The Elaboration Likelihood Model and Web-Based Persuasion

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INTRODUCTION

Discussing Google's reliance on the *AdWord* as a major source of revenue, *Wired's* Josh McHugh (2004) wrote of the obstacles faced by Google founders Sergey Brin and Larry Page in the late 1990's:

... the biggest challenge was convincing venture capitalists that Google could actually make money serving up minimalist, fast loading, text-only ads. It was 1998, after all, the heyday of elaborate splash pages and animated, brand-touting banners that danced at the top of every portal...Google didn't buy in—a stubbornness that proved brilliant. Six years later, those skinny little text-based ads are a huge money maker, accounting for more than $600 million in revenue last year... . (p. 120)

As McHugh (2004) points out, not only do persuasive appeals in digital media vary from the pallid and benign Google-like appeal to the flashy and vivid banner advertisement or corporate publicity site, but the simple Google appeal is highly successful. Recent research suggests a promising and powerful explanatory conceptualization of this continuum be based on a concept labeled peripheral cue complexity.

Peripheral cue complexity describes the degree to which a multimedia message contains production elements (visual and/or auditory effects), which are not directly related to the central meaning of the message. Rigorous experiment-based research reveals messages low in peripheral cue complexity, like that of the Google AdWord, are more appropriate and effective for highly involved and motivated individuals. While, messages with higher degrees of peripheral cue complexity pique the attention of minimally involved individuals and lead to more elaborate and focused cognitive processing of the message itself (Duthler, 2001; Singh & Dalal, 1999).

Peripheral cue complexity is derived from a significant theoretical model of persuasion called the *Elaboration Likelihood Model* (ELM) and extends the research into the cognitive processing of multimedia presentations. A significant body of research literature pertaining to the ELM from the social sciences of communication studies and social psychology helps the message designer and communication practitioner understand the information processing strategies of individuals faced with persuasive appeals. Recent incarnations of this literature may help to explain the wildly successful, yet plain Google AdWord. It may also explain the continued popularity of the Internet banner advertisements and the sophisticated, planned, visually complex corporate or commodity-related World Wide Web (WWW) site.

BACKGROUND

Though first proposed more than 20 years ago, the ELM (Petty & Cacioppo, 1981, 1986) helps to explain how information seekers process persuasive messages. Recent work (Duthler, 2001; Karsen & Korgaomkar, 2001; Singh & Dalal, 1999) to refine and adapt the ELM to digital media such as the Web has proven fruitful. An exploration of the fundamental tenants of the ELM, some criticisms, and recent refinements will help demonstrate its applicability to persuasion in digital media.

The ELM is an information processing theory of persuasion proposing two routes individuals take to analyze a persuasive appeal. The central route to persuasion, also labeled as central processing, involves high elaboration or careful scrutiny and thinking about an argument and its merits, to arrive at an evaluation of the advocated message. An individual taking the central route to persuasion carefully dissects the argument, weighing the data, arguments, and

warrants of the message. The central processor is one who pays ultimate attention to the informational content of the persuasive appeal. On the other hand, an individual taking the peripheral route to persuasion, also labeled peripheral processing, expends very little cognitive effort or low elaboration, instead relying on simple cues in the persuasive situation to arrive at an evaluation of a message. The peripheral processor foregoes consideration of the textual/informational dimension of the persuasive message, in favor of the sensory, non-content related dimension of the persuasive appeal.

According to the ELM, these routes to persuasion are assumed to be mediated by the motivation and/or ability of the individual. Because the central route is more difficult, a person with greater motivation is more likely to engage in central processing (Gass & Seiter, 2003). Motivation is typically operationalized by creating circumstances where outcome-relevant involvement is either high or low. Outcome-relevant involvement is the degree to which the economic or social outcome advocated in the message is important to the individual (Slater, 1997). When outcome-relevance is high, individuals are likely to take the central route. When outcome-relevance is low, individuals are likely to take the peripheral route. Even if an individual is highly motivated, they may not have the ability to process the message and thus must engage in peripheral processing. Ability can be affected by lack of previous knowledge, difficulty in analyzing complex material, distraction, a lack of time, or possibly a slow Internet connection. The key to the ELM is the proposal that when both motivation and ability are high, then elaboration likelihood is high and individuals are likely to follow the central route. However, when motivation and/or ability are low, elaboration likelihood is low and individuals are likely to follow the peripheral route. As either motivation or ability to process an argument are decreased, then peripheral cues become more important determinates of persuasion (Petty & Cacioppo, 1986).

Peripheral cues are variables that allow an individual to arrive at a judgment of an argument without processing the message arguments themselves (Petty & Cacioppo, 1986, p. 18). Commonly researched peripheral cues include source attractiveness (Forret & Turban, 1996), credibility or expertise (Petty, Cacioppo, & Goldman, 1981), argument length or number or arguments (Petty & Cacioppo, 1984), and

even fragrances (DeBono, 1992). Furthermore, as individuals arrive at an attitude via the central route, attitudes are thought to be more accessible, persistent, resistant to change, and a better predictor of behavior than when the peripheral route is taken (Petty & Cacioppo, 1986). Research addressing the ELM is usually concerned with identifying the variables that affect elaboration likelihood (motivation and ability) and the effects of different variables (potential peripheral cues) in the persuasion context. An extensive research program supports these general relationships and conclusions.

Singh and Dalal's (1999) work is among the first published studies directly connecting the ELM with the WWW. The value of their study is the differentiation between the Web searcher and the Web surfer as central and peripheral processors, respectively. According to these researchers, the surfer is a hedonistic, fun-seeker and explorer who desires entertainment and stimulation…"likely to land at a Web site, linger for a brief period and take off for another more attractive site in their path" (p. 95). The surfer exemplifies the peripheral processor (low motivation/ability). The searcher is a goal-oriented, information seeker, likely to spend more time at preferred sites (p. 95). The searcher is typified by the central processor (high motivation and high ability).

Imagine Signh and Dalal's (1999) searcher attempting to find the best on-line value for a digital camera. Deciding to explore Froogle.com (Google's shopping site); the searcher types the model number of the digital camera into the search engine. Froogle.com returns eight AdWords and 21,200 total search results. The searcher not is likely to explore all 21,200 results, but will evaluate many WWW sites related to the search. The searcher will explore the primary search results and the AdWords, evaluating, price, retailer credibility, return policies, shipping prices, finally deciding on a retailer from whom to purchase the item. Contrast this to a surfer happening upon a manufacturer's Web site. Such intense comparison and evaluation will not take place. Rather the surfer might be drawn to the site because of the emotion-laden, eye-popping graphics or enticing interactivity. The surfer will spring for another site as soon as the initial interest is gone.

However, despite the explanatory power of the ELM it is not without its critics and has been reproached for a number of reasons. The foremost

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