WWW – The New Wild Wild West
An assessment of the credibility of online reviews

By: Isaac Gorin

ABSTRACT:

The development of search and search engines has evolved around the context of relevance. User generated content has factored significantly in search engine result rankings, and as such raises many questions. How impactful is opinion in influencing action? What is the economic impact implicit in rankings? How has the marketplace reacted to this influence? How trustworthy is user generated content online considering its relative influence? This paper is meant to be a treatment of the contextual landscape of online reviews as a significant factor in influencing decisions, with a focus on the veracity or trustworthiness of said reviews. There is specific treatment of current protections offered by the legal system challenging the spirit of consumer protection.

RELEVANCE OF REVIEWS AND SEARCH RANKING:

As the Internet continues to occupy an increasingly significant role in people's lives, there are questions essential to the veracity of the information presented to consumers. The Federal Trade Commission was originally established in 1914;

> *To prevent business practices that are anticompetitive or deceptive or unfair to consumers; to enhance informed consumer choice and public understanding of the competitive process; and to accomplish this without unduly burdening legitimate business activity."*
> (*http://www.ftc.gov/ftc/about.shtm*)

With the advent and proliferation of user generated content on the internet, in the forms of blogs and online reviews, much information about consumer sentiment has become available to consumers in their decision making processes, but little has been done in preventing anticompetitive or deceptive or unfair practices. In March of 2011 the FTC fined Tennessee based Legacy Learning Systems $250,000 for paying for positive reviews online. Although there have been measures taken to address the challenge to consumers of deception online, a

proper treatment of the subject appears necessary to properly understand the challenge facing consumers and their decisions.

This past November and December 2011, the Wall Street Journal reported that online purchases in the US alone topped $35 Billion for the two months. According to Nielsen, consumer recommendations are the most credible form of advertising among 78% of survey responders (Survey 2007). A *BIGresearch* survey indicates that 43.7% of consumer electronics purchases are affected by word of mouth (*BIGresearch* 2009). In addition to this, retailers see 15-100% greater conversion rates and decreases in product returns for items with reviews (*PowerReviews*; *BazaarVoice*). Given the influence of opinions or reviews in the decision making process and the economic impact they wield, the online community has been driven to understand the underlying patterns governing such behavior for a number of reasons. The first goal of online properties is to attempt to create a model for aggregating reviews such that they can properly represent the quality of a product, and additionally to attempt to preserve the authenticity of the information so that it can continue to be credible in influencing opinions.

The very nature of the indexing, storage and presentation of information online has evolved around a common thread, relevance. The more a search term entered into a search engine yields a result closer to what a person is actually searching for the "better" the result and therefore "better" the search engine. Yahoo/Microsoft/Bing have moved towards a strategy of indexing Facebook "likes" as its future path towards relevance. The "likes" of "friends", in their estimation, is more relevant to a searcher, than impersonal information.

The most significant change in search results inside of Google in recent years was the introduction of Google Maps/Local/Places results, which has undergone several rebranding, and name changes. Considering that consumers are so heavily influenced by opinion as Nielsen and others have quantified, these results are heavily influenced by reviews. In a national survey of Google Local experts published in June of 2011, by David Mihm, online reviews were listed as the 6th most important ranking factor for Google Local results, following behind proper category associations, physical address listing, and manual owner verification of maps page.

In comparison to Yahoo/Microsoft/Bing, Google has given significant weight to reviews in determining which results are most relevant and therefore should be given prominence. As such it is well known that reviews are a major ranking factor in search engine ranking criteria relevant to Google's Local or Maps results as well as its organic blended (Organic and Places/Maps) results.

In the result above the mention of reviews and red balloon labeled A, are linked to a Google Maps/Local page, which features location information and reviews. In the result it is blended with the regular business web address listed atop the listing.

A study of natural language processing is a priority in Google's ranking algorithm as a deeper understanding of language, indicates what may be most relevant to a consumer. As such, Google has increasingly tailored its results to offer Local or Places based results for the language it deems indicates a local result. Increasingly, the Google algorithm has been evolving towards offering local results in classic organic results once it can identify where a searcher is. Thus it follows that a person searching in Miami will see different set of 50-100 results for a non-geographic search term like Dental Implants than a person searching in Los Angeles, even though no location is mentioned in the search. Google has thus begun to more proactively deliver localized search results, based on location for those search terms deemed local in nature, with a strong emphasis on reviews.

THE ECONOMIC SIGNIFICANCE OF SEARCH ENGINE RESULTS PAGES (SERPS):

On August 4th, 2006, AOL Research, headed by Dr. Abdur Chowdhury, released a compressed text file on one of its websites containing 20 million search keywords for over 650,000 users over a 3 month period, intended for research purposes. AOL was sued for violation of the Electronic Communications Privacy Act, but the information was disseminated over the internet. The data released gave empirical proof to traffic patterns online. Specifically, the data showed, based on keywords searched, search results and user clicks, what in fact, are the impacts of search results positions. In extrapolating the data the finding was that anywhere between 34% and 46% of the traffic was drawn to the first listing on the page, where anywhere between 12% and 29% of traffic was drawn to the second result on the search page with a sharply descending curve as shown in the figure below:
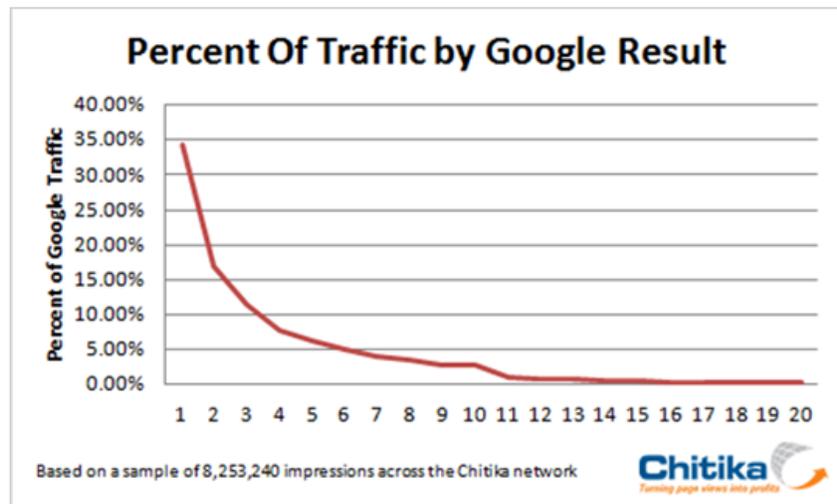
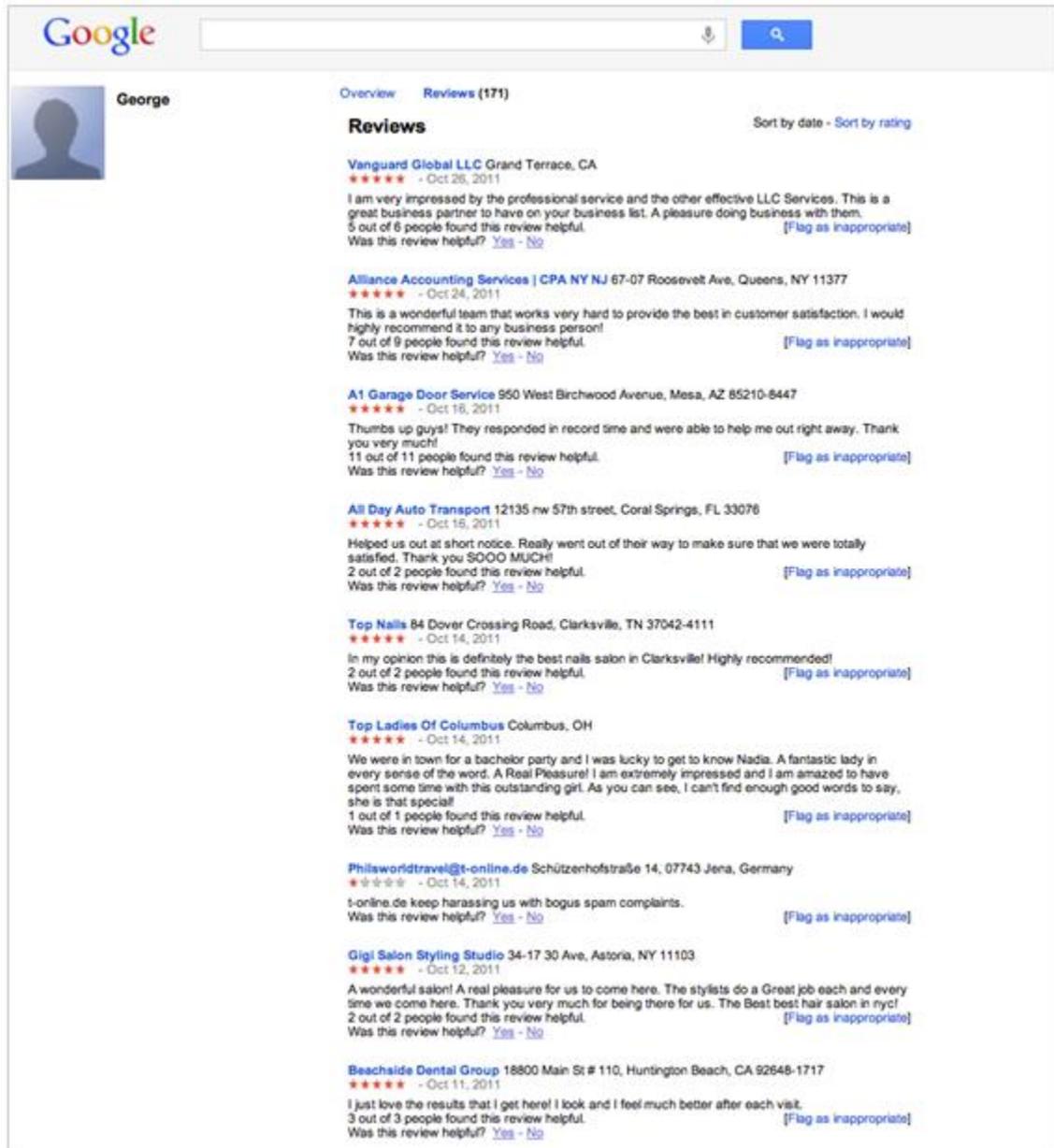Based on a sample of 8,253,240 impressions across the Chitika network

The findings from this data leak, confirmed what webmasters suspected, but quantified the potential economic gain behind search engines rankings. If a higher ranking exponentially increases traffic to a site, which is effective in generating new customers, than the importance of that first position is quantifiable. In recent News JC Penney was the subject of much attention for hiring an SEO firm who used "deceptive" strategies in attempting to reach results in the search engine, which helped it dominate a wide amount of search terms. The Google reaction was to delist JC Penney from its search engine, which caused a significant financial loss to the retailer. A similar event was documented in a case with BMW, whose practices were deemed deceptive, resulting in a delisting of one of their web properties as well.

IMPLICATIONS INSIDE OF DENTISTRY:

In the context of Google Local Results, which top the search engine results pages (or SERPS) for many terms deemed local in nature by Google, such as Dentist or any search term with the phrase Dental inside of it, this has spawned a competitive thrust to sell services based upon improved search engine results. The clear economic gain from gaining in rankings has spurred a veritable renaissance of spam practices, on the part of small businesses offering services geared at improving local rankings. These entities offer optimization services focused on improved rankings, while the main activity consists of populating online websites with fictitious reviews. Similarly companies have begun to hire fake reviewers to present their competitors in a negative light. There are numerous specific examples of dentists who received reviews from patients in different cities who often have 5 or 6 reviews posted on the same day from businesses in 5 or 6 different states as evidenced in this Google User Profile containing 171 fake reviews (http://bit.ly/AqWsFf).

IMAGE ON NEXT PAGE

WEB MARKETING FOR DENTISTS

Office: 786.264.1767
Fax: 305.328.6670
Web: webmarketingfordentists.com
Address: 260 95th Street #201
Surfside, Fl. 33154

Notice the user posted reviews in the same week for a Dentist in Huntington Beach, CA and then he posted reviews for a business in Astoria, NY, Jena, Germany, Columbus, OH, Clarksville, TN, Coral Springs, FL and Mesa, AZ. If particular attention is paid to the services offered it becomes obvious that the reviews are in fact fake.

Another example of this user profile containing 53 fake reviews. (http://bit.ly/yPHrOt).

WEB MARKETING FOR DENTISTS

Gloria

Overview   Reviews (53)

Reviews

Sort by date - Sort by rating

Citizens Bank of Canada 815 West Hastings Street, Vancouver, BC V6C 1B4, Canada
★☆☆☆☆ - Oct 26, 2011

These thieves stole my money! I bought one of their stupid prepaid visa credit cards at the stupid canada post to make a payment and the card was declined even though there were 8 times more mooney in the card than necessary. They would not give me a refund. On top of that I had to talk to their condescending phone support in bangladesh or whatever. Avoid these scammers!
0 out of 1 people found this review helpful.   [Flag as inappropriate]
Was this review helpful? Yes - No

Vanguard Global LLC Grand Terrace, CA
★★★★★ - Oct 26, 2011

Very nice customer service. Always courteous and friendly, very knowledgeable about corporate issues, and in general a good experience that has truly helped me and my business grow. I will tell all my friends to come here for many corporate issues.
Was this review helpful? Yes - No   [Flag as inappropriate]

Alliance Accounting Services | CPA NY NJ 67-07 Roosevelt Ave, Queens, NY 11377
★★★★★ - Oct 24, 2011

Impeccable accounting each and every time! A great company that focuses on quality and customer service. Good rates too!
2 out of 3 people found this review helpful.   [Flag as inappropriate]
Was this review helpful? Yes - No

Bushido Marketing 3145 E. Chandler Blvd. #110-420, Phoenix, AZ 85048
★★★★★ - Oct 16, 2011

Very high end web design! They are true professionals that take car of all the little things. A pleasure working with them.
2 out of 2 people found this review helpful.   [Flag as inappropriate]
Was this review helpful? Yes - No

A1 Garage Door Service 950 West Birchwood Avenue, Mesa, AZ 85210-8447
★★★★★ - Oct 16, 2011

Great service! This is the kind of business that I would like to deal with.
8 out of 8 people found this review helpful.   [Flag as inappropriate]
Was this review helpful? Yes - No

Austin Absolute Garage Doors co:aad, 1108 LAVACA #110-487, Austin, TX 78701
★★★★★ - Oct 15, 2011

When we needed a Garage Door Installation when we were in Round Rock we called Austin Absolute Garage Doors and they provided prompt and reliable service. Thank you for a job well done.
4 out of 4 people found this review helpful.   [Flag as inappropriate]
Was this review helpful? Yes - No

Top Nails 84 Dover Crossing Road, Clarksville, TN 37042-4111
★★★★★ - Oct 14, 2011

I really love this place! The staff is sooo nice and friendly and they do a marvelous job each and every time that I come to get my nails done. And the results are fantastic. My hands look so much better. A very professional service.
3 out of 3 people found this review helpful.   [Flag as inappropriate]
Was this review helpful? Yes - No

Hometown Thrift Store 9505 Airport Plaza, Dansville, NY 14437
★★★★★ - Oct 13, 2011

I have found so many good books here, it is a real treasure trove for me! Thank you for being there.
1 out of 1 people found this review helpful.   [Flag as inappropriate]
Was this review helpful? Yes - No

Alegria Dental Center 4214 Beverly Blvd, Suite 209, Los Angeles, CA 90004
★★★★★ - Oct 13, 2011

Fast, professional, top of the line treatment!!! This is what I have found at Alegria Dental Center every time that I come here.
Was this review helpful? Yes - No   [Flag as inappropriate]

This user reviewed a dentist in Los Angeles, CA and in the same day a home thrift store in Dansville, NY, the following day a Nail Salon in Clarksville, TN. The day after she reviews a Garage Door company in Austin, TX and on the SAME day a garage door company in Mesa, AZ over 1000 miles away.

In our personal experiences, a dentist in Jacksonville, who asked to remain anonymous, contacted our firm about consulting a way to remove fraudulent negative reviews. When we inquired why he thought it was fraudulent, he explained that another dentist in town, had been know to have been vocally slanderous about his competitors. 6 individual dentists had found the same negative review, verbatim, posted for each of the 6 dentists on the same day, from the same user. An anecdotal compilation of fraudulent behavior in online reviews is far too exhaustive for this treatment but is certainly commonplace enough to merit a more proper classification and treatment of the extent of the problem.

On another occasion, a client of our firm, a Dentist based in Glenview, IL asked our assistance with a negative situation surrounding online reviews. He discovered that within a short time of firing an employee negative reviews were beginning to appear online, without being able to connect the stories told to his actual patients. As a family dental office, this seemed strange. The reviews were appearing consistently with great detail from people with only a single review. Once one of the reviews alleged that he was misrepresenting himself as a family practice because she alleged he was having an affair with a patient, it became obvious this was a disgruntled past employee. The point most pronouncedly illustrated by this occurrence was the lack of any filtering online. In the Doctors words, he "never imagined that anyone could create a completely fake profile repeatedly, and say whatever they wanted, with nothing to stop them."

THE EXTENT OF THE PROBLEM AND LEGAL CONSIDERATIONS:

Although the term Spam is traditionally applied to email, Jindal and Liu used the term to more properly define the application in relation to reviews;

> *There are generally two types of spam reviews. The first type consists of those that deliberately mislead readers or automated opinion mining systems by giving undeserving positive opinions to some target products in order to promote them and/or by giving unjust or malicious negative reviews to some other products in order to damage their reputation. The second type consists of nonreviews (e.g., ads), which contain no opinions on the product. (Jindal and Liu, Review Spam and Detection 2007)*

In this context there are several motivations for misleading reviews, either for self-promotion through positive reviews, or to engage in competitive practices in fictitious negative reviews.

The proliferation of fake reviews has been the subject of significant discussion in the press. Spawned by fraudulent activities from well established companies like this Amazon ad seen posted by Belkin, a top networking and peripherals manufacturer with sales ~ $500 million in 2008, illustrates the point quite dramatically;

WEB MARKETING FOR DENTISTS

Timer: 00:00:00 of 60 minutes

Want to work on this HIT? **Accept HIT**

Want to see other HITs? **Skip HIT**

Write Product Reviews 25-50 Words
Requester: Mike Bayard
Qualifications Required: HIT approval rate (%) is not less than 95

Write a Positive 5/5 Review for Product on Website

Positive review writing.

- Use your best possible grammar and write in US English only
- Always give a 100% rating (as high as possible)
- Keep your entry between 25 and 50 words
- Write as if you own the product and are using it
- Tell a story of why you bought it and how you are using it
- Thank the website for making you such a great deal
- Mark any other negative reviews as "not helpful" once you post yours

Instructions:

The link below leads to a product on a website. Read-through the product's features and write a positive review for it using the guidelines above to the best of your ability. I have also provided the part number for this product and you can click on the links below to see it on several alternative websites. In order to post some reviews you will need to create an account on the site. You can use your own email address or open a new free webmail account (gmail, yahoo...) and use it to post with.

In July 9, 2009 The Wall Street Journal published a story about an attorney who, in search for a coffeemaker found that an employee of the manufacturer, DeLonghi, had posted glowing reviews for the product he was researching. A New York Times article published August 19th 2011, even goes so far as to express that several websites, www.fiverr.com and http://forums.digitalpoint.com/ actively promote fake reviews, in the case of Fiverr for as low $5 a piece, and Digital Point offers money to anyone willing to post reviews on TripAdvisor.com. So severe was the proliferation of doctored online reviews, that TripAdvisor released a warning to consumers about fake reviews, as a USA Today article reported, when the online travel venue found alarming numbers of fake online reviews both promoting specific businesses as well as negatively depicting others. The millions of fake reviews prompted TripAdvisor to dedicate significant resources to develop a customized algorithm to detect fraud in reviews.

Companies such as Microsoft and Google each have invested in technical studies sponsoring research with $138,000 and $50,000 grants respectively to further model behavior patterns around online reviews in hopes of developing more sophisticated fraud detection measures. The grant focused in part on analyzing 6 million Amazon.com reviews among other data. Bing Liu, a computer science professor at the University of Illinois at Chicago, one of the grant recipients, expressed in the aforementioned USA Today article that he believes that nearly 30% of online reviews are in fact false.

An interesting perspective was expressed by a Texan small business owner who anonymously reported to Bloomberg in a September 9th 2011 article that he posted an advertisement online

for "a writer who can write and post 25 positive reviews" on eight popular websites, including Yelp, Google Places, and Citysearch. A man in Chittagong, Bangladesh, won the gig and agreed to do 200 fake write-ups for $100. In his interview with the news outlet he denied feeling remorse for his activity as he said his clients always raved about the quality of his service but none went online to write reviews. His feeling was that the fake reviews were actually in the spirit of truth, even though they were doctored. This account, like many, expresses the sentiment that often times the only reviews posted online are from angry customers looking for an outlet to express their anger as opposed to a balanced venue properly depicting the "other side" of the story, told by happy clients. The growth and upsurge of technologies and review collection services focused on automating online review requests in search of positive reviews on behalf of service providers is an expression of the efforts currently being engaged to prompt satisfied clients to review a business in order to counterbalance the sentiment of online review sites as a forum for venting frustration.

Part of the reason for this sentiment, is the posture taken by several of the more popular review sites focused on negative reviews. In an article dedicated to expressing why it is a bad idea to sue Ripoffreport.com on its own website, the website explains that it never removes a posting from its site. Even if a poster wants to recant from his position and requests that his posting be removed it will not be removed. The courts have to date ruled that a website cannot be considered a publisher of content and therefore is not liable for the information written by anonymous posters. As such, it has no responsibility to verify the accuracy or truthfulness of postings, nor address whether they are slanderous. The same statements which would be considered illegal offline, are considered legal online. Ripoff Report explains the Communications Decency Act or "CDA", 47 U.S.C. § 230 which protects review sites and states as follows on its website;

> *In short, the CDA provides that when a user writes and posts material on a website such as Ripoff Report, the site itself cannot, in most cases, be held legally responsible for the posted material. Specifically, 47 U.S.C. § 230(c)(1) states, "No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider." Because the reports on Ripoff Report are authored by users of the site, we cannot be legally regarded as the "publisher or speaker" of the reports contained here, and hence we are not liable for reports even if they contain false or inaccurate information.*

This issue was drawn into greater scrutiny in a class action lawsuit filed against Yelp. Yelp is accused of offering to remove or downgrade negative reviews if the business in question purchases advertisements on the site. The company was being sued for extortion. A Wall Street Journal article on October 28th 2011 reports that the law suit was dropped stating;

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Judge Chen ruled that Yelp's choices for which user-generated reviews to display on the site—central to the merchant complaint—are protected by the Communications Decency Act, a 1996 law that shields websites from being sued for publishing user-generated content.

CONCLUDING REMARKS – THE DOUBTS CAST BY ONLINE REVIEWS

In an environment where consumer decisions are so heavily impacted by reviews, it is concerning that the content delivery mechanisms, i.e. review sites, are not held liable for their profiting from manipulating the presentation of this information, from those whose reputations are damaged. In fact, that is the primary revenue stream for many of these review sites, whose success is proportionally related to the amount of negative reviews it collects and the financial strength of those being maligned. When financial incentive is based on proliferation of negative reviews, a deep concern over consumer protection surfaces, especially considering the relative legal amnesty they have enjoyed. In the context of an environment where entire companies overseas are dedicated to writing false reviews, the legal system seems ill equipped to protect consumers from fraudulent or misleading content online. The ease with which fake reviews are obtained and the overwhelming economic opportunity generated from manipulating reviews as they impact buying decisions means that the credibility of reviews has to be seriously challenged. With an estimate of nearly 30% of product reviews on Amazon or travel reviews on TripAdvisor, whose numbers reach the millions, being doctored and an unwillingness of review sites to remove negative reviews that may have been settled offline, there is a great need on the part of consumers to find a better path to the truth so that in fact they are not misled by half-truths.

An interesting aspect of the current problem with online reviews is anonymity; the fact that so much doubt is cast upon online reviews hinges on the fact that there is no verification process for truth, no responsibility of accountability owing to the anonymity of users and lack of legal ramification to libelous behavior. The fact that case law neglects to consider the potential damage caused by misleading or false comments, even those which are admittedly untrue, further fans the argument that online reviews tend to be a venue for self promotion or negative competition or simple venting of frustration. This double standard, which has led to proliferation

of falsehood in a magnitude that few appreciate, affords titling the internet the, WWW, the Wild Wild West, where the pronounced effect of lawlessness is in fact quite tangible.

Rather than reaching conclusive findings about the efficacy of online reviews, this article can only draw a question as to whether consumers are aware of the magnitude of deception, the many economic and personal motivations propelling dishonesty and the relative double standard within the legal system releasing anonymous reviewers of accountability. It would appear that the responsibility falls on the shoulders of the legal community to establish consequences around misleading behavior online more effectively, and work towards a sense of personal accountability.