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Consumer Literacy for Credence Services: Helping the Invisible Hand

The intrinsic problem of credence services is that, by definition, even after purchase and consumption experience, the consumer is unable to assess the quality of what was bought. While economic theory defines this category of offerings, it also provides advocates with a way to adequately deal with such services. Existing literature maintains that to increase consumer literacy for credence services, consumers need access to current, unbiased, credible, self-directed information. This commentary furthers the notion that government-sponsored websites and search engines can help consumers gather necessary information to make critical decisions.

> ". . . .whenever information is imperfect, in particular when there are information asymmetries—where some individuals know something that others do not (in other words, *always*)—the reason that the invisible hand seems invisible is that it is not there. Without appropriate government regulation and intervention, markets do not lead to economic efficiency" (Stiglitz 2006, p. xiv).

The framework of Economics of Information Theory includes three categories of consumer offerings: search, experience and credence (Nelson 1970; Darby and Karni 1973). Credence offerings—those that the consumer can never fully evaluate even after purchase and consumption—must be accepted on faith even though the consequences of poor choices are potentially severe. It is here that buyers and sellers most starkly stand on asymmetrical informational footing. The consumers' predicament is that quality cannot be known even after repeated purchase use; credence services are usually technical in nature, purchased by individuals that lack technical expertise, such that "only the most knowledgeable and determined consumers have sufficient expertise to support an informed evaluation."

It is tempting to label the credence services in terms of what is purchased, but it is more correctly defined as a credence situation (Bloom

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and Pailin 1995). That is, the framework classifies the consumers' information situation rather than the particular good or service being offered (Smith and Bush 2002). Unlike a credence situation, a search situation offers consumers enough information to effectively judge the offering prior to purchase, therefore allowing for a well-informed decision.

JCA has published special issues on consumer literacy for two services that typify the credence situation: healthcare (Summer 2009) and consumer finance (Summer 2008 and Summer 2010). Because these topics are increasingly complex, confusing, expensive and important to basic well-being, the authors within these special issues, as well as the regular issues of JCA, persistently maintain that consumers need pertinent information to assist in the decision-making process (e.g., see Royne and Myers 2008; Bone et al. 2009; Kim and Lyons 2008; Rotfeld 2009). As Rotfeld (2008) repeatedly likes to point out, people do not want to be their own accountant, pharmacist, mechanic, doctor or lawyer, but rather want clear, concise, and trustworthy information that will help them make wise decisions about these services.

In short, unlike search goods where the buyer can easily determine the value of the offering prior to purchase, information search for credence offerings can be quite lengthy, difficult, frustrating and unsatisfactory. Although consumer literacy has been advocated for many offerings in this category, information often remains inadequate. Yet, information via the web can be far-reaching, specific, tailored and, more importantly, unbiased. And there exists a theoretical basis for governmental action and web-based self-regulation.

THE THEORETICAL FRAMEWORK

For services in which the seller holds most of the informational cards (i.e., asymmetrical information), how does the consumer know that the information gathered is in fact current, unbiased, credible, correct and needed? The plethora of easily accessible information on the web could shift the consumer leftward on the ease of evaluation scale (Zeithaml 1981) from the credence end toward a search situation (Figure 1), but the difficulty in determining credible sources from bogus information, and targeted information from frivolous information (i.e., information overload, Rotfeld 2009) move the situation back to the right toward credence. In this case, the consumer may perceive (incorrectly) the search process to be easier, and may make a poor choice as a result.

Asymmetrical information between buyer and seller frequently can lead to consumer fraud, abuse and seller-biased recommendations, i.e.,

FIGURE 1
Ease of Evaluation

"opportunistic seller behavior" (Darby and Karni 1973; Emons 1997). Indeed, the likelihood of a financial institution overcharging consumers either through predatory practice or a mistake depends in part on the amount of information the firm provides the customer (Bone 2008). Credit cards, while providing consumers with many benefits, can prove disastrous for certain individuals who do not understand the terms, limitations and effects of credit card debt (Wang 2010). Because of situations like this, consumer literacy in credence situations remains a major area of governmental concern, involvement and payout. Federal regulatory bodies acknowledge this framework. The Federal Trade Commission (FTC) concentrates on challenging false or misleading claims when "those claims are expensive for consumers to verify, or are beyond the competence or expertise of ordinary consumers to verify" (Azcuenaga 1997, p. 5). It subjects such claims to more intense scrutiny. In reaction, the US government has developed comprehensive websites such as cdc.gov and flu.gov that provide consumers with information on general and specific healthcare issues. State governments provide even more information targeted toward its citizens.

But questions remain as to whether such websites effectively increase the literacy of consumers. Do consumers receive these sites quickly enough in the search engine priority to be sufficiently informed? Are consumers overwhelmed by unimportant, biased, wrong information?

Compounding this situation, the consumers' role in many credence situations has increased. Healthcare has moved to a more "consumer-centric" model in that consumers must navigate an increasingly confusing health system, steer clear of high "out of pocket" expenses, evaluate convoluted treatment options and decide among multiple provider settings (Levy and Royne 2009). Likewise, consumers find financial products increasingly complicated, have more questions about retirement planning, are faced with many more options and understand that employers progressively shift more investment decision-making on to them (Hart 2000). "Financial education can help future retirees better prepare for rising health care costs and avoid unnecessary financial burden in later life" (Kim and Lyons 2008, p. 33).

THE INTERNET

The web and its accompanying search engines have vastly lowered the price of information. Never before has so much information been offered in such an accessible and user-directed way. According to Stigler (1961), when marginal cost of search is significantly lowered, the consumer will extract substantially more information, i.e., buy more information. The more information people collect, the more comfortable they feel making purchase decisions (Loibl et al. 2009). Further, the more expensive the offering, the greater will be the return from the consumers' pursuit (Urbany 1986). By lowering search costs via the Internet and making the informational environment more transparent, consumers increase their well-being (Lynch and Ariely 2000). Yet reliability, credibility and intent of web information are all suspect (Malaga 2008). The consumer gathers much more information in time spent searching, but spends more time sifting through the information to make sure it is good, appropriate and useful information. Internet usage reduces information costs but comes with a trade-off in terms of quality and credibility (Costa-Font, Mossialos, and Rudsill 2009). Although the web offers an abundance of information, much of it is sponsored and prioritized, not for the consumer's well-being, but rather for the seller's profit.

When consumers search for information on the web, websites appear through search engine optimization and advertising. Optimization occurs when search engine algorithms order websites according to their keyword relevance. Companies work to attain the top spots within this process by providing legitimate company keywords or through gaming the system (http://www.iprospect.com/premiumPDFs/WhitePaper_2006_SearchEngineUserBehavior.pdf). Legitimate ways to get into the top listings include modifying a title tag, meta-tags, heading tags, links and other areas of the page (Sen 2005). Gaming includes search engine optimization techniques that directly violate search engine guidelines (Malaga 2008). In addition to optimization, companies pay for spots on search engine results (Yao and Mela 2008). While these listings are usually shown as "sponsored results," that is not always the case. Keyword advertising has become the most popular category of online advertising, accounting for 40% of all online advertising, because advertisers pay only when consumers click on their spot (Steel 2007). To run this service, search engines operate real-time auctions for millions of keywords (Chen, Liu, and Whinston 2009). When the per-click price gets too expensive for a particular popular keyword, advertisers quit bidding on it (Delaney 2006). Using this source of revenue, search engines rank sites higher

when the site pays a fee, not necessarily because of the relevance of the search term. The consumers then must determine if headings such as "recommended sites," "featured listings," or "search partner," represent a disclaimer, if their findings are, in fact, a result of their keyword search (http://www.FTC.gov), or if the process includes a combination of search and advertising sponsorship. Moreover, few users can consistently discern between paid and unpaid results, thus exacerbating this situation (Fallows 2005).

The importance of a top ranking for a company is obvious. Research shows that the majority of people do not look past the first page of the search engine results, very few (less than 10%) click beyond the third page, and almost half will change their search term if they cannot find it on the first page (http://www.iprospect.com/premiumPDFs/WhitePaper_2006_SearchEngineUserBehavior.pdf). This indicates that consumers will generally use the information on the first page regardless of its veracity.

The FTC polices Internet advertising as it does other forms of advertising; that is, rules and guidelines that apply to written ads or printed material also apply to visual text displayed on the Internet (http://www.FTC.gov). Therefore, the agency's tenets of advertising truthfulness, not misleading, backing up claims, and being fair, hold true for advertising content on the web. However, US government agencies only have jurisdiction over US advertising websites and only for paid content which, by definition, comprises advertising. Because the FTC oversees *paid* content, it does not regulate general Internet content. This is a sticking point—while making many things more transparent, the Internet clouds others. Because consumers do not have full knowledge to discern between paid for and organic results, they can be led to believe that their results are the best findings for their search, when in fact advertisers have paid for the ranking (i.e., a perverse "invisible hand"). As the federal government's main consumer protection agency, the FTC does issue warnings about such issues but does not intervene in the process.

Although the constitution protects much of the information found on the Internet as free speech, paid content is another matter. Search engines derive a sizable portion of their revenue from sponsored searches, which by definition makes it advertising because of the "paid" relationship. Mercadante (2008) argues that search engines have been disingenuous in their cries for protection of free speech. On one hand, search engines hold that the results page is comprised of the speech of others; therefore, they cannot be held liable for that content. However, when the search engine does manipulate results, the argument is raised that it is protected speech. If, indeed, the results page is protected speech, then the search

engine "should assume liability for inaccuracies in that speech, including non-automated manipulations of the results" (p. 15). Moreover, search engines can and do refuse to run advertisements. "When it comes to advertising, search engines are not bound by the First Amendment's free speech guarantees" (Wall Street Journal 2007, p. B11).

GOVERNMENTAL WEBSITES

The US government's ability to provide online information to its citizens has not kept pace with other uses of the Internet. About 24,000 governmental websites exist, but many tout organizational achievements and focus on technological infrastructure rather than delivering basic information and improving content delivery (Federal Web Managers Council 2008). Governmental websites have an enormous amount of information but the sites tend to contain mostly obvious as opposed to helpful information. For example, the site dedicated to flu pandemic preparation provides simple information such as developing preparedness plans, talking with local public health officials and practicing good health habits (Bone et al. 2009). While government agencies understand this, they appear ill-equipped to handle it. One government website dedicated to best practices for government websites (Better Websites. Better Government) has been established to promote the "Top 10 Best Practices for Government Websites." Predictably, the first best practice is "Meet all laws, requirements, policies, and other directives for public websites." Not until number five (of the top ten) does a customer-focus begin to appear—"create and manage content effectively and efficiently." Number eight and nine presumably bring the customer orientation into play—"evaluate the effectiveness of your website" and "make sure the public can find your content" (http://www.usa.gov/webcontent/reqs_bestpractices/checklist/criticaltasks.shtml). Even then, the information may be more about the content than the customer, and written in "governmentese" instead of plain language (Federal Web Managers Council 2008). Research for this commentary confirmed this; specific and useful information on government websites is difficult to find. Moreover, literacy advocates argue that low literacy blame belongs more to the communicator than to the consumer (Bone et al. 2009). Hence, the government is culpable in low literacy; the consumer must not only get the appropriate information, but must get it in an easily usable comprehendible form.

There is precedence in government intervention in turning a credence situation into a search one for the consumer's well-being. In essence, until

governmental regulations required packaged food companies to carefully and specifically label ingredients, consumers faced a credence situation. In 1990, the Nutrition Labeling and Education Act was enacted, requiring packaged foods to provide more information on nutrition labeling and claims. The act promotes more healthful foods in the marketplace by arming consumers with ingredient information. In the last two years, four states and eleven US city and county governments have begun requiring chain restaurants to post calorie content on their menus (Economist 2009) because of obesity trends and consumers' inability to determine the calorie content of foods offered in such venues (Bassett et al. 2008). Other research shows that nutritional disclosure on restaurant foods influences consumer product evaluations and preferences (Bates et al. 2009) and has been included in the health reform bill (Economist 2009). However, research shows that information needs to be combined with education (Kozup et al. 2006) and presented in a consistent and standard manner (Kozup and Hogarth 2008).

Far from being a passive conduit of advertising, search engines perform an enormously important function in providing all kinds of information to consumers. With so much potential for enlightenment and so much room for misinformation, particularly in credence situations, what is the right balance? Like the T.V. of the 1950s, we imagine the possibilities but can barely fathom the negative consequences. In this environment, government regulators and industry self-regulation step in to create a balance that protects consumers while allowing marketers to operate efficiently and effectively. In all instances, but especially in credence situations, information changes the dynamics.

In a nation of consumers who are increasingly responsible for their own choices in credence situations and where the invisible hand feels more like it is in our pocket than on our shoulder, what can be done without increasing costs and hand-cuffing the market? Research indicates that efforts to educate consumers will work best in credence situations (Bloom and Paulin 1995). Likewise, behavioral decision research (Eggers and Fischhoff 2004) recommends that an informational environment that enables consumers to make choices in their own best interests should be the goal. Information on credence services needs to be just that—accurate information so that the distortions of the marketplace erode and the invisible hand can work. Thus, with government-sponsored websites providing better, consumer-oriented websites, and search engines adopting self-regulation policies to increase consumers' knowledge in credence situations, the invisible hand becomes active again.

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