The Effects of Website Familiarity on Website Quality and Intention to Use

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Abstract. Previous research has revealed that mere exposure to a website can positively influence a user's experience with that website. This research extends this line of investigation by looking into the influence of familiarity on ads that appear on a website as well as the website itself. The results revealed familiarity to have a significant impact on ad evaluation directly and website quality indirectly (through ad entertainment and informativeness).

Keywords: Website quality, WebQual, entertainment, online advertisement, Internet, experiment.

1 Introduction

Increasing the number of customers to a website and their use and reuse of that site has been a major focus of companies on the Web, since its inception. This has lead to numerous studies looking into website quality (Loiacono, et al., 2007) and usage (van der Heijden, 2003; van der Heijden et al., 2003).

Several factors that influence a consumer's satisfaction relate to the website itself (i.e., website quality) and have been studied in great detail (Loiacono, et al., 2007). These factors relate to the site's intrinsic components, which are both aesthetic and utilitarian in nature. Other factors, which have not received as much attention, are more extrinsic in nature. These aspects are outside of the website, but may still effect a consumer's decision to reuse it. First, the mere familiarity with a site may impact a consumer's perception of it (Zajonc et al., 1971; Kim and Malhotra, 2005). Additionally, external elements, such as advertisements (ads) that are placed on a website may influence the evaluation of that website.

The following research focuses on how these external factors impact a consumer's evaluation of a website and subsequent decision to reuse it.

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2 Literature Review

Several theories have been put forth in psychology and communications to explain how individual perceive and react to entertaining phenomenon (Oatley, 1994; 1999; Vorderer, 2001). *Entertainment*, although difficult to define (Vorderer, 2004), is defined as stimuli that through interaction with the user produce a sense of enjoyment or pleasure (Moody et al., 2007). It is important to note that entertainment is perceived and experienced by the user and is not specifically an aspect of the system (Lowry et al., 2008a), even if a system is intended to produce entertaining outcomes or not (Klimmt and Vorderer, 2003; Moody et al., 2007).

2.1 Applying Entertainment to Websites

More recent research in information systems and consumer behavior has also attempted to explain how entertainment–related constructs aid our understanding of user intentions towards websites (Koufaris, 2002; van der Heijden, 2004). Koufaris (2002) applied the theory of flow, with further refining, and the theory of technological acceptance (Davis, 1989) to explain the intention to use a website alongside unplanned purchases on the website. They found that only the enjoyment of shopping and the perceived usefulness of the site were able to predict intentions to continue to use and return to the website.

Likewise, van der Heijden (2004) applied hedonic/intrinsic motivation in the form of perceived enjoyment of using a system to the technology acceptance model to explain intentions to use a system, which we extend towards websites. They found that the perceived ease of use of a website significantly increased the perceived enjoyment from using the website, which also increased the intentions to continue to use the website.

Both of these studies propose and show how entertainment is an important factor to consider when determining the intentions to use a website. Further, extent research on motivations within technology acceptance (TAM) literature (Lowry et al., 2008a) has shown that both intrinsic and extrinsic factors for usage should be considered. We thus build upon TAM to explain how entertainment, as an intrinsic motivator, is an important factor to consider in website design.

2.2 Website Quality

The literature on website quality is extensive. Many researchers have developed measures for evaluating a website's quality (Barnes and Vidgen, 2001; Schubert, 2002; Yoo and Donthu, 2001). None, however, have been as extensively tested and validated as WebQual (Loiacono, 2000; Loiacono, Watson, and Goodhue, 2007). For this reason, we chose WebQual as the website quality measure for this research.

According to WebQual, there are 12 key factors that consumers consider when determining a website's quality. They are: informational fit-to-task, tailored communication, trust, response time, ease of understanding, intuitive operations, visual appeal, innovativeness, emotional appeal, consistent image, online completeness, and relative

advantage (See Loiacono, Watson, and Goodhue, 2007 for a complete explanation of these factors).

Extent research in e-commerce has also shown that cobranding is an effective mechanism for increasing perceived website quality (Lowry et al., 2008b; Stewart, 2003; 2006). Specifically, these studies have found that brand equity held by a brand advertised on a website can be transferred to the website. Given that online advertisements have already been shown to be influential in the buying process (Briggs and Hollis, 1997; Danaher et al., 2003; Ha and Perks, 2005), cobranding becomes an effective mechanism to quickly improve website quality by taking advantage of the advertised brand on the website.

3 Theoretical Model Development

We build on the underlying proposed by van der Heijden (2004) and the technology acceptance model (Davis, 1989) to build and propose our model to predict how cobranding attempts via online ads alters the perceived level of entertainment of the ad, and its level of informativeness, which are both increased on familiar websites. We then explain how the informativeness and entertainment of the ad impact its perceived website quality and intentions to use the website.

3.1 Predicting Entertainment and Informativeness of the Ad

Prior research, and the mere exposure effect¹ (Holden and Vanhuele, 1999; Lowry et al., 2008b; Zajonc et al., 1971), have long proposed that familiar websites are more likely to be viewed positively by its users (Lowry et al., 2008b; McKnight et al., 2002). Thus, building on prior research, and the mere exposure effect, we extend these findings specifically to the entertainment value of the online ad on the website, and propose:

H1: The familiarity of the website will positively influence the website user's perception of the entertainment value of an online ad placed on that website.

Familiarity of a website would serve as an indicator that the user has already deemed the website proficient enough to return and reuse (Beaudry and Pinsonneault, 2005). This positive impression is likely to spread to ads that are present on the website. This we propose that:

H2: The familiarity of the website will positively influence the website user's perception of the informativeness of an online ad on that website.

Finally, building on the spillover of affect as explained in psychology literature (Lowry et al., 2008b) and the theory of flow (Csikszentmihalyi, 1975; 1990), we posit that more entertaining websites ads will positively impact the users' perceptions of the ad's informativeness.

¹ The *mere exposure effect* refers to the consistent finding that through repeated interactions with an object, one's attitude the object is enhanced (Zajonc et al., 1971).

We thus propose:

H3: The perceived enjoyment of the online ad will positively influence the website user's perception of the informativeness of the online ad.

3.2 Explaining Website Quality and Website-Related Intentions

We posit that the entertainment afforded by the website, via the online ad, will positively impact the perceived quality of the website, and intentions to continue to use the website. Thus building on the prior research linking motivations to attitudes and intentions (Feldman and Lynch, 1988; Jonas et al., 1997), we propose the following:

H4a: The perceived entertainment of the online ad on the website will positively influence the perceived quality of the website.

H4b: The perceived entertainment of the online ad on the website will positively influence the user's intentions to continue to use the website.

The perceived informativeness of the online ad on the website should also impact the perceived quality of the website and the users' intentions to continue to use the website. Thus, building upon the logic afforded by TAM, and the strong research stream that has shown the relationship between utilitarian beliefs and the attitudes and intentions formed from these beliefs (Davis, 1989; Venkatesh et al., 2003; 2013), we extend these findings to our specific belief of the perceived informative of the online ad on a website.

H5a: The perceived informativeness of the online ad on the website will positively influence the perceived quality of the website.

H5b: The perceived informativeness of the online ad on the website will positively influence the user's intentions to continue to use the website.

Previous research has longed predicted, shown and defended the relationship between the perceived quality of a website and users' intentions to continue to use the website (for example, Wells et al., 2013). Thus, we predict:

H6: The perceived quality of the website will positively influence the user's intentions to continue to use the website.

4 Methodology

The study was conducted in an experimental setting to control the location and frequency of the advertisements, as well as to allow measurement of all of the outcome variables. The use of a real website and real ads allowed us to make the experiment as realistic as possible. The dependent variables were used as they appeared in previous research (for example, McCoy, et al. 2007; 2009; Galletta, et al. 2006). Four hundred and twenty volunteer students at a large South American university performed several search tasks under conditions chosen for them at random. The experiment was conducted in two closed rooms in the campus computer lab with each room containing 40 identical computers.

5 Analysis and Results

Data validation shows that our dataset exhibits strong factorial validity of the constructs, little multicollinearity, strong construct reliabilities, and the lack of any discernible mono-method bias. We used partial least squares (PLS) regression, using WarpPLS version 2.0, for the analysis of our theoretical model. We generated a bootstrap with 500 resamples to test the final model, which is shown in Figure 1.

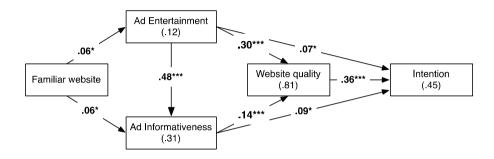


Fig. 1. Model Analysis Results

Analysis of the data supports our model. The results show strong explanatory power for website quality ($R^2 = 0.81$) and intention to reuse a website ($R^2 = 0.45$). The specific model relationships are strongly supported as well. We predicted that a familiar website would positively influence a user's perception of an ad's (H1) entertainment value and (H2) informativeness. The results support both hypotheses.

Further, it was predicted that the spillover of an ad's affect would impact consumers' perceptions of an ad's informativeness (H3), as well as the website's quality (H4a) and a consumer's intention to reuse the site (H4b). All three hypotheses were supported.

Extending the utilitarian concepts contained in TAM (Davis, 1989; Venkatesh et al., 2003; 2013), we predicted that an informative ad would positively influence a consumer's perception of a website's quality (H5a) and his/her intention to revisit that site (H5b). Both hypotheses were supported.

Finally, as Loiacono, et al. (2007) predict, the quality of a website is proposed (H6) to directly impact a consumer's intention to reuse the website. This hypothesis was highly significant. This is evident in the popularity and continued growth of websites like Amazon, Google, etc.

6 Conclusion

As outlined above, the results show strong explanatory power for website quality and intention to reuse a website with the model explaining over 80% of the variance in

determining a website's quality and almost half of the variance for the intentions to continue to return to and use the website. In addition, the specific model relationships are strongly supported. It is important to note that ads can produce a negative feeling from website users. However, given the revenue they generate to the host site, they are often seen as a necessary evil. Our research shows that given the right ads, which are entertaining and informative, the result can provide positive feelings toward the overall website quality and intentions to return by users.

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