography enables the user to comprehend and absorb page content and is essential for visual and verbal communication (University of Minnesota Duluth Technology Services, 2010). Typography deals with the study of typefaces. The term "typeface" refers to a font family; prominent examples include the serif, sans-serif, monospaced, and scripted typefaces. A serif typeface differs from a sans-serif typeface in that the former has short lines called "serifs" at the end of letter strokes whereas the latter is devoid ("sans") of such lines. The physical space occupied by a serif typeface and a sans-serif typeface is proportional to their width; in contrast, for a monospaced typeface all letterforms occupy the same amount of physical space. An example of a serif typeface is the Times font family which includes the Times New Roman font that has been used to type this document. The sans-serif typeface includes the Arial, Verdana and Calibri fonts; the monospaced typeface includes the Courier font. A scripted typeface uses a running hand where letters are cursively connected within words, an example being the Rage Italic font (Shaikh, Chaparro and Fox, 2006).

#### **User Perceptions of Typefaces**

Prior research in the context of ink-based printed text material has found that readers attribute human characteristics to typefaces (Bernard, Mills, Peterson and Storrer, 2001; British Broadcasting Corporation, 2001; Brumberger, 2003;

Kostelnick, 1990; Shaikh et al. 2006). Thus, serif and san-serif typefaces have been associated with the human traits of stability, maturity, and trustworthiness while monospaced typefaces have been associated with plainness, unpleasantness, and insipidity. Scripted typefaces have been found to be associated with casualness and youthfulness (Shaikh et al. 2006).

#### RESEARCH FRAMEWORK

As users perceive typefaces to have human characteristics, it can be expected that the typeface used to present text-material in a website can influence user perceptions towards the website. When used as the primary font in a website, it can be expected that a serif or sans serif typeface (perceived to be stable, mature, and trustworthy) will engender greater trust in the user than a monospaced typeface (perceived to be dull and unpleasant) or scripted typeface (perceived to be casual and youthful). The impact of typefaces in influencing user perceptions would be greater for online business transactions than for paper-based face-to-face transactions as in the case of the former, the user has only limited scope for direct physical interaction with the seller. Thus, our first substantial research question reads: *How does typeface influence user perceptions of trust in an e-commerce website?* 

An experimental pilot study was conducted in the context of an online banking website. Participants were randomly allocated to one of two experimental conditions: a banking website having Times New Roman as the primary font and another having Courier as the primary font. They were required to browse the experimental websites and then their perception of trust was measured. Results indicate that participants had greater perceptions of trust in the online banking website having Times New Roman as the primary font than the one having Courier as the primary font. Thus, there is preliminary evidence to suggest that typeface influences user perceptions of trust in the online environment. Though web designers address typeface issues at design time, it is more from a readability perspective rather than with the explicit intention of influencing user trust.

In addition to the association of typeface with trust, it is possible that the interaction of the typeface with the product line sold by the website could influence trust perceptions. For example, consider an outdoor-activity website selling merchandise targeting the youth. It is conceivable that scripted typefaces (associated with casualness and youthfulness) might be better suited in this context to present text material than a serif typeface. Thus, our second substantial research question reads: *How does the interaction between typeface and the product line influence user perceptions of trust in an e-commerce website?* 

#### PROPOSED EXPERIMENTAL STUDY

We are currently developing a main experimental study that will address these research questions. The 2X2 factorial design will have four experimental conditions (see Table 1) with trust as the dependent variable:

- a banking website having Times New Roman as the primary font
- a banking website having Script as the primary font
- an outdoor-activity website having Times New Roman as the primary font
- an outdoor-activity website having Script as the primary font

		Typeface	
		Times New Roman	Script
Website Context	Outdoor Activity	Condition1	Condition 2
	Banking	Condition 3	Condition 4

Table 1. Experimental Design

Such a design will enable us to test for the influence of typeface on user perceptions of trust and possible interactions between typeface and the product line in influencing user perceptions of trust.

#### CONCLUSION

Web designers have hitherto focused on implementing functional techniques for enhancing user trust in e-commerce websites. However these have proven inadequate with large numbers of users still not trusting the online environment. This paper argues that basic web design elements such as typeface can influence user trust and puts forth an experimental design to examine the impact of typeface and product context in influencing trust in B2C e-commerce websites.

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